



ELECTRIC IMP® RELEASES IMPOS 34 FOR ADVANCED EDGE-TO-CLOUD SECURITY AND IOT CONNECTIVITY

LOS ALTOS, Calif. – September 14, 2016 – [Electric Imp](#), a global platform provider for Internet of Things (IoT) secure connectivity and application enablement, today announced the release of impOS™ 34. As the latest version of its IoT operating system, impOS 34 enables full-life-cycle development and maintenance of IoT edge devices and gateways. Besides being the first major release for the imp005 module, impOS 34 also increases levels of security for device connections and operating system updates and delivers Private Cloud support for customers using the imp003 module for edge applications.

“Electric Imp technology enables Pitney Bowes to simplify the complexities of doing business across the physical and digital worlds,” said Pitney Bowes Fellow Rick Ryan. “Our clients have diverse IT environments and the flexible — and secure — managed networking and Private Cloud options provided by Electric Imp’s imp005 module help ensure that our clients connect seamlessly to Pitney Bowes’ Commerce Cloud.”

“Our services for real-time energy management are built upon Electric Imp's IoT platform because our customers expect flexibility, and we chose Electric Imp because we knew we could deploy new functionality to all our devices with genuine confidence,” said Regan Ryan, Chief Technology Officer at Embrium Holdings, makers of the Good Measure sub-meters and real-time energy management cloud service. “With impOS 34, we now have greater capacity and more processing power at the edge to stay on top of a rapidly evolving sector. With just a screwdriver and mobile phone, an electrician can install an energy meter and have cloud streaming data in minutes.”

“Our customers’ complex offline performance requirements are difficult to meet in scalable pick and place smart packages,” said Gavin Knight, Co-founder of Mystic Pants, an IoT connected-product consulting firm that designs and engineers everything from complex industrial controls systems to sophisticated-yet-simple smart toys. “Electric Imp’s doubling of code space on imp003 has allowed us to meet these requirements with ease. The addition of new network capabilities has also opened up new use cases and expanded connectivity dramatically.”

Security Improvements

Keeping devices secure is central to Electric Imp’s platform-as-a-service, and with impOS 34, we have taken further steps to keep every IoT device — stretching back to the first imps shipped in 2012 — at the leading edge of security. Major security enhancements include:

- TLS 1.2 and forward secrecy: increased protections on data in transit and prevention of attempts to decode previously captured data should the keys ever become available.
- Doubled RSA key and certificate lengths: increases longevity of secure device use.
- Added an ed25519 challenge-response system: leveraging the unique identities provisioned into every imp at time of manufacture, this verifies device authenticity in a lightweight but secure way.

- FIPS 140-2 certified HSM system: provides physical, tamper-proof protection of the private OS signing keys and ensures that only genuine updates will ever be accepted by devices in the field.

Expanded Application Code Space on imp003

The available space for application code within the imp003 module has doubled to 256kB, matching other imp modules and ensuring easy portability of code for complex edge processing. Examples of edge processing on imps include data filtering/compression, alerting, local data storage and implementation of algorithms that run when no connectivity is available.

Private impCloud™

impOS 34 brings support of Electric Imp's Private impCloud to the imp003 module, which was previously only available on the imp005 module. Private impCloud equips customers with their own, unique instance of the Electric Imp Platform, running on customer-owned servers, fully-managed and secured by Electric Imp. Each Private impCloud allows its owner to rapidly build out a dedicated cloud architecture tailored to fit their IT operations, security, and processing requirements for connected products and services.

Full Compatibility

As with all imp operating system releases, impOS 34's capabilities are comprehensively documented in the [Electric Imp Developer Center](#). Extensive automated and manual testing is continuously performed to ensure that every impOS release remains backwards compatible with earlier releases, enabling our customers to move seamlessly onto new releases without expensive and time consuming re-integration — this same compatibility ensures that migrating applications to newer imp hardware over time is low risk, fast, and automated.

About Electric Imp

Electric Imp helps more than 100 manufacturers and enterprises transform the world through the power of secure IoT connectivity. Over a million devices have been built with our highly secure platform as a service, with devices deployed and managed in 105 countries. Our unique solution - featuring fully integrated hardware, OS, security, APIs and cloud services purpose-built for the IoT - dramatically decreases cost and time to market while increasing security, scalability, and flexibility. The Electric Imp platform enables innovative commercial and industrial applications and empowers manufacturers to manage and quickly scale their connected products and services to millions of users. Electric Imp, founded in 2011, is located in Los Altos, California, and Cambridge, England. For more, visit <https://electricimp.com>.

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