

# Simplify IoT with Intelligent Cloud Connect

The world's first plug and play IoT solution that automatically connects with AWS





## IoT: A World of Complexity and Opportunity

The Internet of Things is changing our world for the better, providing real time insights that accelerate efficiency, improve business outcomes and make life easier. However, to realise the benefits of IoT, organisations need to navigate an enormously complex ecosystem and a fragmented value chain. With many development hurdles to cross, it can take up to two years to launch a new IoT solution, while many projects are paralysed by complexity and never make it to market at all.

Organisations just want to connect their devices and ingest the data into their back-end systems in order to make business decisions based on the insights gained. However they face numerous challenges, including but not restricted to:

- Hardware selection and development targeting the correct geography
- The connectivity and SIM management platform
- Managing rate plans and device data utilisation
- Cloud provider and analytics applications.
- Device management and security.

The diagram below outlines the building blocks and associated complexities with a typical IoT solution ecosystem.

### IoT connectivity is complex

All of the below are pain points that you will need to resolve to successfully deploy IoT devices.



60% of companies substantially underestimate the
 complexities of building an IoT service " Cisco Industry Survey 2017



There is an alternative way of achieving IoT success, by simplifying the steps and streamlining the ecosystem to reduce complexity.

### Eseye and Thales: Together, Simplifying the IoT Journey

Eseye and Thales are fundamentally disrupting this IoT ecosystem with a collaborative IoT Connectivity Platform that cuts through complexity, reducing new product development timelines from two years to typically six months.

As global leaders in module technology and ubiquitous reliable connectivity, Thales and Eseye have combined their expertise to deliver Intelligent Cloud Connect; the world's first integrated IoT solution that vastly simplifies IoT device design and deployment.



The Intelligent Cloud Connect solution allows device and equipment manufacturers to develop a single IoT product SKU for any industry that can intelligently switch between over 700 mobile networks to provide near 100% global connectivity, while offering seamless data provisioning to AWS IoT Core. The platform handles zero-touch IoT security certification as well as lifecycle device management, allowing customers to manage global fleets of devices through a 'single pane of glass'. The complexity of balancing bandwidth, data plans and negotiating MNO contracts is removed, providing customers with only one, carrier agnostic, message based (MQTT) bill covering all connectivity requirements globally via AWS Marketplace.

### Intelligent Cloud Connect: Streamlining IoT Solution Deployment

Design and development strategy are crucial to successful IoT solutions. Early technology decisions can make or break projects. The Eseye Platform solves challenging IoT pain points and positions organisations for success.

The solution delivers pre-installed firmware which intelligently manages security, connectivity and credentials between the device and the cloud, ensuring a consistent global 'out of the box' experience. The device behaviour simplifies IoT deployment and automates global, secure connectivity into AWS IoT Core.

To ease device application development, an easy to use Message Queuing Telemetry Transport (MQTT) client is supported by the Intelligent Cloud Connect devices. This AT command-controlled feature simplifies the communication between embedded hardware in the IoT devices and the AWS IoT Core with other related IoT services.

#### Benefits include:

- 1 One globally deployable SKU connects out of the box anywhere in the world, simplifying logistics and reducing device and technical management overhead
- 2 Zero-touch, automatic service provisioning delivering ubiquitous global cellular network connectivity on power-up – delivering near 100% device uptime across 4G LTE, 3G and 2G networks
- 3 Automatic AWS cloud enrolment once device is activated – device certification and security automatically managed by AWS cloud and delivered OTA to the device
- 4 Eseye's agnostic mobile network profile management enables dynamic on-device and OTA network switching to ensure maximum device connectivity is achieved

- 5 MQTT message bundles provide simplified and scalable global connectivity management with predictable costs
- **6** Single pane of glass solution allows management of global device estate and billing from one intuitive user interface, while simplified lifecycle management extends device lifetime and reduces maintenance costs
- 7 Reduces time to market for device deployment, improves IoT outcomes and accelerates ROI, allowing customers to focus on delivering business value



### 6 Steps to Delivering a Rapid, Efficient and Global IoT Solution that Works

With the Intelligent Cloud Connect solution, organisations can reduce time to market by 75% while greatly improving cost efficiency and ROI. The foundation of the solution is the ground-breaking Cinterion® PLS62-W Global IoT Module or Terminal paired with Eseye's intelligent network switching AnyNet SIM for AWS. This combination provides out-of-the-box, zero-touch secure connectivity anywhere in the world. With this device/SIM combination, developers can streamline and secure IoT development, deployment and activation from device to AWS IoT Core in 6 basic steps:

1 Purchase Intelligent Cloud Connect	<ul> <li>Purchase Combined Eseye and Thales Intelligent Cloud Connect bundle. (Available from the AWS Device Catalogue)</li> <li>Plug into device.</li> </ul>
2 Set up your AWS Account	• Set up your AWS Account. Go to the AWS marketplace and buy a MQTT message bundle from Eseye.
(3) Install Eseye's software	Install Eseye's AWS marketplace software integration. This enables security certificate and zero-touch provisioning.
(4) Create a 'Thing'	<ul> <li>Go to your 'Things' repository in your AWS IoT Core.</li> <li>Follow the instructions to Create your 'Thing' or upload a list of 'Things' for mass activation'</li> </ul>
<b>5</b> Queue credentials	• Security and identity credentials are queued for delivery to device on the Eseye network
6 Switch on your loT device	<ul> <li>Switch your IoT device on and voila – a security certificate is downloaded to your device and your data is automatically provisioned via Eseye's Platform OTA to AWS.</li> </ul>

## Intelligent Cloud Connect

Simplifying and accelerating IoT deployment





#### Intelligent Cloud Connect – Device Form Factors



internet of things

Depending on the application it is possible to choose from different form factors to efficiently connect a 'thing' to the internet.



#### MODULE

Designed for integration on host PCB, the module is the common choice for higher volume projects. It is necessary for the designer to have board level RF and embedded design skills. Final applications require type approvals



#### **TERMINAL**

The easiest method of integration. Pre-approved and ready to use IoT system with industrial interfaces including USB SPI, I2C, RS232 along with Digital GPIO and Analogue inputs. The terminal is a popular choice for adding connectivity to existing hardware.

#### **MODEM CARD\***

Applications which require a 'swappable' RF module concept commonly use the industry standard connectorised interface. Many industrial motherboards and routers adopt this standard.

\*PLANNED VARIANT



### Simplifying the IoT Journey

Eseye and Thales are revolutionising IoT with the power of simplicity. Together, they are streamlining the IoT Journey with out-of-the-box, zero touch global connectivity and seamless AWS integration. The platform solves major IoT challenges allowing organisations to focus on generating business value and innovating solutions to improve our world.

Contact Thales or Eseye today to learn more and request a demonstration.

www.eseye.com/thales

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## About Eseye

Eseye is a global provider of highly managed global IoT cellular services working exclusively with companies deploying IoT devices. They are an AWS Advanced Technology Strategic Partner for IoT, winners of the 2017 Frost & Sullivan Product Leadership Award; joint-winners of the 2018 GSMA GLOMO Award for Outstanding Contribution to UN Sustainable Development goals, recognised in the 2016/17/18 Gartner Magic Quadrants for M2M managed services and hold ISO 27001 accreditation.

For further information about Eseye please visit: www.eseye.com

### About Thales

Thales is a global leader in solutions for the Internet of Things (IoT), at the heart of the digital economy for a truly connected world. We have been pioneering IoT solutions for almost a quarter of a century and our customers value our experience and expertise in the thriving M2M/IoT market.

Thales takes a 360-degree approach by providing the essential building blocks required to enable the secure exchange of information between devices, machines or vehicles and the cloud through wireless connectivity.

We serve OEMs from various markets such as automotive, tracking and tracing or industrial mobile computing globally through an extensive portfolio of hardware, software and services for the IoT: Future-proof Cinterion® IoT Modules, Terminals and Modem Cards connect virtually any IoT application while enabling seamless evolution to next generation networks. Our customers value their rugged design, unparalleled engineering and manufacturing standards which make them reliable in the most extreme environments. We empower our customers' businesses through off-the-shelf connectivity. Our security services provide IoT device lifecycle management and ensure trusted data exchange from edge devices up to the cloud while keeping devices protected from cybersecurity threats.

For more information please visit: https://gemal.to/intelligent-cloud-connect



You can now follow an easy process to deliver IoT data to the cloud in a greatly reduced timeframe with the confidence of a solution being provided by AWS, Eseye and Thales. This is a truly watershed moment for IoT."

Andreas Haegele, VP loT at Thales



#### FOR MORE INFORMATION PLEASE CONTACT

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