Efficient connectivity and security management for Massive IoT

Wednesday 28 February, 2024 9.00 - 11.30 Gran Fira, Barcelona Hall 8, Theatre 4



Jean-Francois GROS

Head of IoT Services Product Line
Thales

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Thales at a glance



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- State and cities protection
- Science and space exploration
- Critical information systems
 Digital Identity and security
- Cloud security and data encryption

#1 eSIM loT provider

Thales is the market leader on industrial and automotive sectors

Protection of 400 critical sites all over the world.

2 out of 3 aircrafts in the world take off and land using Thales equipment

Cybersecurity solutions for

9 of the top10 internet giants.



Vision for IoT



SVP Strategy, Mobile Connectivity Solutions at Thales Digital Identity and Security said:



loT demands greater simplification, more orchestration and right level of security for each use case.

We already collaborate with hundreds of OEMs and IoT service providers and we can address their challenges, based on 3 pillars:

BUILD, RUN, PROTECT

- Build covers design
- o Run means production, deployment and maintenance
- Protect encompasses the continuous virtuous cybersecurity



Enterprises top priority IoT challenges 01 BUILD **84%** o loT technos & solutions are wide & diverse Standardization for scalability RUN 02 51% o Concerns over service reliability or network coverage **Connectivity management** for efficient logistic PROTECT 03 o Ensuring data network & device security Security for service continuity and brand protection

Source: Kaleido Intelligence



Cellular is moving to eSIM

CELLULAR IOT IS GROWING

2027 Annual Shipments Incl. Auto, excl. China

2.5 Bu

5% 0.5 Bu Cellular CAGR

IOT IS MOVING TO ESIM

eSIM/iSIM adoption is being embraced



Enterprises are or plan to adopt eSIM for greater flexibility



- Standardized &
 certified common
 criteria EAL4+
 hardware Root of Trust
- Efficient connectivity management
- Scalable security

What enterprises say

Large global smart metering company

- I provide a global connectivity but some customers want to use their own local one
- I want to use NB-IoT for battery powered devices but GSMA M2M cannot be used
- Security is a subject, use cases, ownership, provisioning, trust in production

Aircraft manufacturer

- I need to use local connectivity when the aircraft lands in a any country
- I need reversibility and cannot depend on a single connectivity provider

Track & trace company

- Permanent roaming is forbidden in some countries
- Secured device to cloud is a must

Leading IoT connectivity provider in Europe

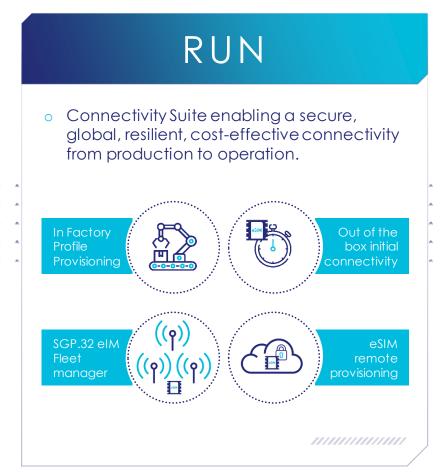
- I want to optimize connectivity costs by using local partners but with eSIM M2M, this is too costly and slow
- Roaming agreements can change anytime

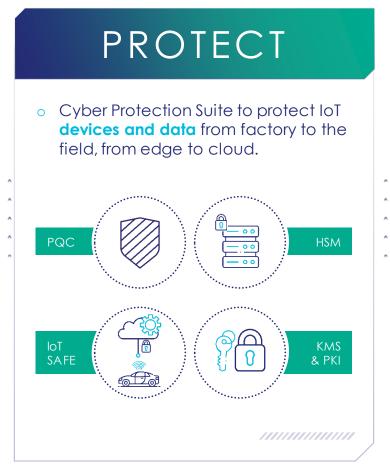


Enabling a dynamic circle of trust all along device life cycle:

connecting and protecting assets and data from cyber threats.

BUILD Range of industry grade, standardized, future proof hardware to securely connect devices. Ruggedized SIM Mono & Multi Profile SGP.32 xSIM eSE





Thales goes beyond the standards to address massive IoT



GO BEYOND CONNECTIVITY management standards

- No impact on device design and manufacturing self contained solution
- Resilient connectivity
 fallback, rollback, remote configuration
- Local rules & smart monitoring of device context location, network quality, change of connectivity
- Bring ultimate flexibility and simplicity
 Fleet management and business rules





SECURITY management to address massive IoT DIVERSITY

- Security by design for IoT use cases
 Data to cloud, firmware update, secure boot, secure storage, consulting services
- Supports in-factory and touchless provisioning
- Advanced key management and PKI
- 360° security assessment Audit, pen test,...





Take away





Security requirements and use cases are very diverse in massive IoT



Thales
delivers true
value add turning
new standards into
practical services



Thank you!



