
Aplicom A-Series
Professional Telematics Made Easy

Aplicom A-Series

Implementing demanding telematics and telemetry applications is easier than ever!

Easy and versatile configuration, no programming needed

Supports Aplicom Data Service ADS, enabling data access over REST API

Fast support from our team of experts

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Overview

A9 IPEX PRO

IP 67 protected unit for demanding environments like trailers and heavy machinery

A11 LTE

The most versatile high-end telematics unit with a wide set of interfaces

A9 PRO

Compact and powerful unit providing several inputs and an internal antenna option

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Sensors and Interfaces

All Aplicom A-Series devices have an internal real-time clock and an accelerometer.

They contain enough memory to store a large number of data snapshots.

The 9-32 VDC power input has built-in voltage level measurement that can be used to detect if an engine is running and to monitor the condition of the vehicle's battery.

The units also have jamming detection for GNSS and communication.

Software interfaces on top of the CAN bus include: FMS, ISOBUS, trailer EBS interface, and Modbus.

K-line is used to access real-time tachograph data.

Interfaces	A11 LTE	A11 BLE LTE	A9 IPEX PRO	A9 PRO
Cellular technology	4G LTE Cat 1 2G/3G fallback	4G LTE Cat 1 2G/3G fallback	4G LTE Cat 1 2G/3G fallback	4G LTE Cat 1 2G/3G fallback
CAN	2	2	1	1
Serial	5	5	1	1
Digital/analogue/ pulse input	12	12	2	3
Open collector out /Digital output	2	2	1	1
Digital input/output	-	-	-	1
1-wire	1	1	1	1*
K-line	1	1	-	
Bluetooth	-	5.0 BLE	-	-
Antenna	External	External	Internal	Internal/ External

* 1-Wire or K-Line

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Collection and Handling of Data

Our devices log data from both external and internal sensors.

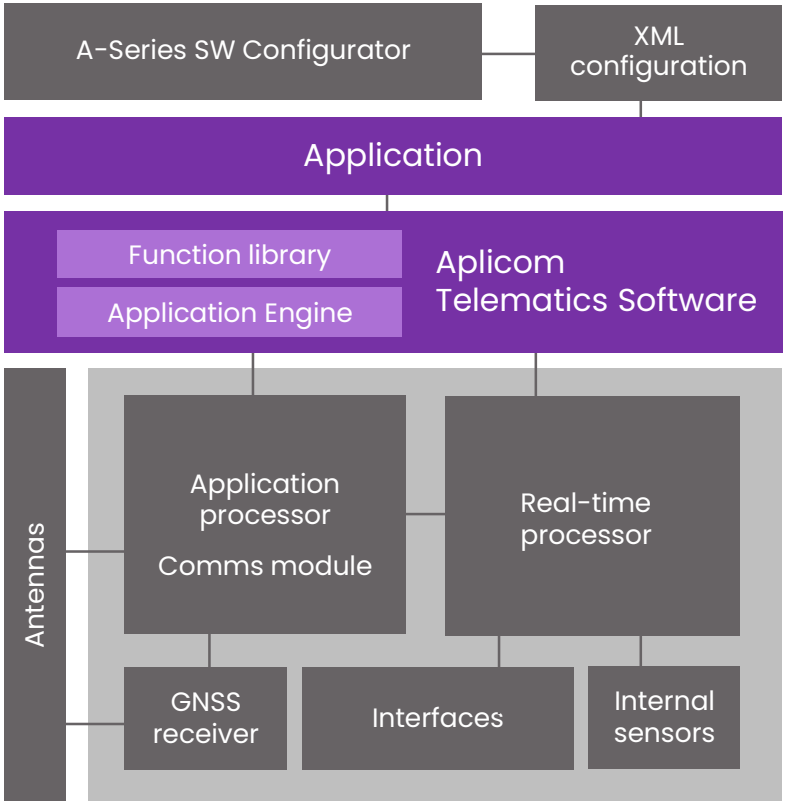
The powerful in-built processor can handle all interfaces in parallel, in real-time, and with millisecond precision.

The application processor takes care of communications and hosts the Telematics Software.

Applications define rules for handling incoming data: what kind of conditions trigger events, and what actions to execute.

An action can send data, toggle an output or perform any combination of in-built functions.

Applications are created with the A-Series Telematics SW Configurator, a versatile tool for creating functionality without the need for programming.



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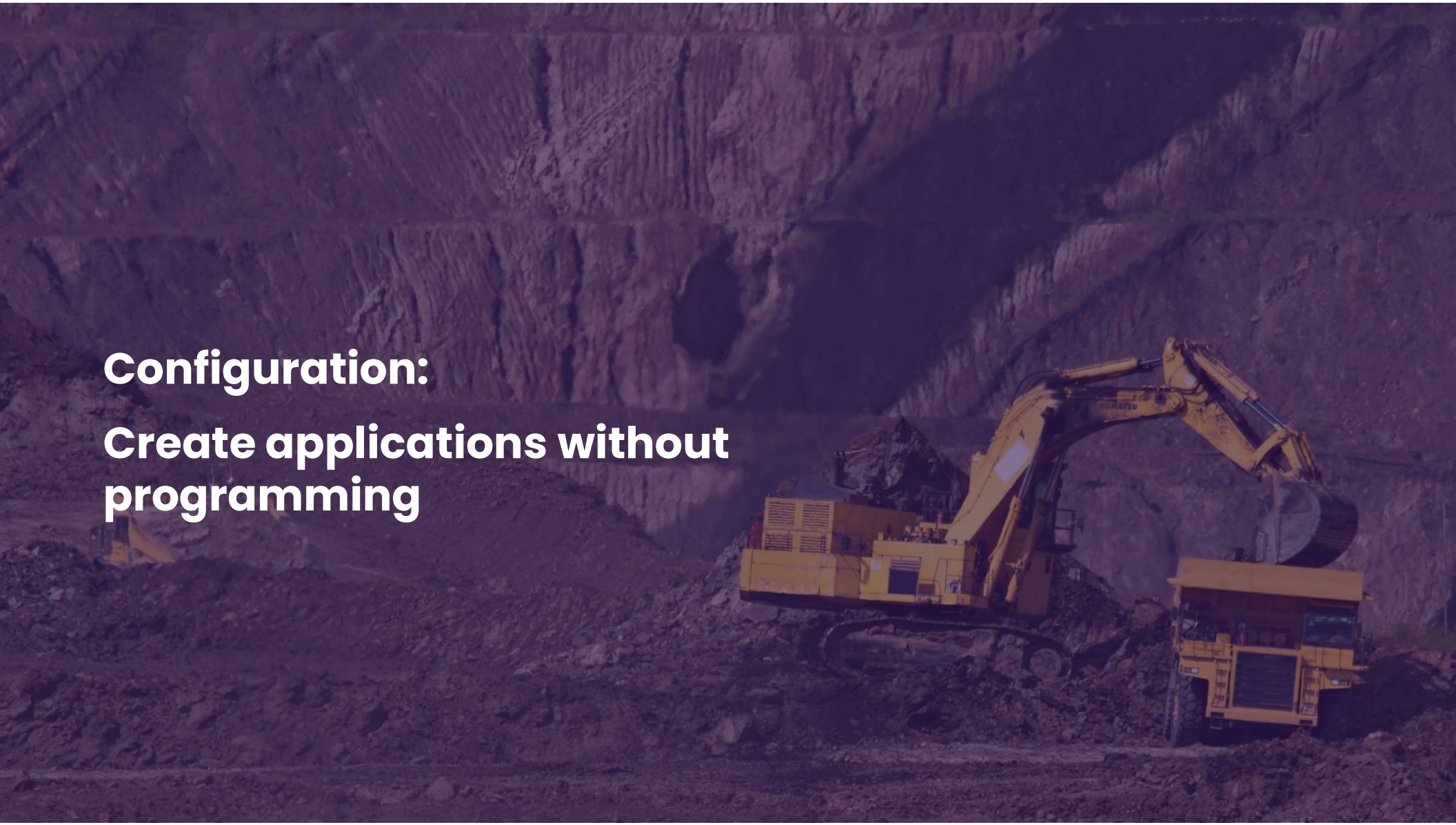

Configuration:
Create applications without programming

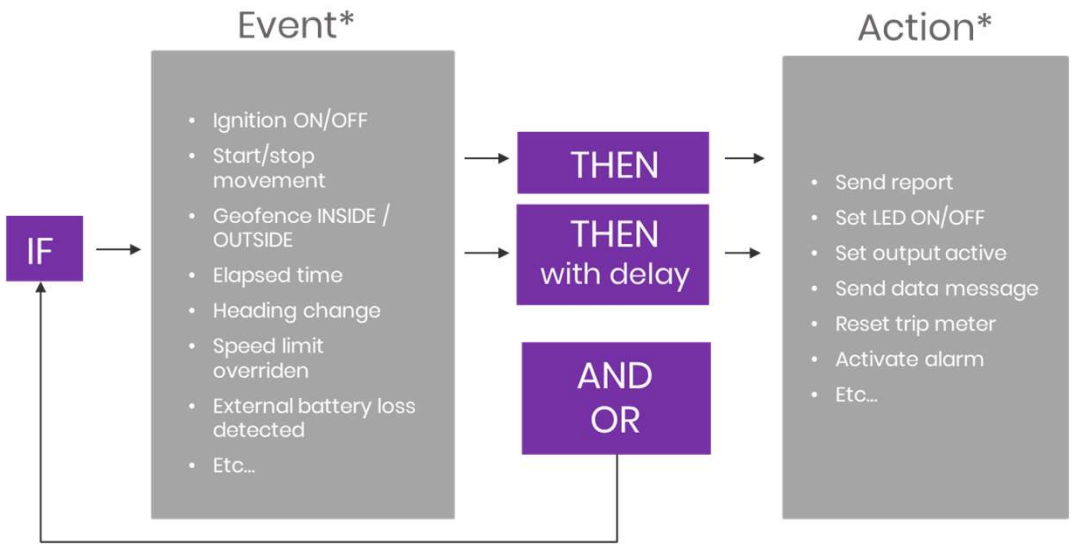
Create Applications without Programming

Configurations are an efficient way to create functionality without programming!

A configuration defines application logic for an A-Series unit, utilizing A-Series Telematics Software's in-built functions.

Each configuration is an XML file, that is generated by the A-series SW Configurator Tool.

Configurations are created on your computer and then uploaded to the devices locally, or with an over-the-air update facility provided by Aplicom.



* The events and actions shown here are examples only. For a full list, please refer to the Aplicom A-Series SW Configurator User's Manual

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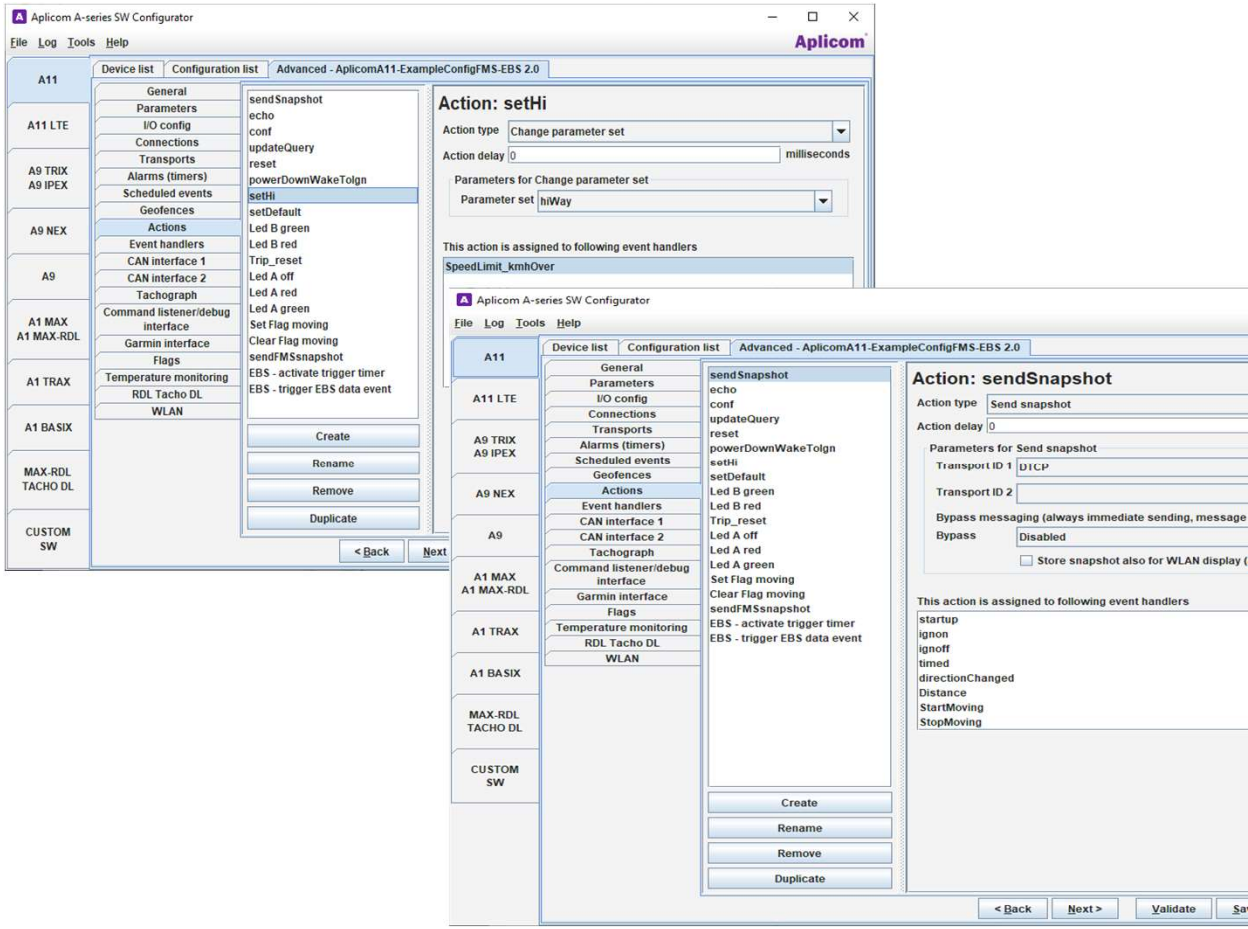
A-Series SW Configurator Tool

The A-Series SW Configurator Tool is a form-based user interface that allows applications to be quickly and efficiently created.

The system uses events that you define. Event handlers decide what actions are triggered by events.

This allows you to create complex application logic needed to power your own use-cases.

We can provide training and support on the usage of these tools. We can even create configurations for you, if needed.



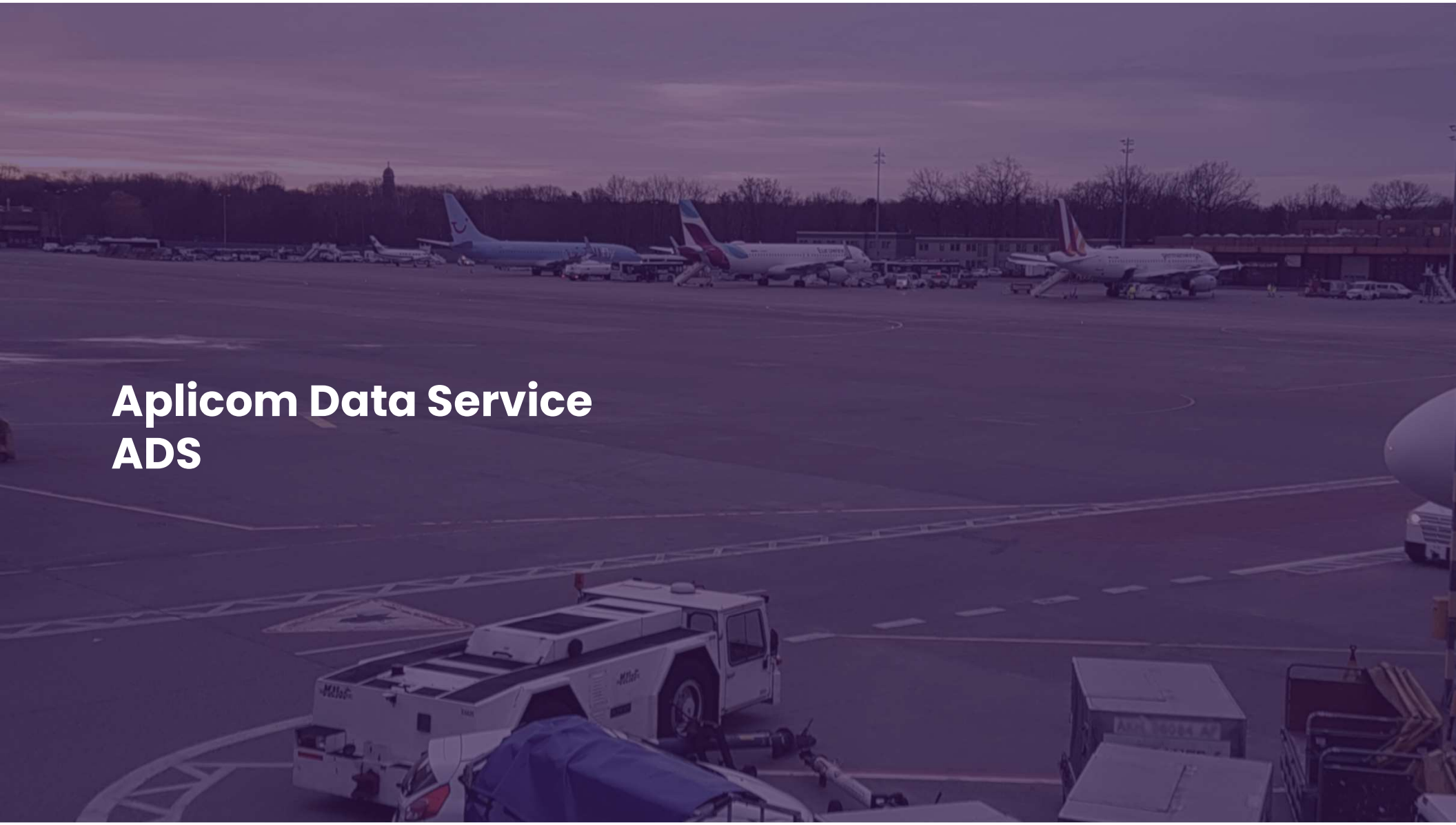
Configuration Templates

The A-Series SW configurator tool includes configuration templates that can assist you in creating your own applications.

Templates can be easily modified or extended with new functions.

A configuration template can be used without any changes for testing or demonstrating A-Series functionality.

You can also use templates as a learning tool, to understand what configurations look like in practice.



Aplicom Data Service
ADS

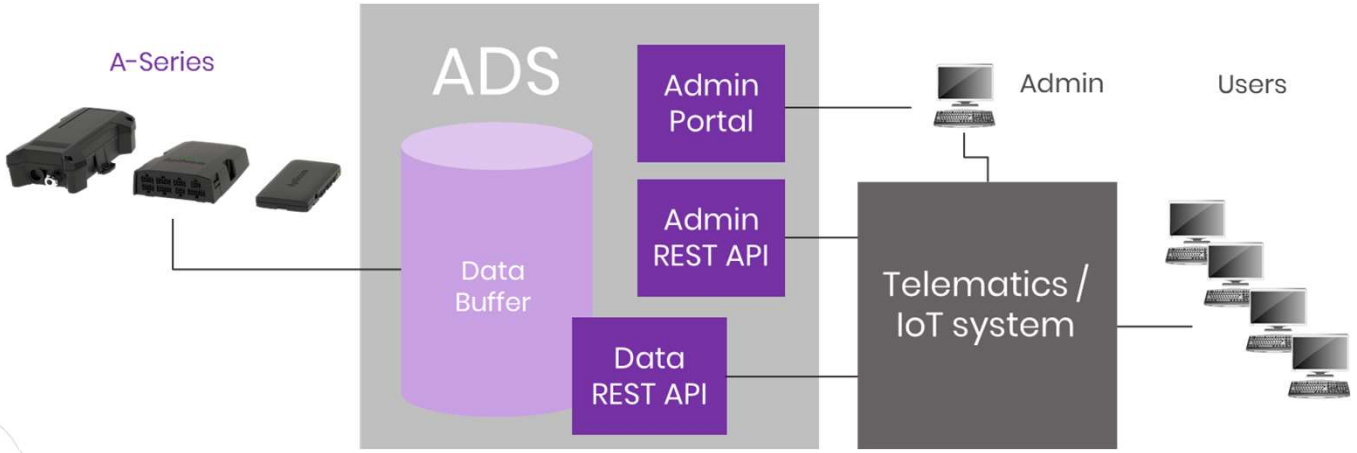
ADS Overview

Aplicom Data Service can be used as an intermediate data storage for A-Series device data. Data can be accessed via a REST API.

ADS offers simple application programming and control interfaces that follow common industry practices.

The data is transferred securely and reliably from A-Series mobile devices, and it is stored in an SQL database on the server for two weeks, so that you can be sure that no data gets lost.

Our services are reliable and easy to integrate.



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Data through ADS: Standard Data Set

Aplicom D- and G-Protocol* data content:

- Location, altitude, speed, heading, and max speed since last event
- Trip counter distances
- Full set of GSM cell information, including location information
- Status of digital inputs and outputs
- Pulse counter rates
- Analog input voltage levels
- Free event information (within “event specific bytes”)
- WLAN status related information for A11W use

*You will get the full protocol definitions from Aplicom Extranet, after registering as Aplicom partner.

Data through ADS: FMS Data

Aplicom F- Protocol data content
Availability depends on vehicle and its FMS interface version (1 to 4)

- Total fuel used
- Total distance driven
- Engine running hours, distance to next service
- Fuel level %, Ad blue level %
- PTO, clutch, brake pedal and cruise control status
- Gross vehicle combination weight
- Number and weight of axles
- Wheel-based speed (both min and max)
- Engine rpm, actual, max. and min between F-protocol snapshots
- Number of harsh braking events between F-protocol snapshots
- Ramp and door status
- Selected gear
- Tachograph information
- Engine coolant temp, actual, min, max

Data through ADS:
Real-Time Tachograph Data

Aplicom E- Protocol data content, e.g:

- Driver ID's, driver 1 and 2
- Vehicle registration number
- Vehicle identification number (VIN)
- Driver status; driving, resting, working, etc.
- Driving time limit warnings
- Driver status change events
- Vehicle moving status
- Tachograph date and time
- Speed
- Engine momentary rpm
- Trip and vehicle total mileage

Data through ADS: Trailer EBS CAN Data

Aplicom EB- Protocol data content

Full data set from trailer Electronic Braking System (EBS) CAN, e.g:

- EBS data counters
- Brake data values, min and max
- Wheel based speed, min and max
- Towing detection
- Weight

Other Data

Other data is relayed in original raw format

- CAN ID forwarder data,
- Cold chain data, or
- 1-Wire sensor temperature data

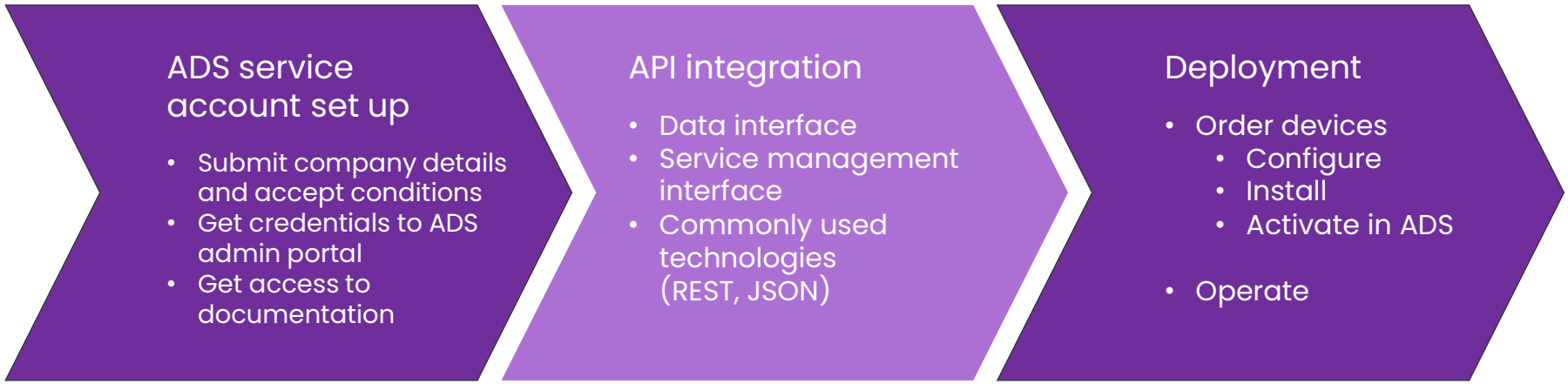
Getting Familiar and Test

You need only create a regular ADS account that can also serve as testing account.

Operation for up to 9 units is free of charge.

You can test and prototype on a small scale, free of charge. Invoicing starts when the tenth device is activated. Until then, no fees are charged.

ADS Deployment in Practice



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Simple Steps To Get Started

1

Contact Aplicom Sales and get familiar with the products.

We can assist you in finding the optimal way to implement your solution.

2

Select the A-Series devices that suit your application, and activate ADS service.

We will help you to select devices that fulfil your needs. We can customize them too, if needed!

3

Create device applications with our configurator tool.

We will teach you how to create amazing applications with the powerful and versatile Aplicom SW Configurator Tool.

4

Connect your system to Aplicom Data Service API.

We will support you in developing and testing the interfaces.

5

Order and set up devices and **you are live!**

We can install your configurations at our factory and take care of SIM management for you.

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