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IOblend

robust data

delivered in real-time

### What is IOblend?

IOBLEND IS AN END-TO-END AUTOMATED DATA
INTEGRATION SOLUTION WITH IN-BUILT DATAOPS
CAPABILITIES

PRODUCTION DATA PIPELINES OUT-OF-THE-BOX

IOBLEND IS A LOW-CODE/NO CODE TOOL FOR BUILDING, RUNNING AND MANAGING ROBUST DATA PIPELINES FAST, BATCH AND REAL-TIME

IOBLEND CAN BE DEPLOYED IN THE CLOUD, ON-PREM AND HYBRID ENVIRONMENTS, FULLY WITHIN THE CLIENT'S SECURITY NET

IOBLEND SIGNIFICANTLY REDUCES EFFORT OF DATA INTEGRATIONS, DATA MIGRATIONS, REAL-TIME DATA PROJECTS AND DATA SYNCRONISATIONS

FREE DEVELOPER EDITION IS AVAILABLE

# Covers all data integration applications

DATA PRODUCTS AND DIGITAL APPS DEVELOPMENT

CUSTOMER 360 VIEW ENABLEMENT AND CRM

PRODUCTION AI AND ML OPS MANAGED DATA FEEDS

ONLINE STREAMING SERVICES, SATCOMS, AND MOBILE COMMS

PLANT MANAGEMENT, PLANNING AND MONITORING

SMART CITY/HIGHWAYS MANAGEMENT AND IMPLEMENTATION, IOT

REVENUE MANAGEMENT SYSTEMS, NETWORK PLANNING, REAL-TIME DATA ANALYTICS

SPACE/SEA/AIR/RAIL MANAGEMENT SYSTEMS AND LIVE FORECASTING

RESOURCE PLANNING AND MANAGEMENT - LIVE OPTIMISATION AND ALLOCATION

CENTRAL OR FEDERATED DATA REPOSITORY CREATION AND MANAGEMENT

DATA MIGRATION, CLOUD IMPLEMENTATIONS, INTEGRATION AND LEGACY SYSTEM UPGRADE PROJECTS

# The Solution (Tech)

### **FAST DEVELOPMENT**

NO CODE, ITERATIVE PIPELINE DEVELOPMENT WITH FULLY REUSABLE AND SHAREABLE ARTIFACTS. FULLY FLEXIBLE - ETL/ELT/REVERSE-ETL/SYNC. BUILD AND MANAGE REAL-TIME SPARK DATA PIPELINES WITHOUT NEEDING SPARK DEVS

#### KAPPA ARCHITECTURE

SEAMLESSLY INTEGRATES BATCH AND REAL-TIME DATA

### INTEGRATED DATA MANAGEMENT AND TECHNICAL GOVERNANCE

RECORD-LEVEL LINEAGE, CDC (ALL THREE METHODS), METADATA, SCHEMA, EVENTING, DE-DUPING, SCD I AND II, CHAINED AGGREGATIONS, MDM, CATALOGING, TIME TRAVEL, WINDOWING, COMPACTION

#### POWERFUL DATA PROCESSING ENGINE

ENHANCED APACHE SPARK, AUTOMATED CLUSTER
MANAGEMENT, IN-MEMORY COMPUTES, >1M TRANSACTIONS
PER SEC PROCESSING SPEED

### RUN SECURELY ANYWHERE

DEPLOYED LOCALLY, ON EDGE, ON-PREM, CLOUD AND HYBRID ENVIRONMENTS - RESIDES INSIDE THE CLIENT'S SECURITY NET. WORKS WITH ANY DATA FROM ANY SOURCE

### ACHIEVE MORE WITH LESS

REDUCE DATA ENGINEERING COSTS BY >70% AND IMPROVE DATA INTEGRATION PROJECT TIMELINES BY 10X

### **LOW LATENCY**

HANDLES HUGE DATA VOLUMES AT
LOW LATENCY ACROSS ANY
ENVIRONMENT - WE HAVE TESTED
AT >1MIL TPS AT <1 SEC ON
MODEST HARDWARE

### 70% SAVING

SAVING IN DATA ENGINEERING
AND DATA MANAGEMENT COSTS
VS MAINSTREAM ETL/ELT AND
SIMPLIFIED REAL-TIME
DEVELOPMENT DUE TO NO
CODE/LOW CODE AND
AUTOMATED SPARK MANAGEMENT

### 10X SPEED

ACCELERATE DEVELOPMENT
OF DATA PROJECTS VS
TRADITIONAL METHODS - WE
TOOK DATA MIGRATION
PROJECTS FROM 9M TO 6
WEEKS

### **FULL DATAOPS**

CENTRALISES AND STANDARDISES
ALL DATA MANAGEMENT AND
TECHNICAL GOVERNANCE IN ONE
SOLUTION - CONSUME
PRODUCTION-READY DATA RIGHT
AWAY

### 90% REDUCTION

REDUCTION IN DATA
MANAGEMENT EFFORT DUE
TO THE HIGH-LEVEL OF
AUTOMATION - SPEND LESS
TIME MANAGING YOUR
PIPELINES AND DATA POSTPROCESSING

### **ARCHITECTURE**

EASILY ENABLES FEDERATED,
CENTRALISED, HYBRID, ONPREM, AND CLOUD DATA
ARCHITECTURES - SHAPE
YOUR DATA ESTATE THE BEST
WAY IT SUITS YOUR NEEDS

# Production grade data integration like no other

IOBLEND GIVES YOU THE CONFIDENCE IN YOUR DATA AND HOW IT FLOWS THROUGH YOUR ESTATE BY GIVING YOU THE FULL VISIBILITY OF WHAT IS HAPPENING IN REAL TIME

MANAGE AND APPLY GOVERNANCE POLICIES TO YOUR DATA BEFORE YOU LAND IT FOR CONSUMPTION



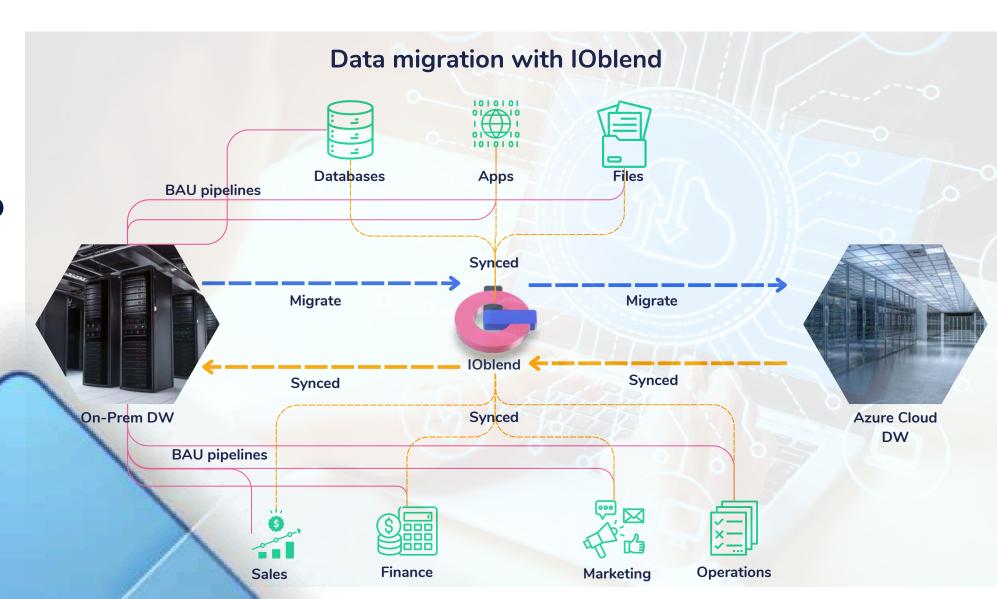
# Fast and cost-effective data migrations

WITH IOBLEND, DATA MIGRATION IS
MASSIVELY ACCELERATED, SIMPLIFIED AND
DE-RISKED

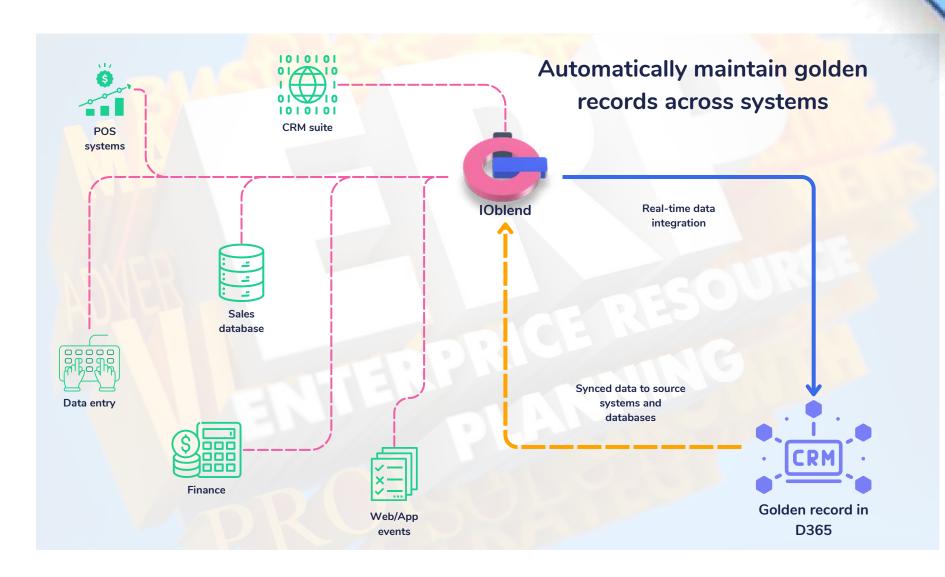
RUN BOTH OLD AND NEW SYSTEMS OR WAREHOUSES IN PARALLEL UNTIL READY TO COMPLETE MIGRATION

LIFT-AND-SHIFT, CLEAN UP, TRANSFORM DATA, APPLY GOVERNANCE, REBUILD DWS AND SYNC DATA ACROSS MULTIPLE SYSTEMS

EXTRACT, APPLY BUSINESS RULES, TEST AND ALIGN CHANGES WITH LIVE SYSTEMS -IOBLEND DOES IT ALL IN ONE TOOL



# Easy CRM data integration (D365)



DATA INTEGRATION EFFORT WITH CRM SYSTEMS LIKE D365 IS SIGNIFICANTLY REDUCED

IOBLEND INTEGRATES WITH ALL DATA SOURCES AND SYSTEMS AND MANAGES THE DATA IN REAL-TIME. ADD AS MANY SOURCES AS REQUIRED

AUTOMATICALLY MANAGES DATA QUALITY,
APPLIES DATA GOVERNANCE AND SCALES
INFRASTRUCTURE TO CATER FOR ANY
COMPLEXITY AND VOLUME

BUILD YOUR PRODUCTION CRM DATA
PIPELINES IN DAYS, REDUCING YOUR
DEVELOPMENT AND MAINTENANCE COST

EASILY SYNC DATA UPDATES AMONG ALL SYSTEMS. ESPECIALLY USEFUL IF USING DYNAMICS 365 AS MASTER DATA

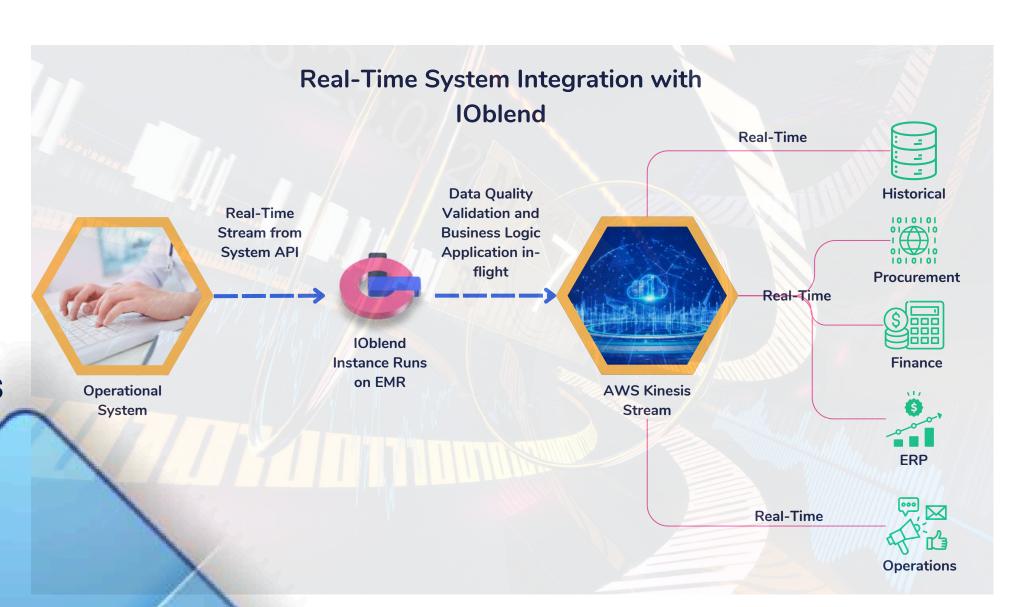
# Real-Time System Integration

REAL-TIME SYSTEM INTEGRATIONS CAN BE DELIVERED QUICKLY REGARDLESS OF THEIR COMPLEXITY

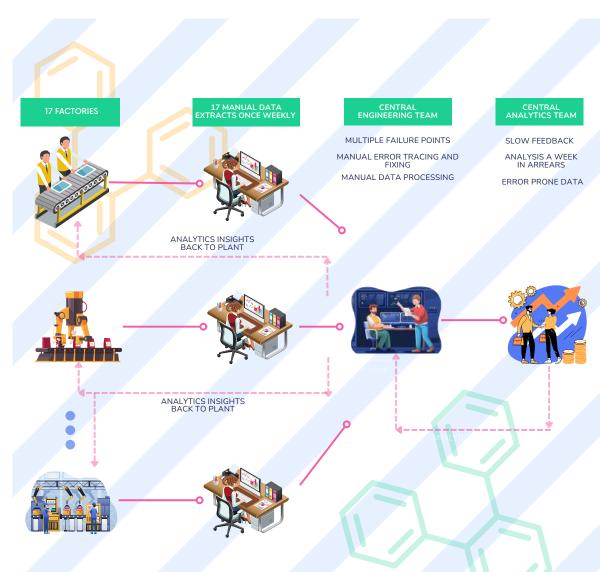
INTEGRATE ON-PREM, CLOUD AND HYBRID SYSTEMS FAST

APPLY DATA VALIDATIONS, GOVERNANCE, BUSINESS RULES, AND STORED PROCEDURES IN-FLIGHT - FULL DEVELOPMENT FREEDOM

DELIVER FULL SYSTEM INTEGRATIONS IN DAYS NOT WEEKS OR MONTHS



# 10blend powers manufacturing IoT



MEDICAL EQUIPMENT COMPANY RELIED ON MANUAL EXTRACTS OF THE MACHINE DATA, DROPPING IT INTO A CSV AND SENDING ONCE A WEEK TO THE HQ FOR PROCESSING AND ANALYTICS

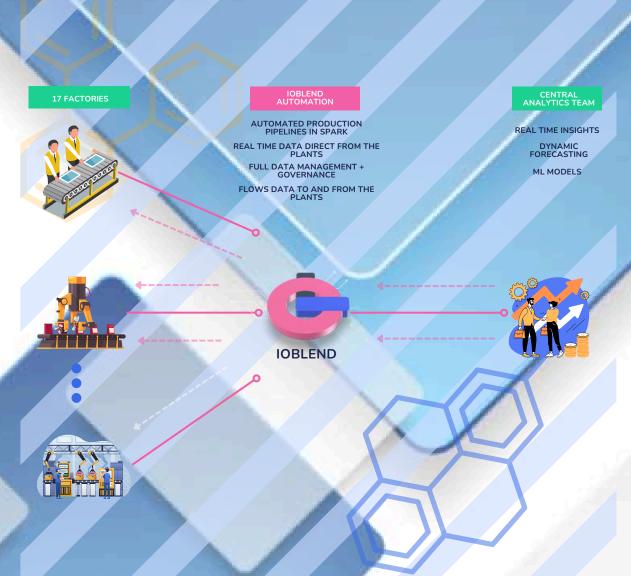
THIS DATA WAS ALWAYS AT LEAST A WEEK IN ARREARS, MEANING THAT LIVE PRODUCTION DECISIONS WERE IMPOSSIBLE TO MAKE FROM THE HQ. LIVE INVENTORY, MACHINE DOWNTIME, COMPONENT QUALITY, ETC HAD TO BE ADDRESSED WELL AFTER THE ISSUES (AND COSTS) HAVE OCCURRED

IOBLEND CONNECTED ALL SEVENTEEN
FACTORIES AND ENABLED TRUE REAL TIME DATA
FLOWS USING OUR PROPRIETARY SPARK-BASED
ENGINE - FULL END-TO-END INTEGRATION

IOBLEND AUTOMATICALLY APPLIED DATA
MANAGEMENT AND DATA GOVERNANCE
POLICIES, AGAIN IN REAL TIME, THUS ENSURING
THE DATA FLOWING THROUGH THE PIPELINES
WAS ROBUST AND RELIABLE

THE EASE OF INSTALLATION AND IMPLEMENTATION OF IOBLEND MEANT THAT THE ORIGINAL PROJECT TIMELINE OF EIGHT MONTHS WAS REDUCED TO JUST THREE WEEKS, INCLUDING ONE WEEK OF THE DISCOVERY PHASE

THE PREDICITVE ANALYTICS MODEL ON TOP OF IOBLEND IMPROVED EFFICIENCY BY >\$1.5M PA



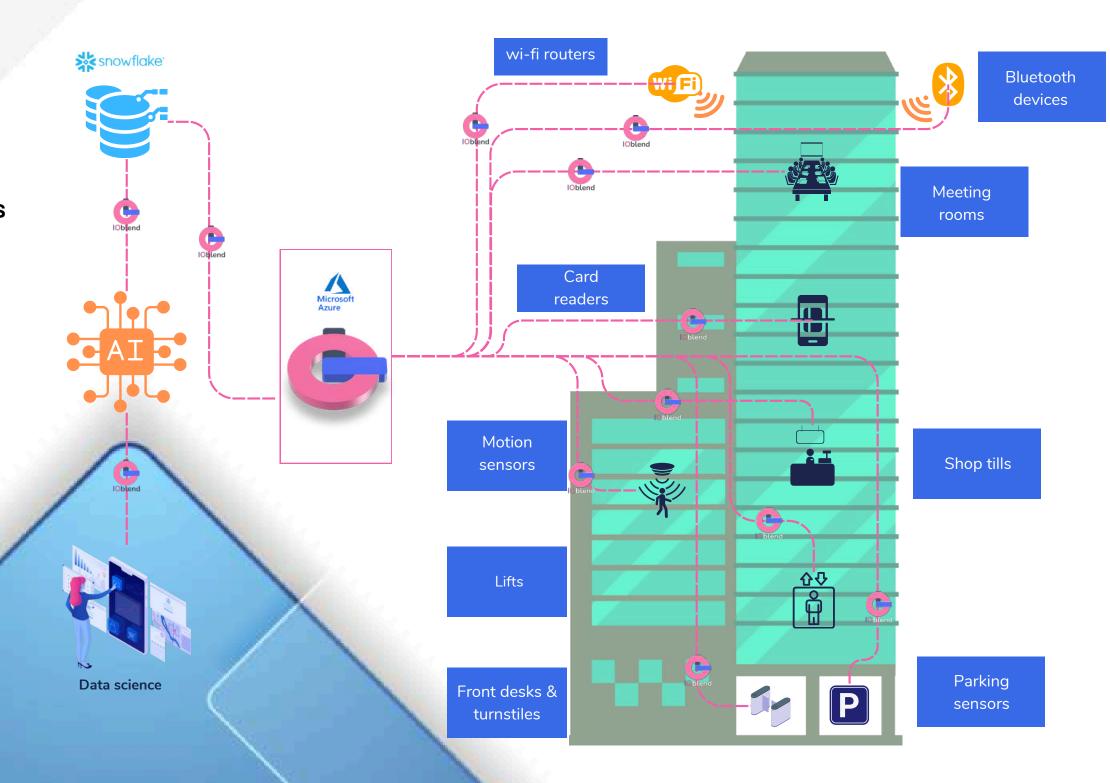
# Real-time commercial property monitoring

### TECHNICAL CHALLENGE

- PROPERTY MANAGEMENT COMPANIES WANT TO IMPROVE UTILISATION OF THEIR PROPERTIES
- TO ACHIEVE THAT, THEY NEED TO MEASURE THE BUILDING OCCUPANCY AND ACTIVITIES IN REAL-TIME TO GAUGE BETTER HOW THE OFFICE SPACE IS BEING UTILISED AT ANY GIVEN TIME
- THE CHALLENGE IS TO ACCURATELY MONITOR ACTIVITIES IN REAL TIME WHILE PRESERVING PRIVACY

#### **IOBLEND SOLUTION**

- IOBLEND CONNECTS TO ANY DATA SOURCE AND PROVIDED REAL-TIME
   STREAMING DATA PROCESSING CAPABILITIES
- THE TOOL WILL PROVIDE REAL-TIME SENSOR MONITORING FROM WI-FI, BLUETOOTH, RFI TAGS, INTRANET LOGS, SHOPPING TILLS, DOOR SENSORS, SECURITY CAMERAS, ETC.
- ALL DATA IS PROCESSED IN REAL-TIME, PROVIDING A VERY ACCURATE PICTURE OF THE OFFICE UTILISATION 24/7
- THIS ALLOWS PROPERTY MANAGERS TO OPTIMISE OFFICE SPACE
   UTILISATION BOTH STRATEGICALLY (E.G. LAYOUTS, TENANT TYPES, ETC)
   AND TACTICALLY (E.G. DESK PLACEMENTS, FACILITIES, SERVICES, UP SELLS)



# Real-time data integration at airports

#### TECHNICAL CHALLENGE

- DISPARATE AIRPORT, GOVERNMENT, AIRLINE AND GROUND OPS SYSTEMS ARE NOT INTERCONNECTED
- MOST SYSTEMS RELY ON MANUAL INPUTS, USE VARYING DATA FORMATS AND CANNOT BE USED FOR DYNAMIC AIRPORT DECISIONS TO OPTIMISE TRAFFIC FLOWS, COMMERCIAL SALES, PASSENGER UPDATES AND GROUND OPERATIONS

#### **IOBLEND SOLUTION**

- IOBLEND CONNECTS TO ANY DATA SOURCE AND PROVIDED REAL-TIME STREAMING DATA PROCESSING CAPABILITIES
- SIMILAR TO THE BUILDING MANAGEMENT, IOBLEND WILL PROVIDE REAL-TIME SENSOR MONITORING FROM WI-FI, BLUETOOTH, RFI TAGS, INTRANET LOGS, SHOPPING TILLS, DOOR SENSORS, SECURITY CAMERAS, ETC.
- ALL DATA IS PROCESSED IN REAL-TIME, PROVIDING A VERY ACCURATE PICTURE OF THE AIRPORT UTILISATION.
- AIRPORTS CAN USE THE DATA TO PROACTIVELY ADDRESS DEVLOPING DELAYS, REDUCE BOTTLENECKS IN SECURITY AND AT BOARDING GATES, ENABLE HIGHER UPSELLS, BETTER TAILOR THEIR SERVICES TO PASSENGER DEMAND
- ENABLE THE ABOVE CAPABILITIES USING THE MOST COST EFFICIENT AND INFINITELY SCALABLE SOLUTION







### Reliable automated data flows at sea

**Sattellite** 

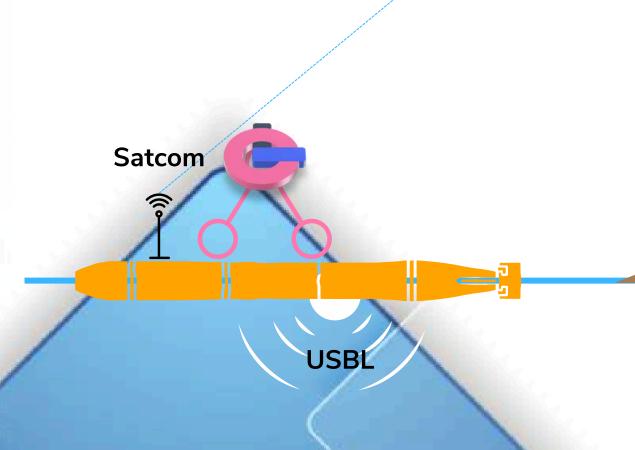
#### **TECHNICAL CHALLENGE**

- DATA LOSS DURING TRANSMISSIONS AND NO ABILITY TO RECOVER UNTIL BACK IN PORT (MANUAL RECONCILIATION OF DATA)
- NO REAL-TIME DATA STREAMING AND AUTOMATIC RECOVERY
- NO AUTONOMOUS DATA MANAGEMENT AND QUALITY CHECKS BEFORE TRANSMISSIONS
- RAW DATA ONLY, NO ONBOARD AGGREGATIONS TO REDUCE COMMS COST

#### **IOBLEND SOLUTION**

- IOBLEND WILL BE INSTALLED ONBOARD (DESKTOP) AND HQ
   AND MANAGE THE DATA FLOWS (ALL DATA SOURCES
   COLLECTED CAN BE MANAGED AUTOMATICALLY)
- THE SOFTWARE MANAGES BOTH BATCH AND STREAMING DATA

   IOBLEND'S CORE FEATURES INCLUDE AUTOMATIC EVENTING,
   REGRESSIONS AND DATA RECOVERY CAPABILITIES THAT
   PROCESS LATE ARRIVING DATA WITHIN AND OUTSIDE EVENT
   WINDOWS
- ALL DATA TABLES GET RECALCULATED AS THE LATE ARRIVING DATA IS PROCESSED, WITH RESULTS STORED FOR "RAW"
   ORIGINAL SET AND NEWLY RECOMPUTED ONE
- DATA CAN BE SUMMARISED ONBOARD THE VESSEL TO REDUCE SATCOM COSTS (RAW DATA CAN BE EXTRACTED IN PORT OR TRANSMITTED AS REQUIRED)





**Drone HQ** 

#### THE ASK

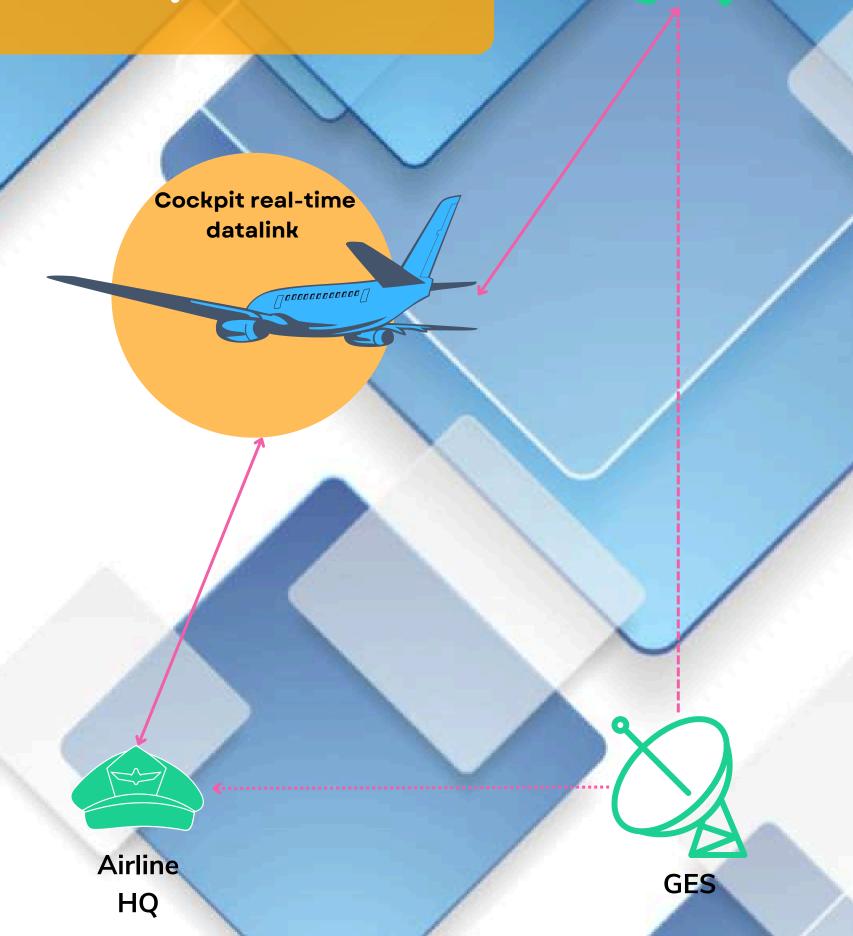
PROVISION OF REAL-TIME SATCOM DATALINK TO ENABLE AIRLINE COCKPIT-TO-GROUND
DATA SHARING TO ENRICH ACARS

#### **TECHNICAL CHALLENGE**

- SATCOM DATA LINK PERFORMANCE IS INCONSISTENT DUE TO SATELLITE OUTAGES, POOR GROUND EARTH STATION (GES) AVAILABILITY AND DATA LINK CAPACITY ISSUES
- REAL-TIME DATA STREAMING GETS INTERRUPTED WITH THE SUBSEQUENT LOSS OF DATA AND NO ABILITY TO RECOVER UNTIL MUCH LATER (MANUAL RECONCILIATION OF DATA)
   - "WHEN AVAILABLE" QUALITY LINK DUE TO COST

#### **IOBLEND SOLUTION**

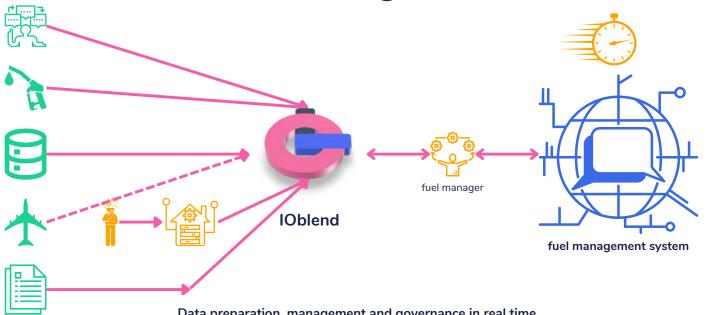
- IOBLEND'S CORE FEATURES INCLUDE AUTOMATIC EVENTING, REGRESSIONS AND DATA RECOVERY CAPABILITIES THAT PROCESS LATE ARRIVING DATA WITHIN AND OUTSIDE EVENT WINDOWS
- ALL DATA TABLES GET RECALCULATED AS THE LATER ARRIVING DATA IS PROCESSED, WITH RESULTS STORED FOR "RAW" ORIGINAL SET AND NEWLY RECOMPUTED ONE
- THE END RESULT IS NO DATA IS LOST DURING THE COMMS INTERRUPTIONS



Sattellite

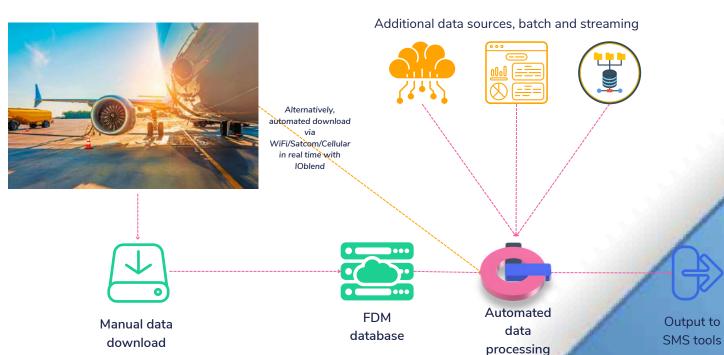
# Aviation use cases

### **Fuel management**

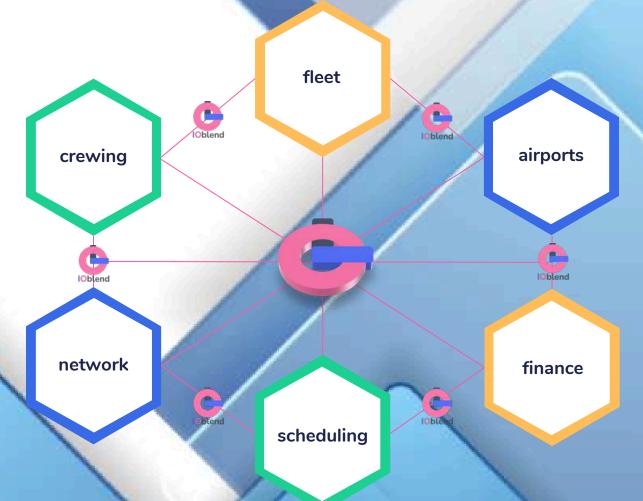


Data preparation, management and governance in real time standardised and automated processing, can be used with any system

### **Safety Management**



### Seamlessly integrate aviation data



# ISV technology partner















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discover the possible