ZetesAtlas
Controlled traceability right down the line

A real answer
to market demands

Fight against counterfeiting and parallel markets

To ensure traceability and support the fight against counterfeiting and parallel markets the packaging of manufactured products must meet increasingly stringent identification criteria. Ensuring full control of the flows and security of data have become a necessity. Technologically advanced sectors such as the pharmaceutical industry therefore include critical production data (batch number, best before date) in the same code as the identifier, in order to allow automatic control at the point of sale. At the same time, counterfeiting has become rife and serialisation of products is a very efficient weapon and method of controlling distribution channels.

New identification procedures

Combined with powerful data supports (RFID, Datamatrix code, Databar code), new identification procedures must be implemented with a great deal of rigour. While traditionally, the identifier of a product was pre-printed (GTIN), the new marking standards impose the addition of dynamic information at batch or even product level (serial number). Responsibility for the integrity of this data therefore lies with the producer!

ZetesAtlas takes up the challenge

It is important for an automatic identification station to be fully software managed in order to meet the challenges of new identification procedures. ZetesAtlas is well equipped to achieve this, with a fully-fledged hardware and software management centre.

Security, integrity, adaptability

After manufacture, products pass through a stage involving conditioning and packaging of units, using peripherals specific to automatic identification, i.e. printers, cameras, high speed automatic equipment...

Regardless of where the order comes from (ERP, EPCIS type repository) identification instructions must be executed in accordance with the following criteria:

- Transaction security
- Data centralisation
- Low level compatibility with machines
- Real-time control
- Accurate digitalisation of the physical identifier

ZetesAtlas execution software has a dedicated architecture to meet these objectives. From the point of view of traceability, digitalisation of production remains the main objective: setting up a reliable, independent and interconnecting data repository.

ZetesAtlas execution solution provides the foundation for horizontal supply chain traceability which meets the industry's most dynamic identification standards, e.g. EPC and ePedigree.
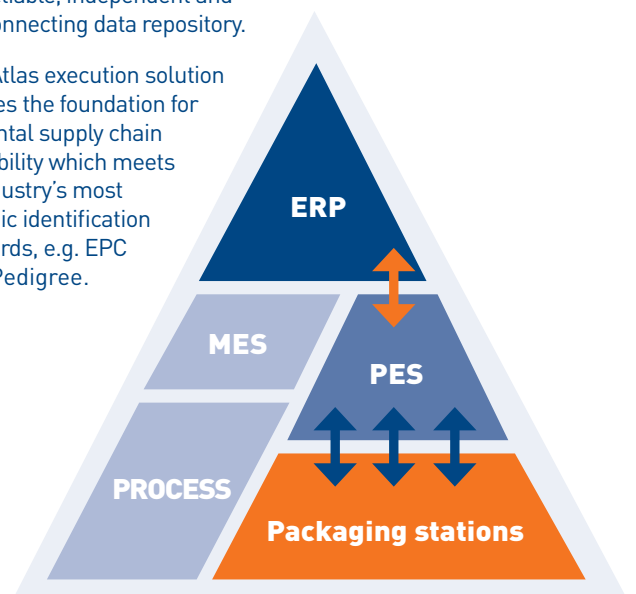
Serialisation and control of all parameters

Serialisation is a challenge that is often underestimated, in particular for high-speed processing of sales units. Regardless of the technology used, hardware and software are interlinked in order to ensure the necessary reliability between physical identifiers and their IT equivalent.

A high-speed processing station combined with ZetesAtlas has a fully-fledged real time core, capable of serialising and controlling articles on a very high speed line (600 op./mn).

- Generation of multi-format containers (products, countries)
- Real-time control of all operations (marking, labelling, control, ejection, performance)
- Digital management of each event
- Retrofits on equipment

Aggregation and control on the line

Controlling the contents of serialised flows also implies allocating single numbers to regrouping logistical units (boxes, pallets) and ensuring the correct match between containers and their contents.

In a mechanised context, this requires a perfect knowledge of packaging cycles and manual recovery procedures. As both a manufacturer and an editor, Zetes adds a unique value to the market by combining these two skills within the same company.

Simplified and centralised management

Put an end to multiple interfaces. ZetesAtlas has a unique IHM that centralises server synchronisation, batch declaration assistance, exploitation and supervision operations. Machine operations (PLC) are an integral part of the interface, which also makes it possible to control configuration and supervision of any level of the production line. Even in the event of disconnection with the server, the ZetesAtlas station remains fully operational.

Hardware-software harmony

Zetes has many years of experience in designing and manufacturing automatic identification machines. Its range covers all packaging levels, whether you need a high speed labeller of bottles or an EAN 128 automatic pallet labelling applicator.

The ZetesAtlas ID stations are designed according to the same specifications as the ZetesAtlas solution: an open and non-proprietary architecture. The customer has a single point of contact throughout the project, from signing to assistance with ramp-ups.

This dual competence ensures a perfect harmony between a machine and its management software, with full control of protocols, peripherals and operating methods.

Results:

- A robust production tool
- A reliable production data repository
- A unique and long term Supply Chain partner

Perfect synchronisation
of the chain in all stages

1. Control over peripherals

ZetesAtlas manages the configuration, utilisation and supervision of the identification station peripherals within a single interface. In addition to saving time and reducing errors, this centralisation is the only way to ensure precise operational traceability.

- Open architecture
- Single intuitive operator interface
- Broad range of peripherals
- Real time core
- Station management in "templates"
- Pharma compliant

2. Line control

ZetesAtlas controls all stations of each packaging level, from UVC to the pallet, ensuring coherence of inter-level flows and reliability of correspondence.

- Complete line configuration
- Sharing of reference templates
- Management of heterogeneous groupings
- Management of manual recovery modes
- Management of drivers in the aggregation zone
- Performance checks

3. Sharing and archiving information

In order to ensure the security and sharing of information, all data necessary for the creation and validation of a batch is managed by the ZetesAtlas server. The latter works either independently or connected to an existing information system.
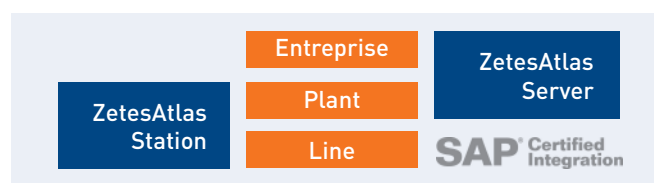
Fully autonomous, a disconnected station can continue operations without impacting the production tools using the ZetesAtlas synchronisation module. During re-connection, information is updated to and from the server and administration is completed using the Zetes SGI web tool.

Effective and high performing ZetesAtlas is based on a tried and tested data model as well as on knowledge gained following a variety of different sectors (in agri-food, chemicals, cosmetic and pharmaceutical industries...).
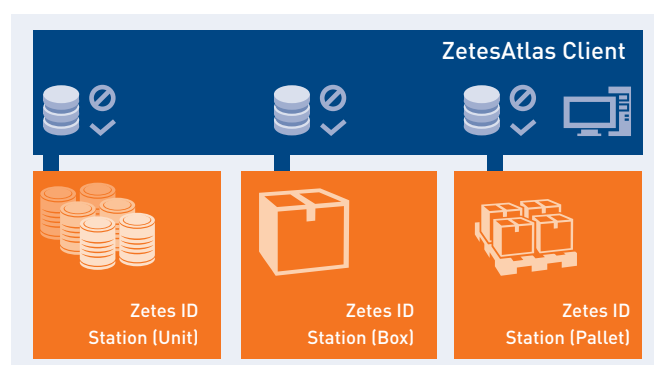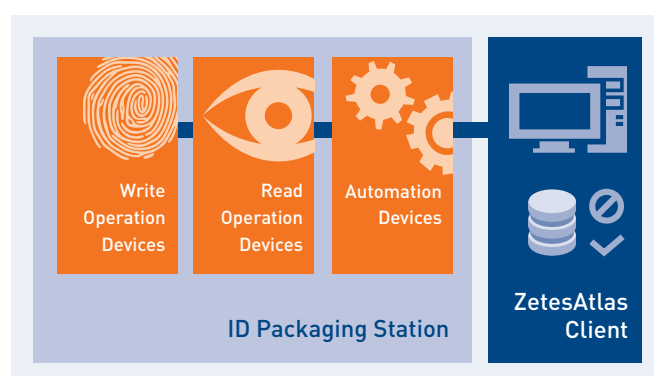
Its scope for unlimited traceability makes it possible to monitor, log and request links upstream and downstream between the references, batches, dates or serial numbers across the entire tree structure.

All configuration and production operations are securely recorded to meet the most stringent regulations (FDA 21CFR p11).

Write Operation Devices

Read Operation Devices

Automation Devices

ID Packaging Station

ZetesAtlas Client

ZetesAtlas Client

Zetes ID Station (Unit)

Zetes ID Station (Box)

Zetes ID Station (Pallet)

Entreprise

Plant

Line

ZetesAtlas Station

ZetesAtlas Server

SAP® Certified Integration
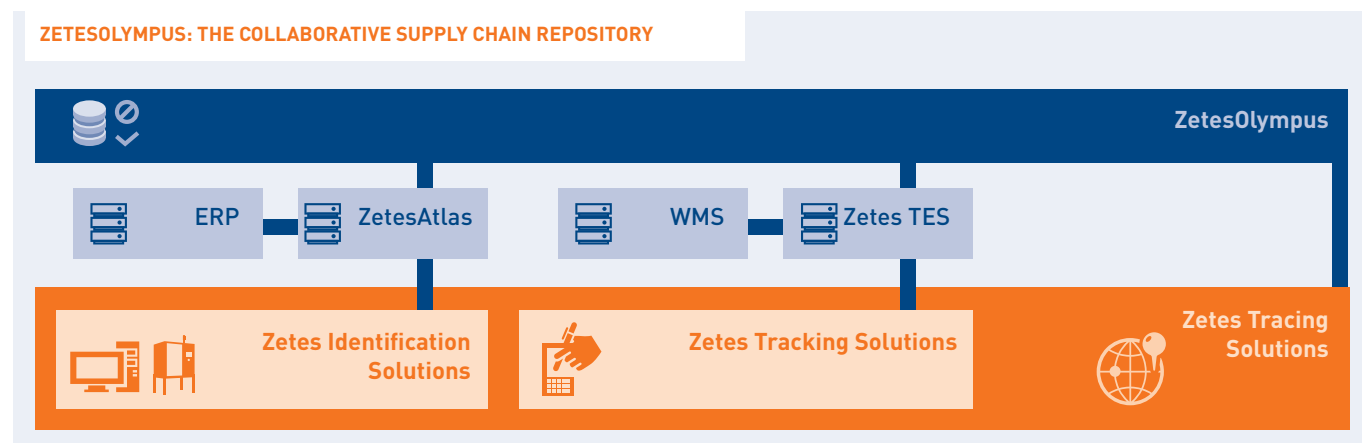
4. Seamless traceability

Production identification lays down the foundations of Zetes' global ITT (Identify, Track & Trace) model, a highly dynamic traceability solution based on two information poles.

- Authenticity control (production level)
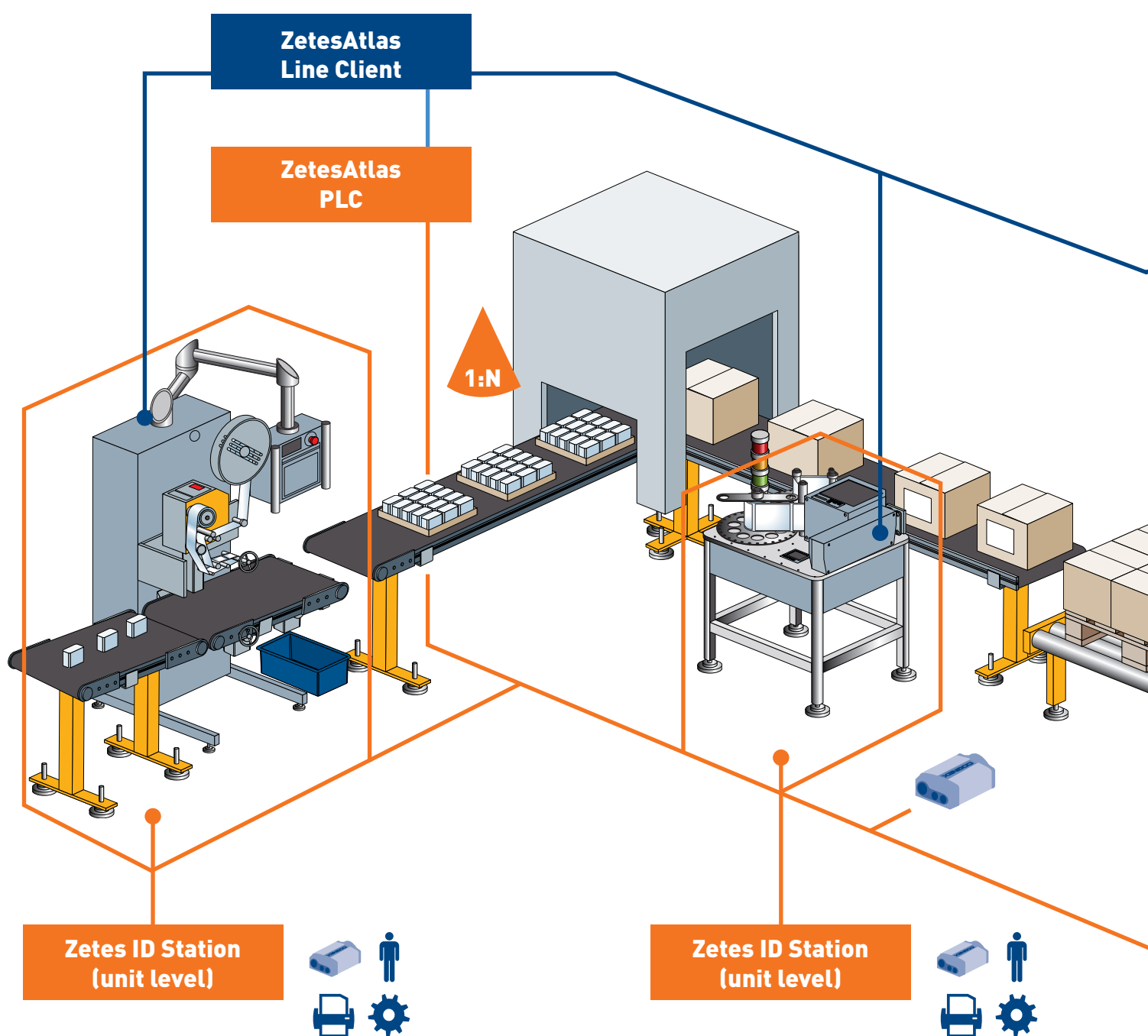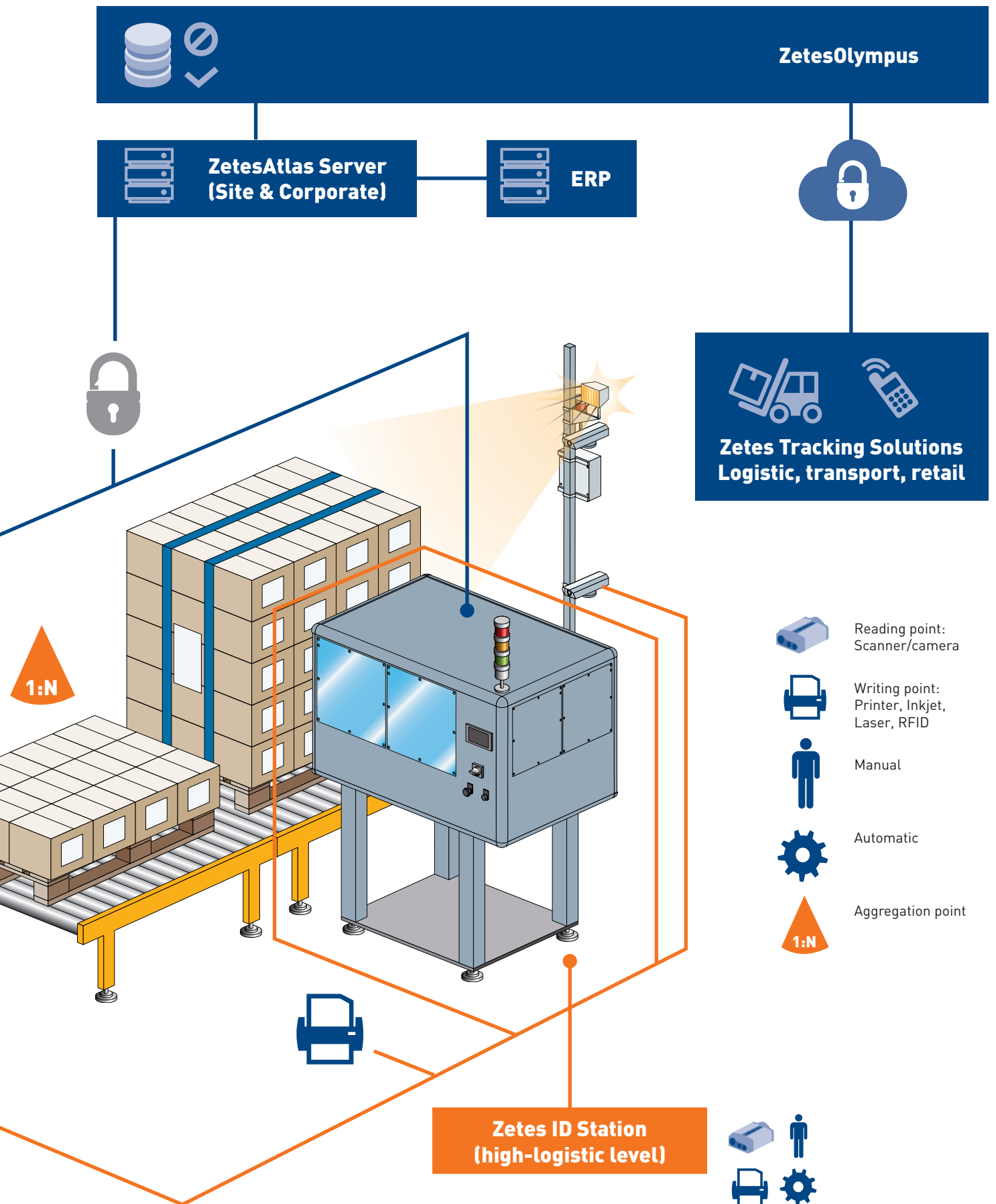- Pedigree control (distribution level)

ZETES ITT FRAMEWORK
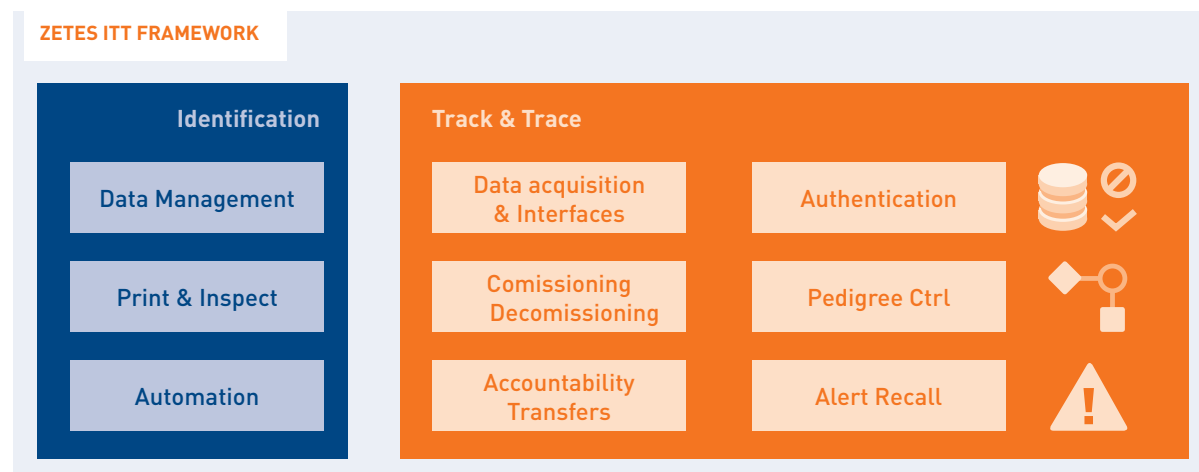
Identification is data synchronised on the Zetes global repository, called ZetesOlympus, which is independent of the traditional professional tools. It is positioned as a permanent horizontal access at all critical supply chain stages (transfer of container, position or owner). Within the framework of a unitary serialisation, serial numbers are imported or generated by ZetesAtlas. Once attributed and validated, they are archived in the global repository, ZetesOlympus. With its dematerialised architecture (cloud), this base, combined with the Zetes mobility solutions, is a powerful and effective tool to fight against counterfeits and the grey market.

ZETESOLYMPUS: THE COLLABORATIVE SUPPLY CHAIN REPOSITORY

Full traceability
along the packaging line and beyond!

ZetesAtlas Line Client

ZetesAtlas PLC

1:N

Zetes ID Station (unit level)

Zetes ID Station (unit level)

BAR CODES | MATRIX-CODES | RFID

ZetesOlympus

ZetesAtlas Server
(Site & Corporate)

ERP

Zetes Tracking Solutions
Logistic, transport, retail

1:N

Reading point:
Scanner/camera

Writing point:
Printer, Inkjet,
Laser, RFID

Manual

Automatic

Aggregation point

1:N

Zetes ID Station
(high-logistic level)

Key features

CLIENT

- Standard interface can be adjusted for all levels of packaging identification
- Secure multi-level access
- Auto synchronisation with ZetesAtlas server
- Supervision of peripherals and automated equipment all down the line
- Centralised management of data flow and machine operation
- Computerised audit trail
- Compatible with all packaging machines
- IT management all down the line
- Integrated high-performance automated equipment
- Real-time recording of all incoming and outgoing events
- HMI can be connected to any ID station
- Easy to use and ergonomic operator interface
- Aggregation controller (packer, palletiser)
- Management of manual rework modes (serialisation and aggregation)

SERVER

- Auto synchronisation with ZetesAtlas clients
- ZetesMD data model
- Business data import/export module (Zetes IEM)
- Line configurator
- Station configurator
- Equipment configurator
- Operator scenario configurator
- Variables configurator
- Resource file manager
- Production analysis and report manager
- Zetes SGI web administration tool
- Rights manager
- Bidirectional secure communication module with the new ZetesAtlas line
- Serial number manager (generation, conversion, attribution, statuses)
- Synchroniser on ZetesOlympus and ERP (connector for SAP OER)
- Serialised data import/export module (Zetes E-Coding for China SFDA)

HARDWARE SUPPORTED

- Marking & labelling machines
- Printers
- Inkjets, Lasers
- Cameras / Imagers / Scanners
- RFID

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zetes atlas
PACKAGING EXECUTION

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