

OPERATION DIGITAL BUTTERFLY

Scenario:
Logistics Service Provider
Version: 1.2
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Based on Operation Digital Ant:
<https://github.com/NutriSafe-DLT/operation-digital-ant>



LIONS

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Logistics
Service
Provider

Central
Warehouse
(Retailer)

Branch
Store
(Retailer)

Consumer

+2

Organization Informationen

- All computers are equipped with the typical office applications including email client
- The mail server is hosted in the cloud by a service provider

Dairy

Handling

Preparation of the shipping documents (shipper, recipient, carrier, deadlines, nature of the goods) for the drivers

- PC
 - Document Management System Client
 - Forwarding Software Client
 - Warehouse Management Software Client
 - Transshipment Software Client
- Multifunction Printer
- Telephone

Disposition and Service

Accepting orders, disposition of shipments to the individual trucks and service (appointments, customer complaints, time delays, ...)

- PC
 - Document Management System Client
 - Forwarding Software Client
 - Warehouse Management Software Client
 - Transshipment Software Client
 - Telematics Software Client
- Printer / Scanner
- Telephone

Insurance and Pallets

Claims handling (transport and storage damage) and tracking of pallet movement (pallet exchange accounts)

- PC
 - Document Management Software Client
 - Forwarding Software Client
 - Warehouse Management Software Client
- Printer / Scanner
- Telephone

Multifunction Printer

Accounting and HR

- PC
 - Document Management Software Client
 - Forwarding Software Client
 - Warehouse Management Software Client
 - Accounting Software Client
- Accounting and Payrolls
- Printer / Scanner
- Telephone

IT Administration

- PC
 - Administration Tools
- Printer / Scanner
- Telephone

Server Room

- Server
 - Forwarding Software
 - Route and shipment planning
 - Warehouse Management Software
 - Transshipment Software
 - Management of storage spaces in the transshipment area with assignment of goods
 - Telematics Software
 - Position tracking and analysis of driving data from the onboard units, documentation of vehicle data
- Server
 - Document Management Software
 - Versioned and structured document storage
 - Accounting Software
 - Payroll accounting, financial accounting
- Server
 - Middleware
 - File format conversion for import from external systems or export to external systems (shipment and customer information)
- Telephone System
- Fileserver
 - Backup-Storage (24h interval)

Communication and data synchronization between the server systems



Storage

Kitchen / Recreation room

Management and Sales

- PC
 - Accounting Software Client
 - Document Management System Client
 - Forwarding Software Client
- Multifunction Printer
- Telephone

Warehouse Area

Long term storage

- High bay storage
- Multiple handheld scanners Connection to Warehouse Management Software, Forwarding Software and Transshipment Software

Truck

- Handheld (Android)
Connection to forwarding software for transmission of shipment status, receipt of instructions (e.g. re-routing), position tracking, documentation
- Onboard-Units (UMTS)
Connection to Telematics Software for: Documentation of the route, position tracking, documentation of vehicle-specific information

Transshipment Spaces

Numbered spaces for location identification of the goods

- Multiple handheld scanners
Connection to Warehouse Management Software, Forwarding Software and Transshipment Software

Transshipment Area

Short term storage (up to 8 hours)

- 2 PCs (at the gates)
 - Warehouse Management Software Client
limited access: read quantity, location, etc.
 - Forwarding Software Client
limited access: reading morphological data (measurements and weight) and tours
documentation of damages (initial recording)
 - Transshipment Software Client
limited access: target location / current location in the transshipment area

Warehouse Office

Warehouse manager's and fleet manager's office

- PC (Warehouse Manager)
 - Warehouse Management Software Client
Full access
 - Forwarding Software Client
Full access
 - Transshipment Software Client
Full access
- PC (Fleet Manager)
 - Forwarding Software Client
 - Telematics Software Client
 - Position tracking, evaluation of driving history data, documentation of vehicle data