

OPERATION DIGITAL BUTTERFLY

Scenario: Slaughter and Cutting Plant

Version: 1.2
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Based on Operation Digitale Ant:
<https://github.com/NutriSafe-DLT/operation-digital-ant>



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Breeding

Feeding

Transport service provider
(livestock transport)



Slaughter
and
Cutting
Plant

Transport service provider
(cold transport)



Butchery
(central
production)



Vehicle of the butchery
(cold transport)

Butchery
(store)

Consumer



Information about the company

- The employees in the slaughtering and cutting area are usually in the low-wage sector
- The ERP software is supported by an external IT service provider (support and updates)
- All computers are equipped with the typical office applications including email client
- The mail server is hosted in the cloud by a service provider

Breeding

Feeding

Slaughter area

live inspection, slaughtering, meat inspection,
weighing, halving, data collection, marking of
cuts

- Slaughter lane
- ERP-Client
 - identification via ear tag number
 - creating the slaughter number and linking it to the ear tag number
 - creation of interim barcodes for the cuts and linking to the slaughter numbers
 - sticking the barcodes to the parts before they are cut
- Barcode printer
- Request terminal (pipe rails)
- Conveyor scale (pipe rails)
- recording the weight in the ERP system

Delivery area

- ERP-Client
 - registration of ear tag numbers
 - linking the ear tag numbers with the suppliers

Pipe rails

Shipping area

- ERP-Client
 - shipping documentation

Packaging area

Shrink-wrapping and labelling of cuts

- Packaging machine
- ERP-Client
 - scanning of the interim barcodes to identify the cuts
 - creation and printing of the cutting labels with all information
- Label printer
- Handheld scanner

Cold-storage 3

Storage of
packaged cuts

- Thermostat

Cold-storage 2

Lagerung der
Schweinehälften

- Thermostat
- Request terminal
(pipe rails)

Cold-storage 1

Storage of
unpackaged cuts

- Thermostat

Sales

- 2x PC
 - ERP-Client
 - Accounting software
(orders, A/R invoices)
- Scanner / printer

Accounting /HR

- 2x PC
 - Accounting software
(payrolls, invoices)
- Scanner / printer

IT-Administration

- PC
 - Administration tools
 - Multifunction printer
 - used by all employees

Server room

- Telephone System
- ERP-Server
 - ERP-System
 - Webserver (ERP-System)
 - Database (ERP-System)
- ERP-Server (Redundancy)
 - continuous synchronization of the databases
- Fileserver
- Backup-Storage
 - daily backup of the Fileserver without versioning



Storage

Kitchen / Recreation room

Cutting area

cutting the halves into parts

- Saws and knives
- Request terminal (pipe rails)

Veterinary

Technical room

- PLC control system (central control of pipe rails)
- PLC control system (Redundancy)



Storage

Hygiene lock

- Forced hygiene lock with rotary barrier
 - automatic disinfection of soles
 - Release of the barrier after disinfection of the hands

Changing room

Changing protective
clothing