



New Interface to exchange data on the farm

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- Context of this project
- Requirements and expectations
- History of this project
- Principles
- Versions 1 and 2
- Deployment in France
- Challenges for this interface



- For the Farmer
 - Communication: exchange data using web interface
 - Time: reduce the time to update every system
 - Quality: Update the system from the national data center
 - Efficiency: Collect the data for milk performance testing with the tools and sensors on the farm

- For the supplier
 - Use the standard interface (no special development)
 - Receive milk components
 - Update the system from data center, inventory, right number...
 - The data can be used to provide advisory services



2009

- Reflexion on exchanging data with automated systems
- Meeting with suppliers, and breeding organisations
- Visit to Quebec, meeting with Valacta
- **Agreement with ALL the suppliers**
- **Agreement with Valacta to use Trans-D**
- **Ori-Automate has started.....,**

***is only under control of France Conseil Elevage,
no other French breeding organization***

2010

- ✓ Development version 1

2011/2012

- ✓ **Development version 2 (Under construction)**



Trans-D software
from Valacta

Manufacturer
Equipment
(MilkMeter/Robot)

Export Data

DATABASE
CENTER

Import Data

Interface
Ori-Automate



- ✓ 2 modules: for import and export
- ✓ Format XML (standardization of the data)
- ✓ Uses specific tools for each manufacturer
- ✓ 2 modes to use
 - ✓ Manual by user
 - ✓ Automatic
- ✓ Define the data type exchanged
- ✓ Security with individual key activation





Farmer's Computer

V2

Sensor Data:
Milking/Feed
Activity/Weight
**Milk Meter
Monitoring**

V1

Milk Yield
Event Dates

Manufacturers'
Software

Converter
ORI-AUTOMATE

FTP Web Service

Information

Data Center

V1

Inventory
Event Dates
Fat, Prot., SCC

V2

Feed Ration
Extra Data:
Events/Milk Yield



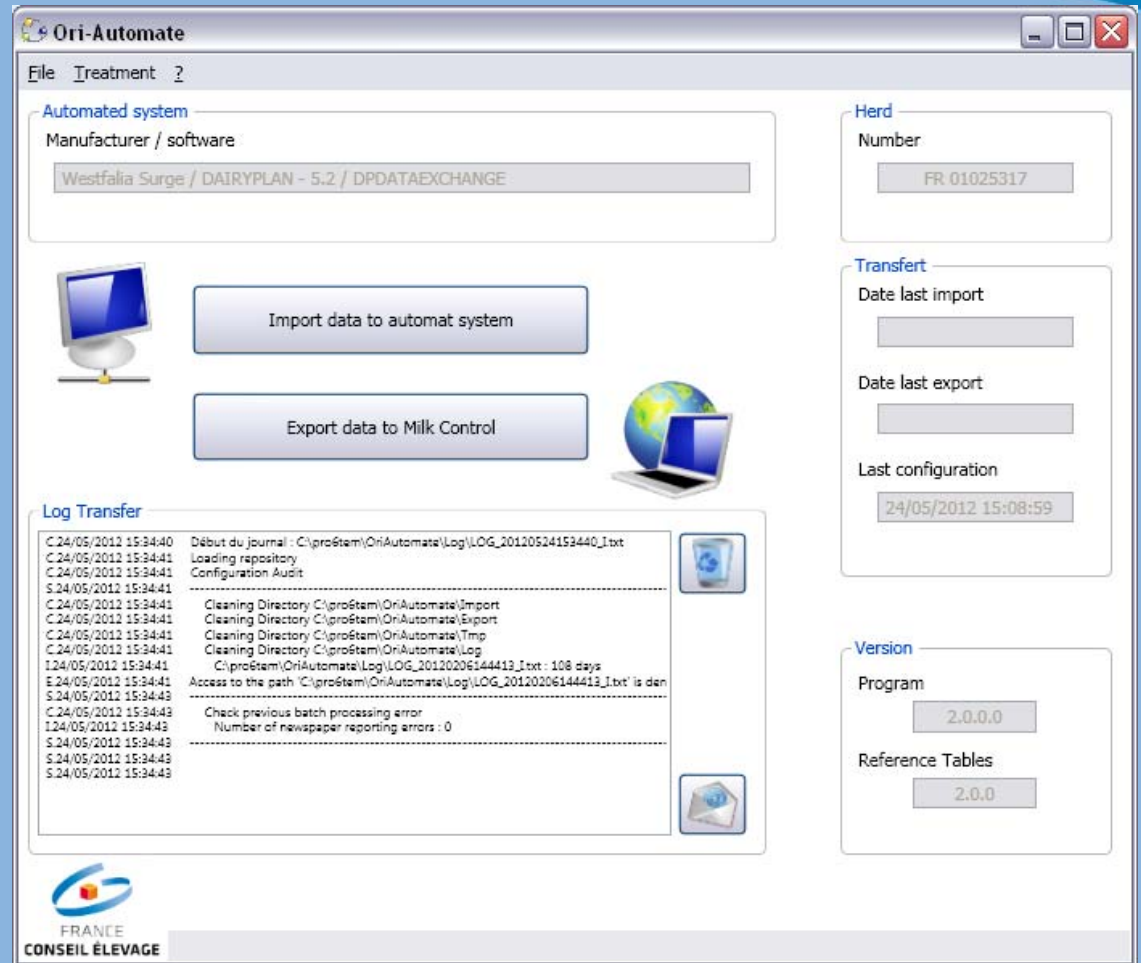
Agreement with each manufacturer to have bidirectional exchange





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The screens





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Configuration Screen



Configuration

Display
English

Herd
Number: FR 01025317

Automated system
Milking parlour: Westfalia Surge / DAIRYPLAN - 5.2 / DPDATAEXCHANGE

Export | **Import** | **Feed ration**

Milking
Since: 7 days

Other events
 Since
 Since last extraction

Directory
In batch mode: C:\prostem\OriAutor
Interactive mode: C:\prostem\OriAutor

Setup for the automat
Program: c:\dairypln\dpdataex
Directory:
Parameter: -A
Timeout (min): 10

Entrance
Parameter:
File: dpdataexchange_in.ads

Exit
Parameter:
File: dpdataexchange_out.ads

Information

<input checked="" type="checkbox"/>	Milking
<input checked="" type="checkbox"/>	Calving
<input checked="" type="checkbox"/>	Insemination
<input checked="" type="checkbox"/>	Heat
<input checked="" type="checkbox"/>	Pregnancy check
<input checked="" type="checkbox"/>	Dry off
<input checked="" type="checkbox"/>	Activity
<input checked="" type="checkbox"/>	Body weight
<input checked="" type="checkbox"/>	Feed ration

Validate **Close**

Import

Export Import **Feed ration**

Population concerned

Sex Male Female

Aged over month

Production

Milk Meat Mixed

Other events

Since days

Since last import

Animal Creation

Initializing Automat ID

Number Working Name 6-digit national number Manual Entry

Default Group

*	Information	Valid. Us
<input checked="" type="checkbox"/>	Animal Record (ID, Identity, Movement)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Calving	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Insemination	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Pregnancy check	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Dry off	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Result Analysis	<input checked="" type="checkbox"/>
<input type="checkbox"/>	Feed ration	<input type="checkbox"/>

Automate

Automated system

Milking parlour

Westfalia Surge / DAIRYPLAN - 5.2 / DPDATAEXCHANGE

Boumatic / HerdMetrix - 3.2.1.1.296 / BMI

Delaval / ALPRO - 6.82 / ISO32

Delaval / DELPRO - 3.5 / DLLSODRIVER

Delaval / VMS - 8.3 / ISO32

Lely / T4C - 3.1.3 / TAUPRO2

Packo Fullwood / CRYSTAL - ? / SDK

Westfalia Surge / DAIRYPLAN - 5.2 / DPDATAEXCHANGE

Export

Export **Import** Feed ration

Milking

Since days

Other events

Since days

Since last extraction

*	Information
<input checked="" type="checkbox"/>	Milking
<input checked="" type="checkbox"/>	Calving
<input checked="" type="checkbox"/>	Insemination
<input checked="" type="checkbox"/>	Heat
<input checked="" type="checkbox"/>	Pregnancy check
<input checked="" type="checkbox"/>	Dry off
<input checked="" type="checkbox"/>	Activity
<input checked="" type="checkbox"/>	Body weight
<input checked="" type="checkbox"/>	Feed ration

Silos

Export **Import** Feed ration

Silo	PCI code	Name
1	12546	Yield Concentrate



For V1, XML format

Data Center	Import	Export
Douai	Setup and Operation	In construction
Zone Siel	Setup and Operation	OK
Bretagne	Setup and Operation	In construction
Osmose	Setup and Operation	In construction
Nancy	Setup and Operation	In construction

For V2, all development for V1 works within version 2 (compatible)





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Challenges for this interface



- Farmer interest (demonstrate benefit)
- Updates to the system
- Additional data to exchange, health....
- Integrating all new manufacturers





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Thanks for your attention

