

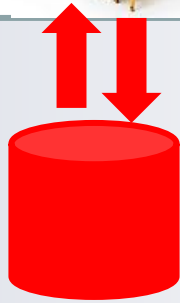


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# Exchanging data from and into on barn automated systems and sensors

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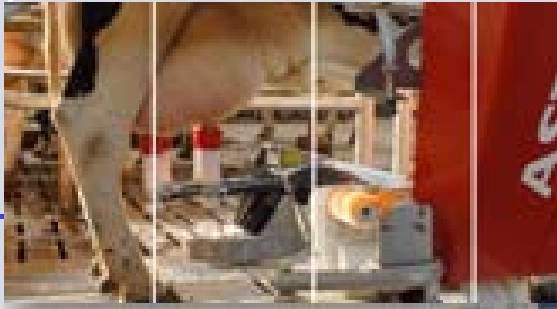


**Data base**



# On farm produced data

Before	With automated systems and sensors
Few data	Many data
Snap	Exhaustive
Externally observable characters	Also internal physiological parameters
Expensive	Free



Farmer's requirement :  
data available on any  
farm information  
system



## **Interoperability :**

- simplifies the work of the farmer and the technician**
- Saves money**
- Allows each one to get more services**
- Implies everybody to share the same language**

# Example of data valorization by a connected 3d party software

Find 1437 Find Animal

Folders list

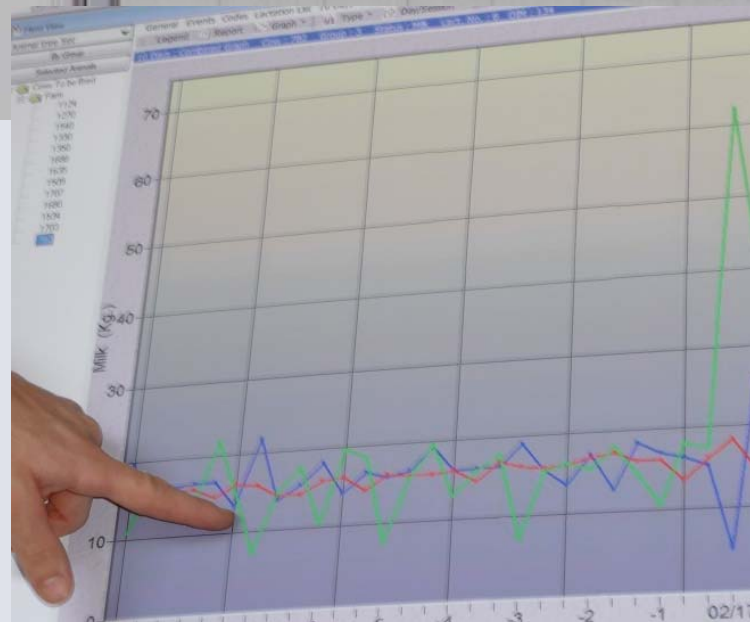
Alifam Today

- Today
  - Alifam Today
  - Parlor Monitoring
  - Today's Tasks
  - Reports Today
- Animals
- Milk Production
- Health
- Fertility

Health for 2 Deviations

Design Refresh Health for 2 Deviations

Index	Cow	Design	DIM	Pop. type	Daily avg. yield	Daily yield	Daily yield $\langle \% \rangle$	Prod. H
1	1635	2	152	H	39.2	31.99	-18	-27
2	1701	1	17	H	32.0	30.42	-5	-4
							1	0
							2	7



# Universal exchange tool : ORI-AUTOMATE

- French, canadian collaboration
- Manufacturers involved
  - Boumatic
  - Delaval
  - GEA Westphalia
  - Lely
  - Packo Fullwod
- Based on ISO standard (11787, 11788)



# Objectives

- Farmers and technician : To enter data once. Permit reusing by several systems sharing the data
- Software developers : to have a unique interface with any farmer or field staff software
- To hide the complexity from :
  - existence of different manufacturer data dictionaries
  - Differences in implementing ADIS syntax



# Use of the tool

- The user (farmer or recorder) selects which event type to enter or to retrieve. Example :
  - Calvings, insemination, heat, dry off, pregnant checking, weights, milkings, ....
- Data extraction :

The tool triggers the extraction from the data base of the automated system and the transfer as a unified format file : XML message (or Adis format)

## ■ Data entry :

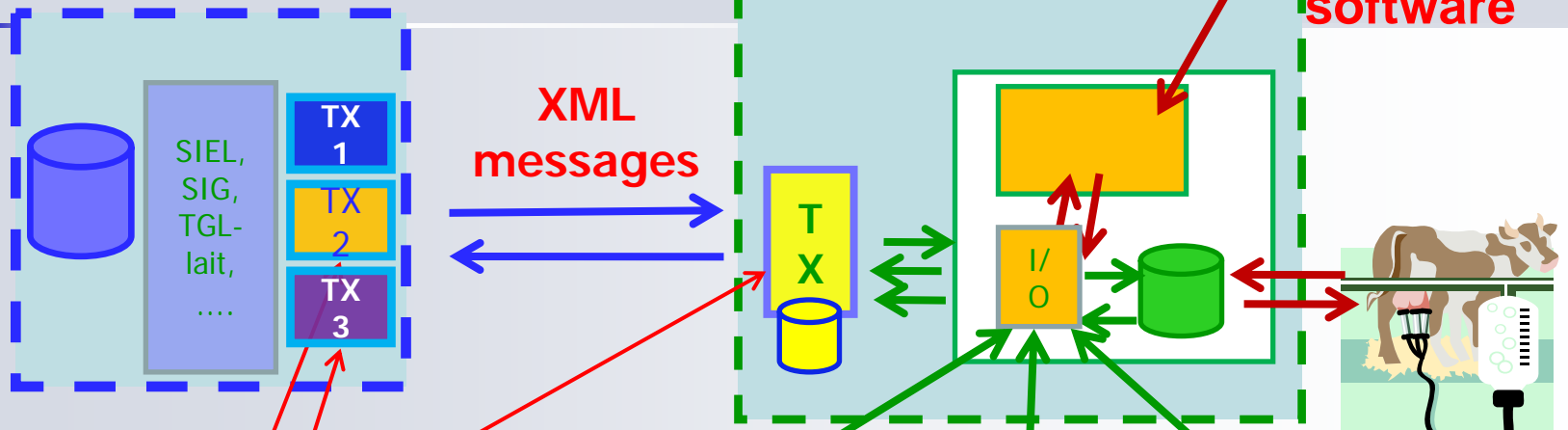
- The system transform the input data in the format of each automated system type
- may prompt the datas for them to be checked by the farmer before submitting to the automated system
- Submits the data to update the automated system data base

# Automation of data transfers

- The data transfer may be automatically scheduled or manually triggered
- On line automated exchange with central data bases are possible, by using FTP or Web service SOAP protocol

Other software :  
Milk recording or  
farmer software)

Automated  
system  
software



Import-export  
modules)

Taurus  
Interfaces:

- Lély
- Boumatic
- Packo

« VMS ISO  
Interface » ,  
« Alpro ISO  
link » : Delaval

« DP Data  
exchange » :  
Westphalia

FIEA 10 décembre 2009

### 3.4 - Onglet « IMPORTATION » - Règle de gestion :

Exportation Importation

**Population concernée**

Sexe  Mâle  
 Femelle

Agé de plus de  Mois

**Production**

Lait  
 Viande  
 Mixte

**Autres événements**

Depuis  jours  
 Depuis dernière importation

**Répertoire**

En mode batch   
En mode interactif

**Création Animal**

**Initialisation de l'Identifiant Automate**

Numéro travail  
 Nom  
 6 chiffres du numéro national  
 Saisie manuelle

Groupe par défaut

**Paramétrage de l'automate**

Programme   
Répertoire   
Paramètre   
Délai maximum (mn)

**Entrée**

Paramètre   
Fichier

**Sortie**

Paramètre   
Fichier

*	Information	Valid. Utilisateur
<input checked="" type="checkbox"/>	Dossier Animal (Identifiant, Identité, Mouvement)	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Vélage	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Insémination	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Résultat d'analyse	<input checked="" type="checkbox"/>

C:\ActiveX.Net\OriAutomate\OriAutomate\Fichiers\I\_FR 75001001\_20100401100000.zip

^ Dossier Animal en "entrée" (6)

*	Animal	N° dans automate	D. Naissance	Race	Sexe	Nom	N° travail	T. Prd	Groupe	D. Entrée	Action
<input checked="" type="checkbox"/>	ES 123456789012	9012	01/01/2008	66	Mâle	TAUREAU	9012	Lait	002	01/03/2010	INF
<input checked="" type="checkbox"/>	FR 5412345678	5678	25/12/2008	66	Femelle	TITINE	5678	Lait	002	01/03/2010	INF
<input checked="" type="checkbox"/>	FR 5412345679	5679	01/12/2008	66	Femelle		5679	Lait	002	01/03/2010	INF
<input checked="" type="checkbox"/>	FR 5700123456	3456	01/10/2008	66	Femelle		3456	Lait	002	01/03/2010	INF
<input checked="" type="checkbox"/>	FR 5700123457	3457	05/10/2008	66	Femelle		3456	Lait	002	01/03/2010	INF
<input checked="" type="checkbox"/>	FR 7500001234	1234	01/01/2005	46	Femelle	MARGUERITE	1234	Lait	001	05/03/2010	INF

∨ Dossier Animal en "sortie" (2)

∨ Vêlage (3)

∨ Insémination (5)

∨ Résultat d'analyse (5)

^ **Insémination (5)**

*	Animal	N° dans automate	Nom	N° travail	T. Prd	D. Insémin.	D. Fin Insé.	Action
<input checked="" type="checkbox"/>	FR 5412345678	5678	TITINE	5678	Lait	15/03/2010		INF
<input checked="" type="checkbox"/>	FR 5412345679	5679		5679	Lait	14/03/2010		INF
<input checked="" type="checkbox"/>	FR 5700123456	3456		3456	Lait	15/03/2010		INF
<input checked="" type="checkbox"/>	FR 5700123457	3457		3456	Lait	10/03/2010	15/03/2010	INF
<input checked="" type="checkbox"/>	FR 7500001234	1234	MARGHERITE	1234	Lait	05/03/2010		INF

**Thank you**