FCEL at the Heart of development for the performance milk recording

ICAR 2011 Bourg en Bresse

A. Context in France
B. Solution Electronic Milk Meter mobile
C. Solution PDA for recording
D. Solution Software « Ori-Automate »

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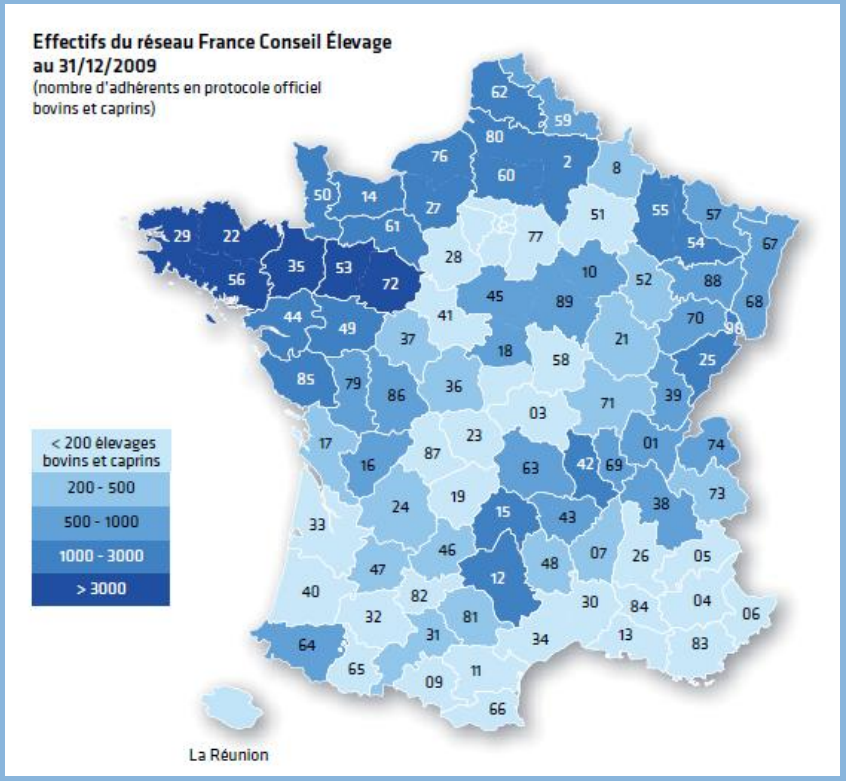
Who is FCEL in France?

- 50 888 Breeders (Cattle/Goat)
  - Cattle
    - 2 541 306 cows
    - 48 987 Breeders
    - 51,9 Average cowshed, (8221 kg/ 338j)
    - 68 % Cows in France (83% Milk production for Dairy)
  - Goat
    - 381 500 Animals
    - 1 900 breeders
    - 200 de Moyenne étable (842 kg/274 j)
    - 43% goats in France (51% milk production for Dairy)

Context in France

- 74 Company for Advise breeders
  - 2322 operators
  - 1284 Engineers advisers
  - 187 Supervision of Staff



- About the Market ?
  - Herd more and more bigger
  - Milking equipment more sophisticated
  - Milk Market no stable
  - Milk Quality can be better
  - The cost of the labour more expensive
  - A more mature technology

  All this points have permitted to modernize the milk recording organization

B: Solution Electronic Milk Meter mobile

- Lactocorder de WMB
  - 2000 Devices (Cows and Goats)
  - 28 breeding company
  - Vial Washable in 50 ml
  - Tag RFID BF and Glass tag
  - Use in Control of performance
    Protocol A, B, CZ (Cattle and Goats)
  - Milking Assistance (100)
  - Identification Automatic (Cow en Goat)
    - Pastern (with reader Commander)
    - Official Ear tag (Identification Individual or Archway)

Solution Electronic Milk Meter mobile

- EMM of TruTest
  - 2300 Devices, 1500 in the field
  - 8 Breeding company
  - Vial Washable 40 ml
  - Tag RFID HF with Memory(Report)
  - Use in Control of performance
    - Protocol A and B (Cow)
  - Software of milking assistance
  - Pastern (with reader on DH)
  - Official ear tag (Identification individual or archway)

Solution Electronic Milk Meter mobile

- Fcel has developed
  - Oriclef: software of link for Lactocorder and EMM
    - Management of the load and unloading on tools
    - Management of the Milk recording with correction
  - Flask washable 2 Models 40ml and 50ml
    - Integration of the RFID in the Vial
    - 450 000 vials
  - Management of the recycling of the vial
    - In association with laboratories
    - Wash, Conservative and Corking

Oxygen Conseil Elevage has developed

- A PDA (50 PSION)
  - Seizure of the milk weights (or code of state)
  - Validation of the control
  - Forecast of tour
  - Seizure of the clinical mastitis
  - Creation of an electronic receipt
- Interfacing of the EMM

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Data Circulation

A.R.S.O.E

Record Official

SYNel

TGLait

List of cows

Control
Validation

Record
Laboratory

Analyser

Reader RFID
on table

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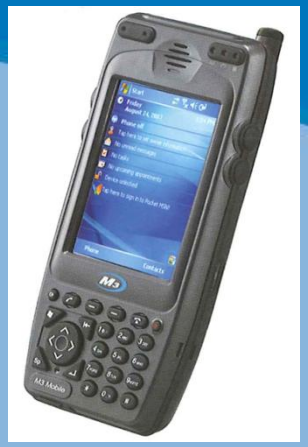
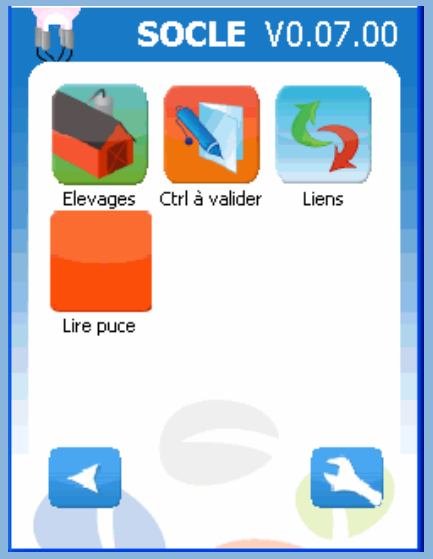
SOCLE from BCEL 35 and BCLO

- A PDA (525 devices)
  - Seizure of the milk weights (or code of state)
  - Reader RFID for Vials
  - Validation of the control
  - Seizure of the clinical mastitis
- Future evolution
  - Recovery the other information
  - Interfacing of the EMM DE TT





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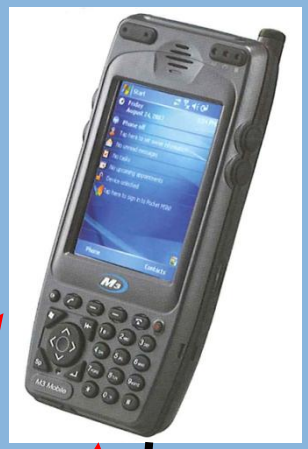
Data Circulation



List of cows

Control
Validation

A.R.S.O.E

Record Official

AGRAEL

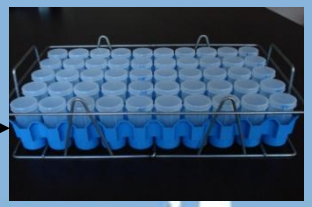
SIEL BZH

Record
Laboratory

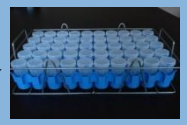
Washing Machin

Vial
EMM 40 ML

Rack Ilas



Robot Ilas



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Profits of the solutions 1 and 2

- Valuation of the job for the agent
- No paper list
- No double Seizure
- Validation and correction of the control in farm
- Traceability of samples
- Results quickly for the breeder
- Automation of the data management
- Secure management of Vials / tags

D: Interface Ori-Automate

France Conseil Elevage has developed an interface of communication with the automatons of the breeders:

- *Interface all the systems of the marks(brands) (Lely, Delaval, Gea, Boumatic, Fullwood)*
- *Exchange of the data: weight of milk, rate, fertility, feed, etc. ..*
- *Ascending and downward exchange, in automatic or manual, completely Autonomous interface*

Advantage: Avoid to the breeder the double seizure

Automatic Transfer of the data.

Interface Ori-Automate

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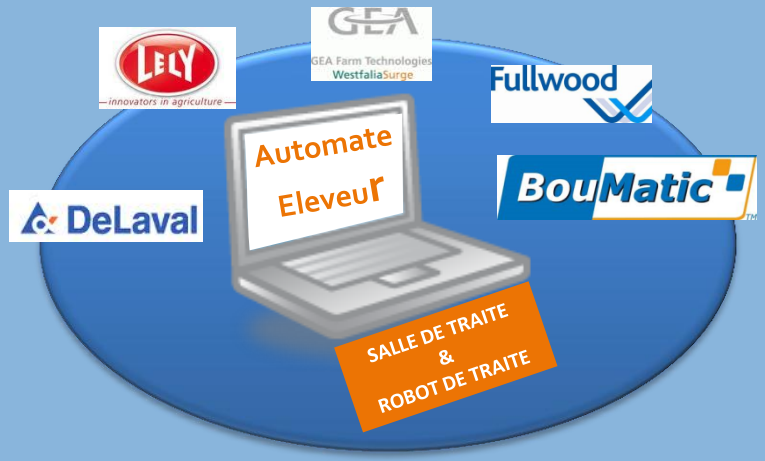
IMPORT of the DATA

ORI-AUTOMATE

Information System of the breeders organization

CONSEIL ÉLEVAGE



EXPORT of the DATA

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Data Exchange

Version 1 (in November, 2010)

- Data exported by automatons:
  - Weight of milk in every draft(milking) / date / hour on the last 7 days
  - Date input-output UL
  - Date calving, drying up, heat, insemination, diagnosis of gestation
- Data imported
  - Data of inventory (N national of identification, Date of birth, race, N of group, Date of entry, and exit)
  - Milk Recording : Protein, Fat ,somatic cells counts.
  - Date calving, IA / SN

Version 2 (in December, 2011)

- Integration of new Manufacturers (Heat Time, Heat Box and Creavia)
- New data of the sensors, activity, conductivity, analysis.
- Complementation of the feed ration (OOPF and Robot)

Interface Ori-Automate

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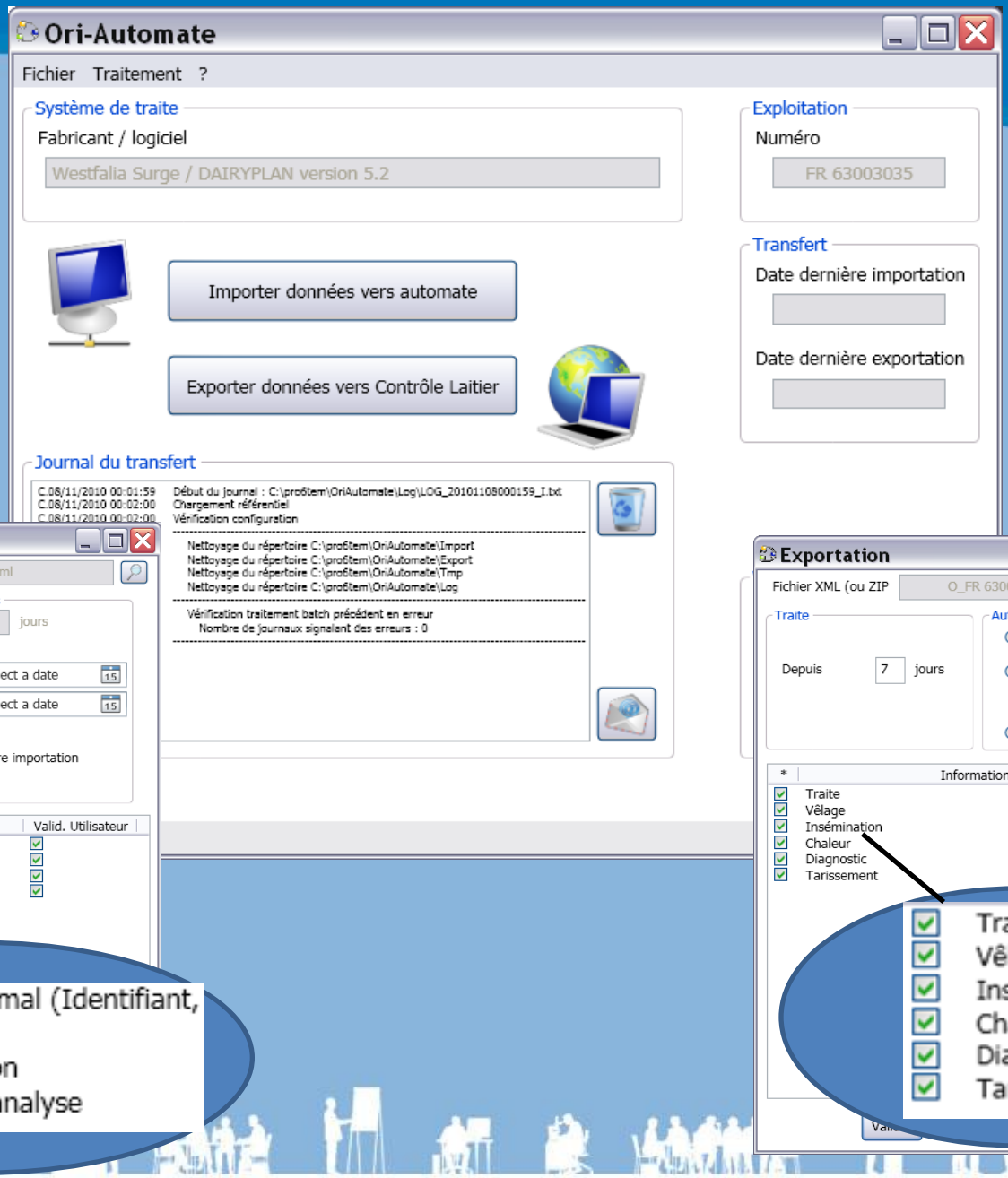

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Thanks for your attention

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