INTERNATIONAL LIVESTOCK REGISTRY

- ✓ WORLD LEADING BREED REGISTRY SERVICE
- ✓ VAST INTERNATIONAL USER BASE
- ✓ MULTI-USER, MULTI -SPECIES
- ✓ DRAWS ON 40 YEARS OF ABRI EXPERIENCE

ilr2

BACKGROUND

The registered seedstock industry internationally provides most of the performance-recorded stock that are used to drive genetic improvement in livestock productivity.

The ABRI has been very successful in servicing the recording requirements of this market with its International Livestock Register products. ILR2 is the latest version of the software, and has become the system of choice of over 190 breed associations worldwide with collective databases exceeding 40 million animals.

The registered seedstock industry worldwide is shrinking in size, breed associations are facing cost challenges (particularly with IT systems), many associations are seeking to achieve economies of scale through resource sharing and the internet has revolutionised the way that breed associations are able to service their members.

ABRI has drawn on 40 years of experience as a leading supplier of agri-business IT systems to create ILR2 - a new generation of breed register software which is predicted to provide an advanced and competitive solution to livestock recording into the future.

ILR2 incorporates 50 person years of software development - such is the depth of its design and functionality. This effort cannot easily be duplicated.

> **ILR2** is a world leading breed registry and genetic evaluation system developed by the Agricultural Business Research Institute (ABRI)



TECHNICAL DETAILS

DEVELOPMENT TOOLS FOR ILR2

ILR2 is a modern client/server system. The ILR2 Server uses a popular enterprise version of Linux - an open source operating system which has a huge international user base. There are no license or support fees for our selected version of Linux.

The Database Management System is also open source and provides high levels of performance and data integrity.

The ILR2 user interface is windows-based and runs on Windows 2000 or later. A flexible license-free reporting tool has been used by ABRI in developing ILR2 reports.

HARDWARE

ILR2 will allow large databases to be run on relatively inexpensive industry-standard servers including laptop PCs.

DATA INTERCHANGE

ILR2 has developed efficient procedures for exchanging data and reports with third parties. Examples of this are data from DNA laboratories, PC herd management systems and genetic evaluation agencies. Data transfer can be automated by web services.

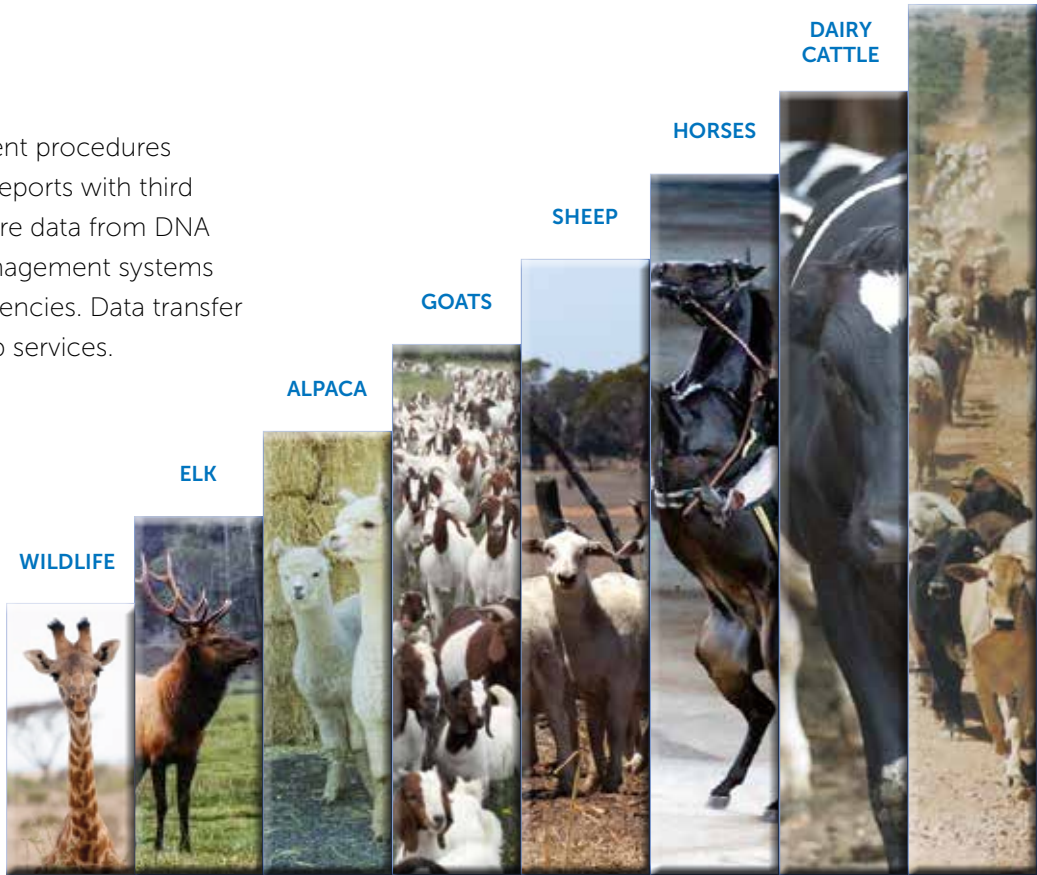
MULTI-USER

An operator of ILR2, with appropriate privileges assigned, is able to access from a single PC window, the databases of several associations that are in an alliance. This means high efficiency in labour use - an important issue as labour is normally the most expensive input for breed association operation.

MULTI-SPECIES

The ILR2 application is largely parameter driven. Screen field captions and drop-down menus can easily be reconfigured for different associations and different species.

> **ILR2 is flexible** and is currently being used by beef cattle, dairy cattle, sheep, goats (boer and milking), alpacas, horses, elk, buffalo and wildlife species.



TECHNICAL DETAILS

DEBTORS ACCOUNTING MODULE

ILR2 has an integrated debtors accounting module. Transactions that are processed through ILR2 may generate a charge at appropriate rates to the members. Invoices are generated automatically and can be retrieved electronically for any period of time e.g. seven years if required.

Payments are receipted in ILR2. At the end of each month, statements are produced (if required), and the totals for the debtors system are posted into the general ledger system of the association's choice. This means that administrative staff know the exact status of each member's account from within ILR2.

REPORT GENERATION

A wide range of reports are available within the system. All reports can be automatically converted to PDF and where required, emailed to recipients.

Reports are stored in the database for easy retrieval for any nominated period of time e.g. up to 7 years. That is, ILR2 becomes an electronic filing system for much of the Association's business. This creates significant economies in administrative time and facilitates more efficient servicing of members.

FLEXIBLE CONFIGURATION

ILR2 is scalable and economically handles the business of breed associations ranging in size from 20 to 10,000 or more members.
For medium to large-sized associations the preference is usually to install ILR2 on an in-house server. Because the run time products are license-free, in-house installations are cost effective.

Specialised bureaus also use ILR2 to service other breed associations, eg. ABRI in Australia, Performance Beef Breeders in New Zealand, American Beef Records Association in the USA, Namibian Stud Breeders' Association in Namibia and Pedigree Cattle Services in the UK.

internet solutions

INTERNET SOLUTIONS provides decision making information from breed association databases on a 24/7 basis. This has been extended to recording of registrations and performance data.

Internet Solutions applications include

✓ ANIMAL/MEMBER ENQUIRY SERVICE
- + animal lists (with sort criteria)
- + pedigree display with photos/images
- + performance information (EPDs/EBVs)
- + progeny lists
- + graphs of performance
- + membership details
- + animal points, competition results

✓ SALE CATALOGUES/SEMEN LISTS

✓ INTERNET REGISTRATIONS/ INVENTORY UPDATES

✓ ENTRY OF PERFORMANCE DATA

✓ MATING PREDICTION SERVICE

✓ INBREEDING COEFFICIENT CALCULATION

✓ DOWNLOAD FILES AND REPORTS

GENETIC EVALUATION

The ILR2 implementation for beef cattle includes the BREEDPLAN genetic evaluation service.
This is a powerful multi-trait model which, subject to data availability, produces EBVs/EPDs for a balanced range of traits.

BREEDPLAN is used to undertake genetic evaluations for over 80 beef breed associations in 14 countries. Many of those breeds are undertaking international genetic evaluations. It is so much easier to do this when all participating countries are using BREEDPLAN. For example the Hereford associations in USA, Canada, Uruguay and Argentina participate in a Pan American evaluation which involves over 4 million performance recorded cattle.

BREEDPLAN is genomics enabled and calculates marker-assisted EBVs/EPDs for breeds where the marker panel effect has been validated.

Species other than beef cattle tend to have their genetic evaluations performed by specialised agencies. ILR2 has advanced facilities for exporting data for evaluation, importing EBVs/EPDs following evaluations and then including EBVs/ EPDs on reports and on Internet Solutions.

BREEDPLAN TRAITS

✓ **GROWTH**
Birth Weight
Weaning
Yearling
Final
Mature cow
Maternal growth

✓ **FERTILITY**
Scrotal Size
Days to Calving
Gestation length
Calving ease: direct
Calving ease: daughters

✓ **CARCASE**
Carcase weight
Eye Muscle Area
Fat thickness (rib)
Fat thickness (rump)
Meat Yield %
Intramuscular fat %

✓ **OTHER**
Docility
Feed Intake
Flight Time
Shear Force
Conformation

SUPPORT STRUCTURE

ILR2 is now installed in countries covering seven international time zones.

Support requests are received by the ILR2 Support Team and handled immediately or can be reassigned to individual members of the team.

Requests for new features are constantly logged, and implemented as updates on a regular basis.

Several technology platforms are used to maintain communications with clients.

> **ILR2 ONLINE** Internet based "Real Time" application is fully integrated with ILR2.

ILR ONLINE

ILR Online allows breed association members to undertake a range of data processing activities for their herds including:

- ✓ Active animal herd management, transfer and disposal
- ✓ Inventory maintenance and submission
- ✓ Performance data entry
- ✓ Registration and maintenance of new animal details
- ✓ Data integrity and validation checks
- ✓ Detailed animal enquiry
- ✓ Review billing and account balance information
- ✓ Payment options

Whatever your location or livestock breeding requirements, **ILR2** can assist you to achieve your goals.

TESTMONIAL

"The integration of our members and animal database with BREEDPLAN, Internet Solutions and genomics has revolutionised the way we do things. It encourages registrations and performance recording and provides inexpensive world wide marketing opportunities. We are an information business. We now have the resources to collect it, analyse it, publish and promote it to add genuine value to our members' cattle. Having dealt with ABRI for over 30 years, we know that the system will also keep pace with advances in technology."

John Croaker, General Manager
Australian Brahman Breeders Association.

CONTACT

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