



Accelerating Genetic Insights: Softcat Delivers for Irish Agriculture

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The Irish Cattle Breeding Federation (ICBF) and Sheep Ireland are non-profit organisations at the heart of Ireland’s farming industry.

As the custodian of the national bovine database, one of the largest of its kind globally-ICBF manages vast volumes of cattle performance and DNA data. This information powers bi-monthly genetic evaluations across the national herd, helping to drive improvements in productivity, sustainability, and on-farm profitability. ICBF has helped deliver over €5.5 billion additional profit to Irish Dairy farmers over the last 25 years.

ICBF works closely with the Irish Government to deliver key farmer support schemes, including the National Genotyping Programme (NGP). With one of the world’s largest cattle DNA repositories, ICBF continues to position Ireland as a leader in agricultural innovation.

Key Facts

1 Established in 1998, ICBF supports beef and dairy farmers across Ireland

2 Operates the NGP, processing over 1 million DNA samples every year

3 Holds one of the world’s largest beef genotypes and ranks second globally for dairy genotypes.

The Challenge

ICBF’s existing storage infrastructure was reaching the end of its life and running out of capacity. The expansion of the National Genotyping Programme meant data volumes were set to surge—from analysing 200,000 animals per year to over one million a year. The existing 180TB storage simply couldn’t keep up.

Jonathan Flack, Senior Sys Admin at ICBF, summed it up: “We were running out of space. Our old storage was about 180 terabytes, bought 10 years ago. It was filling up fast, and with the ramp-up of the National Genotyping Programme, we knew we’d run out completely. We needed more, bigger, better, faster.”

The challenge wasn’t just about capacity. Tight timelines linked to government reporting cycles and calving seasons meant the project had to be delivered quickly. Missing deadlines would have had serious consequences for national programmes and farmer support. The tender process added another layer of complexity, requiring detailed specifications and compliance with public-sector rules. Jonathan admitted: “Was it fraught at times? Absolutely. But at the end of the day, both of us came out of it with what we needed and what we wanted.”

Critical Success Factors

A significant increase in storage capacity to handle growing genomic datasets

High-performance infrastructure to support complex genetic evaluations and HPC workloads

On-time delivery and installation to meet strict programme deadlines

The Solution

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- Jonathan Flack, Senior Sys Admin at ICBF.

Softcat worked closely with ICBF to deliver a scalable, high-performance solution based on NetApp storage technology. The deployment provided more than 300TB of initial capacity, later expanded by a further 150TB, and integrated seamlessly with ICBF’s Oracle environment and high-performance computing systems.

The deployment featured NetApp AFF systems for fast, low-latency storage and Cisco networking components to ensure connectivity and resilience. Softcat’s Professional Services team handled the installation and configuration, making sure everything was up and running within the agreed timeframe.

Supply chain challenges emerged when Cisco hardware was unexpectedly delayed—but Softcat acted quickly, sourcing temporary equipment from alternative European

suppliers to keep the project on schedule. Jonathan recalled: “The Cisco kit suddenly got delayed. Softcat sourced extra kit from God knows where in Europe to plug the gap so the installation could proceed on time. That was brilliant.”

Softcat’s engineers, including Paul Giles and John Wilkinson, went above and beyond to make sure the installation was smooth. After the initial setup, Softcat provided consultancy days to fine-tune configurations and adapt to evolving requirements.

Jonathan explained why this support mattered: “Could we have done it in-house? Yes. Would we have been comfortable? No. Our remit is huge, from laptops to milk meters and AI handhelds. Being able to rely on Softcat to take care of this was invaluable.”

Solution Highlights

NetApp AFF storage platform delivering over 300TB capacity

Cisco networking integrated for performance and resilience

Full installation and ongoing consultancy by Softcat Professional Services

The Benefits

“We’ve a huge improvement. One of the biggest benefits is time saving. Across one evaluation, the team saved about two days. For sheep evaluations, they saved 1 day out of four. That’s a big chunk.”

Jonathan Flack
Senior Sys Admin at ICBF.

The new infrastructure has completely changed how ICBF manages and processes genetic data. The organisation now has the capacity it needs to support billions of pieces of data and future growth. Performance has improved dramatically, enabling faster genetic evaluations and research workflows, which is critical for national programmes.

Jonathan shared a tangible example: “We’ve a huge improvement. One of the biggest benefits is time saving. Across one evaluation, the team saved about two days. For sheep evaluations, they saved 1 day out of four. That’s a big chunk.”

The solution also allows ICBF to run dedicated development and testing environments without impacting production systems. Most importantly, the system has been rock solid since deployment, requiring minimal intervention and giving ICBF the confidence to focus on its core mission. Jonathan put it simply: “At the end of the

day, you want to put it in and almost forget about it. That’s what we’ve got. It’s been running away effectively for eight months without a peep.”

Beyond operational benefits, the project has strategic importance. Faster and more accurate genetic evaluations help farmers make better breeding decisions, improving productivity and sustainability. Jonathan said: “If we can help do that in a more sustainable manner, brilliant.”

The impact goes beyond Ireland. ICBF now ranks among the top organisations worldwide for cattle genetics, competing with major players in the US. The volume of data received through National Genotyping Programme is crazy stuff,” Jonathan explained. “You see the well-known consumer DNA testing companies at chip conferences, and then there’s ICBF, a tiny organisation in Ireland, buying millions of chips a year for cattle.”

Benefits at a Glance

Up to 25% reduction in processing time for genetic evaluations

Scalable storage to support future research and national programmes

Reliable infrastructure delivering peace of mind and operational efficiency

Why softcat

“Softcat delivered exactly what we needed, when we needed it, to the specification we demanded. Was it fraught at times? Absolutely. But the team went above and beyond to source kit and keep us on track. The installation was seamless, and the solution has been rock solid ever since. We’d recommend Softcat because of the service, they delivered under pressure and got us over the hump.” - Jonathan Flack, Senior Systems Administrator, ICBF.