

THE UNIVERSITY
of ADELAIDE

Achieving true practice integration at the University of Adelaide's Veterinary Health Centres

A case study

The University of Adelaide's School of Animal and Veterinary Sciences ("the School") at the Roseworthy Campus is home to four purpose-built Veterinary Health Centres: the Companion Animal Health Centre, the Production Animal Health Centre, the Equine Health Centre, and the Veterinary Diagnostic Laboratory. The School is focused on its leading-edge curricula, which is supported by the hands-on, practical experience offered through the commercial services provided by these four centres.

Part of staying at the forefront is a commitment to investing in the latest veterinary-specific technology, to offer the most relevant training to its students, and also to ensure that all patients received the highest possible standard of care. As such, the School's technology environment has always been ahead of the curve.

A PACS that had limitations

As part of Adelaide University, the Veterinary Health Centres have access to a comprehensive Practice Management System and various modalities including digital radiography and ultrasound systems. While all these systems functioned well independently, the key piece of technology that would enable these systems to integrate – the Picture Archiving and Communication System (PACS) – was poorly specified and not delivering as expected.

Bessy Rasmussen, Director of the Veterinary Health Centres, shared that there were a number of short comings with the PACS, "It was far from what we needed to meet our requirements. From an educational point of view, we couldn't show students the images we wanted to share with them when we wanted to. And from the point of view of running the commercial arm of the Centres, we simply couldn't do so with a system that just didn't work for us". Specifically:

- The software was not designed specifically for veterinary use, and therefore didn't contain fields for details such as 'breed' and 'species', making it difficult to accurately capture patient information.
- It did not integrate with the University's Practice Management System (PMS).
- It did not have any support for the software or hardware, placing the University at significant risk should something go wrong.
- It was hosted on a physical server installed at Roseworthy, and therefore limited in flexibility.
- The information stored on the PACS was not backed up in anyway, representing a high risk for data loss.
- It was running out of space, and was poorly specified for the expected growth of the image database, as well as the School



itself.

- Not all of the captured images were stored in one location, with some only being stored on individual workstations, making the images difficult to find and risking data loss and non-compliance with storage standards for diagnostic imaging.
- The PACS could only support a limited number of modalities. In fact, when a new CT scanner was purchased and required a long term storage capability, they were left without a useable solution.

When a new CT scanner was purchased, the existing solutions was unable to support it, and the School was left without a useable solution.

With the existing PACS failing on so many fronts, it was simply a matter of time before Bessy and her team sought out a solution that better matched their requirements.

What the School of Animal and Veterinary Sciences needed

A user group was assembled and tasked with finding the right PACS solution for the School's requirement. After some investigation, they identified ARO Systems as a Systems Integrator capable of not only addressing the issues they faced, but also able to help them clearly specify what exactly was needed to best address these issues. "I met with Read [Hedditch, Managing Director of ARO Systems], and I told him exactly what we *lacked*... And he helped us identify what we needed to address each of those gaps."

Specifically, it was agreed that the School needed a PACS that:

- Was designed specifically for veterinary-use, incorporating all relevant fields;
- Was integrated with the University's IDEXX Cornerstone PMS;
- Was comprehensively supported by specialists in medical and veterinary imaging technology;
- Was relocated to a virtual server environment to offer more flexibility and secure backups;
- Able to support as many modalities as required by the School;
- Provided a centralised location for all image storage, eliminating issues of lost images; and
- Was able to store a vast number of images in line with DICOM standards.



The School required a PACS that was designed specifically for veterinary use.

VET-WEBX PACS, VET-VIEW Workstation, OrthoView Vet and iQ ROUTER PREMIUM from ARO Systems

In response to these specific requirements, ARO Systems recommend a combination of vet-specific technology to best address all of the School's specific needs. This included:

- **VET-WEBX PACS** is especially designed for veterinarians, capable of comprehensively managing the imaging, archiving and distributing functions through a web-based interface.

[Learn more.](#)

- **VET-VIEW** is an easy-to-use reading station, specialised for veterinarians, featuring a customised veterinary graphical user interface and a specially adapted text overlay. All important veterinary data, like breed description or studbook name, are visible on every image, thus providing easy patient recognition. [Learn more.](#)
- **OrthoView VET** (a plug-in for VET-VIEW) is a complete planning solution for veterinary orthopaedics. It provides tools and prosthesis templates for accurate pre-operative planning in the digital environment. [Learn more.](#)
- **IQ-ROUTER PREMIUM** is the ideal tool for any frequently used and critical connection between imaging centres. Compressing medical images up to 1:8 times in a lossless compressed format, speedy data transmissions can be achieved using existing, low-cost narrow bandwidth lines, thus saving time, resources and money. The PREMIUM version features rules that automatically identifies patients and studies and enforces the collection of consistent patient and study data. [Learn more.](#)



OrthoView VET (a plug-in for VET-VIEW) is a complete planning solution for veterinary orthopaedics

Achieving true integration throughout the Vet Centres

Following the implementation of these solutions at the School, Bessy is keen to share its success, "The new system is capable of doing what we want it to do:

- "It's designed for veterinary-use, we can track all the veterinary-specific information we couldn't before;
- "It's integrated to the Cornerstone PMS, eliminating the need for multiple instances of data entry, and ensuring one source of the truth for all patient information;
- "It integrates with the University's systems and is constantly backed up, eliminating any risk of data loss;
- "It's hosted on a virtual server, giving us far more flexibility than we had before;
- "It can support unlimited number of DICOM nodes, allowing us to use it with as many modalities as we need, and therefore, remaining viable as a solution as we continue to grow;
- "It can store up to 500 million images in a single database, so we can store as many images as we want to; and
- "It allows users to access the images via online browsers, so they can be easily viewed on mobile devices and easily shared with owners and referrers.

"One of the great benefits of the relationship with ARO Systems is the ability to talk to someone who knows what they're doing. Read continues to liaise with us and provide advice to our ongoing



The VET-WEBX PACS can store up to 500 million images in a single database.

initiatives and has been of great value to us. They are also providing really good customer service on an ongoing basis.

“For any practice that is looking to modernise their imaging equipment for the future, I would definitely recommend engaging ARO Systems. We have had an excellent experience working with them so far and look forward to doing so into the future.”

Are you ready to leave your outdated imaging equipment in the past?

Get it touch with us now to understand all the benefits you stand to gain by implementing state-of-the-art, veterinary-specific diagnostic imaging technology at your practice.



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With more than 20 years of experience in providing medical and veterinary imaging solutions, ARO Systems specialises in recommending, implementing, and supporting the right imaging solution for each of our clients.