

IT Services

All staff have a personal phone and networked PC at their desk. Laboratories and workrooms also have networked PCs.

Cabled and wireless local area network (LAN)

We have installed a certified structured Cat 6 network using the latest copper cable technology. This provides ultra-high transmission rates for data-intensive and graphics-intensive applications widely used by our researchers.

There are 730 Cat 6 outlets installed, and each outlet can be used for either data or phone.

Additional outlets over and above the needs of our cabled network give us the ability to add wireless network connectivity in the near future. Staff using portable devices will soon be able to move freely around the building and glasshouses.

Cabling and patch management

Because we have staff from several organisations (each with their own independent network) working in the building, network cabling systems, patch management and system security were important considerations. We opted for a centralised, split distribution panel and cabinet system. This simple but effective design allows all cabling to be run back to a single, secure location. Secondary cabinets, adjacent to the central distribution unit, provide secure housing for each organisation's active network equipment. A strict set of common patching and security protocols has to be followed by all technical support staff at all times.

Wider area network (Internet)

We have incorporated provisions for data services from Telecom, Telstra and the University of Auckland. There is capacity for additional installations in future.

Currently Landcare Research is using a 2 megabit frame relay connection in/out of the building, which is provided by Telecom.

Video conferencing

Our Polycom Viewstation can be used anywhere in the building for video conferences with any other Landcare Research site. The system operates over our wide area network. Appropriate quality of service measures ensure adequate bandwidth for conferences when needed.

Telephone system

The Telecom Meridian PABX (Nortel 11C) has an initial capacity for 144 DDI extensions. This could be extended considerably with expansion modules. The PABX is controlled from the administration PC, which has password-protected access from any PC on the Landcare Research network.

Building management system

We have installed a Johnson Controls Metasys M3 centralised monitoring and management system for all building plant and services. Virtually everything, including alarms and warnings, can be handled from a central PC. As with the PABX system, WINVNC software permits password protected access from any workstation on our network.

