Case Study
Intel® Core™ i5 vPro™ Processor
Remote Manageability
Mobility in the Enterprise
Government/Public Sector



Enabling consistent, high-quality services with centralized remote management solution

CSIRO strengthens its support services with an integrated, extensible out-of-band (OoB) solution powered by Intel® Core™ i5 vPro™ processor-based Ultrabook™ devices, increasing remote IT staff productivity and service response time



The Commonwealth Scientific and Industrial Research Organization (CSIRO) is Australia's national science agency and one of the largest and most diverse research agencies in the world. With 6,500 employees, CSIRO's mission is to deliver great science and innovative solutions for industry, society, and the environment focusing on five areas: energy; environment; food, health, and life science industries; information sciences; and manufacturing, materials, and minerals. Within these areas, CSIRO operates multiple national research flagships, facilities, and collections. Through its science, CSIRO provides innovative and sustainable solutions, ideas, and technologies; knowledge exports; industrial and environmental innovation; as well as new jobs, industries, and opportunities. Currently, CSIRO is in the top 1 percent of global research institutions in 14 of 22 research fields and in the top 0.1 percent in four research fields. CSIRO continuously seeks to make a difference with its research to solve problems that matter to humanity and generate positive impact among current and future generations.

Challenges

- Remediate PC issues. Since CSIRO is geographically dispersed across Australia, ensuring that PCs comply with policy and updates has presented challenges.
- Empower support services. Ensure that support services staff is better equipped to enhance productivity and service response.
- Enhance global collaboration. Enable an enhanced system of collaboration and interaction between research communities across the world through better communication and interconnection.

Solution

 Deploy Intel® Core™ i5 vPro™ processor-based Ultrabooks™ with a centralized remote management solution. Intel® vPro™ technology and remote management solution enable CSIRO IT staff to remotely manage and support the Ultrabooks deployed, and provide them an integrated, extensible OoB IT support solution.

Technology Result

Realize efficient remote IT services. Unlock KVM Remote Control, a feature of Intel® Setup
and Configuration Software (Intel® SCS) that allows diagnosing, refreshing, and upgrading of
applications, services, and operating systems on remote machines at sites with minimal IT staff.

Business Value

- Increased IT productivity and service response time. CSIRO's IT staff can now provide faster and more efficient IT support at CSIRO locations across Australia with an efficient, remote OoB management solution.
- Improved research and development across all CSIRO locations. By providing an efficient
 OoB solution, CSIRO's IT staff can support CSIRO researchers in accessing data and instruments by
 providing high-end computing capability, allowing CSIRO to collaborate with researchers globally.

"CSIRO's Information
Management and Technology
department is dedicated to
providing consistent and highquality services and support to
aid our scientific, research, and
administrative staff. The Intel®
Core™ i5 vPro™ processor-based
solution helps us strengthen
that dedication by increasing our
support services to better cater
to remote IT staff and broaden
the scope of service-desk-level
capabilities."

Euan Sangster Executive Manager, IT Services CSIRO



CSIRO plays a key role in Australia's National Innovation System by generating and applying innovative solutions that deliver a profound and positive impact. As a forward-looking organization, CSIRO needs to establish global precincts to facilitate collaboration among organizations, forecast global megatrends that will change the way people live, and remove geographic boundaries to acquire the best people in the field, regardless of their location.

"Many of the challenges we face are global and interconnected. Scientists need to investigate the complexities from all angles to find solutions. This is why we want research communities across the world to work more closely together. Greater interaction can support the cross-fertilization of ideas drawn from people with deep expertise in different areas of knowledge. This can help provide improved ability for governments, industry, and community organizations to better plan for an uncertain world in which we all share," explained Euan Sangster, executive manager for IT services at CSIRO.

To support this goal, CSIRO's Information Management and Technology (IM&T) department looks to aid CSIRO's business by providing a wide range of IT, eResearch, and library services. IM&T's vision is to be increasingly valued as a partner in science delivery. This involves providing the infrastructure and services that enable CSIRO researchers to access data and instruments through high-end computing capability, and to collaborate with researchers globally.

IM&T services are delivered through a mixture of physical and remote channels. The level of physical and remote delivery provided varies depending on location and the type of support required. To ensure that IT services are delivered efficiently, CSIRO's IM&T department needed to enhance its IT support services to be able to aid CSIRO's administration, research, and administrative staff faster and more conveniently.

Intel® Core™ i5 vPro™ processor and Intel® SCS give CSIRO a centralized, extensible OoB solution to improve remote IT support services

Improving nationwide reach

To widen CSIRO's reach across Australia, the IM&T department needed to strengthen the delivery of IT support for businesses nationwide. It sought to adopt an OoB management solution powered by Intel Core i5 vPro processor based Ultrabook devices, which will enable it to provide IT support remotely.

"CSIRO is in a situation where remote site OoB management would improve both productivity and service response times. Intel Core i5 vPro processor and the Intel SCS management solution provide a centralized and extensible OoB solution," shared Adam Smith-Platts, desktop SOE engineer at CSIRO.

IM&T chose Intel as its technology provider, since it believes the Intel Core i5 vPro processor and Intel SCS are the baseline and standard of OoB management. Given the included hardware support provided via CSIRO's hardware vendors and Intel's OoB solutions' reputation, Intel was the logical step for CSIRO.

Adopting a centralized OoB solution

A proof of concept was completed in CSIRO's hardware support test lab environment. CSIRO deduced that the automation support and management capabilities of the Intel Core i5 vPro processor would benefit the wider IT support teams, providing fast and efficient support service to the wider CSIRO community.

As a nationwide organization, CSIRO has staff members in different locations and regions. Some of these regions are quite remote, making it challenging to collocate IT staff with other CSIRO personnel. This has caused delays in providing personal IT support for varying issues, since IT staff members need to travel from nearby offices. These delays have placed a significant burden on those using CSIRO's IT services, where the issues can make them unable to perform their jobs.

Lessons Learned

- Intel has well-documented procedures and best practices which are flexible and extensible. Approaching the configuration and deployment using these guidelines is recommended.
- Hardware support is paramount to achieve a complete solution. Ensure that your hardware vendor provides Intel Core i5 vPro processors and follows Intel's guidelines and recommendations.

Where hardware support allows, Intel's KVM Remote Control solution proved useful in diagnosing, refreshing, and upgrading applications, services, and operating systems on remote machines at sites with minimal IT staff. The Intel Core i5 vPro processor with KVM Remote Control proved to be the missing gateway to being able to instantly connect to diagnose and resolve issues with workstation boot problems, such as encryption lockout, application installation and upgrades, and operating system upgrades, among other issues.

Increasing support services

By using Ultrabook devices based on the Intel Core i5 vPro processor, CSIRO strengthened its commitment to providing consistent, high-quality services and support to aid its scientific, research, and administrative staff. Increasing its support services enabled CSIRO to better cater to remote staff and broaden the scope of service-desk-level capabilities.

With the positive results from adopting this solution, CSIRO now plans to provide Ultrabooks to its remote IT staff, enabling faster and more efficient IT support service.

Find a solution that's right for your organization. Contact your Intel representative, visit Intel's Business Success Stories for IT Managers (www.intel.com/itcasestudies) or explore the Intel.com IT Center (www.intel.com/itcenter).

330026-001FN



This document and the information given are for the convenience of Intel's customer base and are provided "AS IS" WITH NO WARRANTIES WHATSOEVER, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY RIGHTS. Receipt or possession of this document does not grant any license to any of the intellectual property described, displayed, or contained herein. Intel® products are not intended for use in medical, life-saving, life-sustaining, critical control, or safety systems, or in nuclear facility applications.

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance tests, such as SYSmark and MobileMark, are measured using specific computer systems, components, software, operations and functions. Any change to any of those factors may cause the results to vary. You should consult other information and performance tests to assist you in fully evaluating your contemplated purchases, including the performance of that product when combined with other products.

All performance tests were performed and are being reported by CSIRO. Please contact CSIRO for more information on any performance test reported here.

Intel does not control or audit the design or implementation of third-party benchmark data or Web sites referenced in this document. Intel encourages all of its customers to visit the referenced Web sites or others where similar performance benchmark data are reported and confirm whether the referenced benchmark data are accurate and reflect performance of systems available for purchase.

Intel® vPro™ Platform is sophisticated and requires setup and activation. Availability of features and results will depend upon the setup and configuration of your hardware, software, and IT environment. To learn more, visit http://www.intel.com/technology/vpro.

KVM Remote Control (Keyboard, Video, Mouse) is available only with Intel® Core™ i5 vPro™ and Core™ i7 vPro™ processors with Intel® Active Management Technology activated and configured and with integrated graphics active. Discrete graphics are not supported.

© 2014, Intel Corporation. All rights reserved. Intel, the Intel logo, Intel Core, and Intel Core Inside are trademarks of Intel Corporation in the U.S. and/or other countries.

* Other names and brands may be claimed as the property of others. O114/JAY/PMG/XX/PDF Please Recycle