FUJITSU

Case Study

» I've had three months of continuous uptime working on multiple, processor-intensive cases at once and the R920 has barely broken a sweat. Previously, it would take me a week to process a 500GB case file; now the CELSIUS workstation can do it in less than a day «

Aidan Jewell, Senior Digital Forensic Analyst, CCL



THE CUSTOMER

Country: United Kingdom Industry: Digital Forensics Founded: 1986 Employees: 120 Website: www.cclgroupltd.com



CHALLENGE

CCL's aging workstations were prone to crashing and unable to process multiple cases simultaneously. The noise generated by the machines was also becoming a problem. It wanted to find a new workstation solution that was reliable, high-performing and whisper-quiet.

APPROACH

CCL worked with Fujitsu to develop its CELSIUS R920 workstation and make it ideal for the forensics market, remodelling it to include six front-facing pluggable ports for external drives. The R920 offers up to 512GB RAM, multi-core processing and a five year guarantee.

The customer

CCL was founded as an independent IT consultancy in 1986, offering experienced and independent advice to ensure IT effectively supports business objectives. Over the years, CCL's offering has expanded, building on its digital forensics capability, to offer computer and mobile phone forensics, CCTV enhancement and cell site analysis services. As a result, CCL is now the UK's leading supplier of IT investigation services. CCL's success and longevity is due to its ability to flexibly respond to market changes and, more importantly, the needs of businesses.

The challenge

CCL handles multiple cases for 23 police forces and numerous government agencies every week. This forensic examination of computers, mobile phones and other devices requires significant levels of processing power – and with suspects in custody for limited amounts of time, the pressure to identify incriminating evidence is intense. However, its existing workstations were finding it hard to deliver the necessary performance and were subject to regular crashes.

"If your workstation goes down, you can lose hours – or even days – of work. Moreover, the machine sounded like a jet engine when doing anything even remotely processor intensive, making it difficult to concentrate on anything else," explains Aidan Jewell, Senior Digital Forensic Analyst, CCL. "Multitasking was also problematic; particularly as case files are becoming larger and larger. We knew there must be a better solution that could perform more effectively and reliably."

At the request of the Managing Director, Jewell drew up a wish list outlining the specifications of the ideal workstation for performing forensic analysis. At the top of this list was the ability to run several programs simultaneously, followed by the capacity to handle terabytes of data without crashing. Being able to perform effectively without creating high volumes of noise was also key.

"Historically, we had had issues with a number of leading vendors but when we met Fujitsu and were introduced to the CELSIUS R920, we knew it had the potential to be the perfect solution," adds Jewell. "Finally, we had found a workstation we could rely on although it initially lacked one critical feature."

THE BENEFIT

- The CELSIUS workstation performs up to eight times faster than the previous solution and can effortlessly handle multiple cases, making CCL more productive
- Optimal reliability means downtime is a thing of the past
- The workstation is 20 per cent less expensive than comparable competitive offerings
- Thermal management, low-noise chassis and silent fans ensure a practically noiseless working experience

The solution

The R920 is an expandable and customisable workstation with up to 512GB RAM and powerful multi-core processing capabilities, optimised for use with forensic toolsets. It boasts whisper-quiet operation, thanks to optimised thermal management, low-noise chassis and silent fans, thus eliminating noise pollution in the lab. In addition, its proven reliability for round-the-clock operation guarantees minimal downtime. However, it didn't have front access, pluggable drive bays, which would have made working on multiple cases much simpler.

"We had found our dream machine and then realised what we also needed was an easy way to swap the hard drives which we examine on behalf of the police," continues Jewell. "It was clear that the CELSIUS R920 was ideal for the forensics market and streets ahead of the competition but we needed a new version with front facing access. We asked Fujitsu what our options were."

The result was a trip to Fujitsu's German labs where CCL explained to the engineers what was required and why. At this point, CCL and Fujitsu also realised this would be an ideal workstation solution for any organisation involved in forensic analysis – and that CCL's longstanding relationships with police and government bodies provided the perfect channel to bring it to market. Within six weeks, a brand new, customised R920 with six pluggable front-facing ports arrived at CCL's offices.

"This demonstrates how flexible and responsive Fujitsu is as a business; we asked for a production line modification and the team in Germany made it happen," says Jewell. "It also opened up new business opportunities for both companies."

The benefit

With six of the new R920s installed at CCL, the organisation has realised significant advantages. The ability to perform analysis on four cases concurrently without ever crashing means employees can maximise their billable hours while helping the police solve crime more quickly. Moreover, the reduction in noise pollution has made the working environment more pleasant.

PRODUCTS AND SERVICES

CELSIUS R920

"I've had three months of continuous uptime working on multiple, processor-intensive cases at once and the R920 has barely broken a sweat," comments Jewell. "Previously, it would take me a week to process a 500GB case file; now the CELSIUS workstation can do it in less than a day. It's faster by a factor of eight and, without the roar of fans, I can finally hear myself think."

CCL also undertook a cost analysis and came to the conclusion that the R920 workstation was 20 per cent less expensive than other solutions from leading vendors. Its extensibility has enabled CCL to offer different specifications for different customers depending on their caseloads and requirements while the five year guarantee provides peace of mind.

One customer piloting the new forensic-specific workstation is Lancashire Constabulary, one of whose analysts adds: "The CCL – Fujitsu workstation is ten times faster on password cracking than my previous machine and has excellent multi-tasking capability without the machine crashing. It is far quicker than our existing machines for data access, indexing and viewing speeds."

Conclusion

As a result, Lancashire Constabulary has already placed an order for 15 units and CCL is committed to replacing all its own 60 workstations with the CELSIUS R920. It provides a clear demonstration of how best-in-class technology combined with flexibility and collaboration can make a great solution even better – and more suited to niche requirements.

"The CELSIUS R920 is more than five times faster than our previous workstations, can handle multiple cases at once, makes practically zero noise, never crashes and is customised to suit our needs. It is also less expensive than competitive offerings. It's no surprise we've partnered with Fujitsu."

About Fujitsu

Fujitsu is the leading Japanese information and communication technology (ICT) company offering a full range of technology products, solutions and services. Approximately 170,000 Fujitsu people support customers in more than 100 countries. We use our experience and the power of ICT to shape the future of society with our customers. For more information, please see www.fujitsu.com

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