

## SCOTTSDALE MEDICAL IMAGING

Radiology practice standardizes on HP Workstations, desktops



“We needed Workstations that were designed with performance as a driving goal. And I personally believe that HP Workstations deliver great performance for the money.”

—Andrew Willy, Information Systems Supervisor, Scottsdale Medical Imaging

**HP customer case study:** Radiology practice uses HP xw6400 Workstations, HP Compaq dc7800 Small Form Factor PCs to improve performance ability and deliver support in-house

**Industry:** Healthcare

HP recommends Windows Vista® Business

### Objective:

Provide Workstations enabling radiologists to access, view and evaluate medical diagnostic images productively with near 100 percent uptime

### Approach:

Scottsdale Medical Imaging replaced the older workstations with HP xw6400 Workstations and HP Compaq dc7800 Small Form Factor PCs and HP servers and storage

### IT improvements:

- Improved uptime of Workstation
- Open architecture solution enables in-house support staff to provide primary tech support
- Modular Smart Array provides redundant, reliable data storage
- HP Compaq dc7800 Small Form Factor PC used for core business applications

### Business benefits:

- Faster PACS image access
- Software tools are more responsive to radiologists
- Radiologists can be more productive
- Improved overall application performance and reliability

When radiologists at Scottsdale Medical Imaging need to evaluate high-resolution diagnostic images, they do it on HP xw6400 Workstations. In fact, Scottsdale has standardized on HP products wherever possible—from business desktop PCs to the servers that support administrative operations and redundant storage arrays that store the vast library of medical images.

“Across the board, we’ve found that HP products deliver the performance and reliability we need, and they are easy to support,” says Andrew Willy, Information Systems Supervisor.



## HP Workstations in an era of open systems

Scottsdale Medical Imaging is a radiology practice with 10 clinics scattered throughout Phoenix's East Valley area. The Scottsdale clinics use a Picture Archiving and Communications System (PACS) from GE Healthcare. The PACS provides for the massive amount of data generated by Scottsdale's diagnostic image studies, and enables radiologists anywhere on the company's network to call up studies for review and evaluation using high-resolution diagnostic Workstations.

---

*"It's no accident that we rely on HP products throughout our enterprise. Each time we evaluate competitive products; we return to HP and have a good experience. Our faith in HP products has been justified again and again. And HP backs up good hardware with good service."*

Andrew Willy, Information Systems Supervisor, Scottsdale Medical Imaging, Scottsdale, Ariz.

---

GE Healthcare has since standardized on HP Workstations for its PACS.

Because of the reliability and manageability of the desktop PCs, storage and servers, the Scottsdale Medical Imaging has been a long-time HP customer. In part, Willy says, there was a predisposition toward HP because the company had a history of good experience with HP products and personnel. HP hardware was familiar, and Willy's staff had supported it effectively as the practice grew.

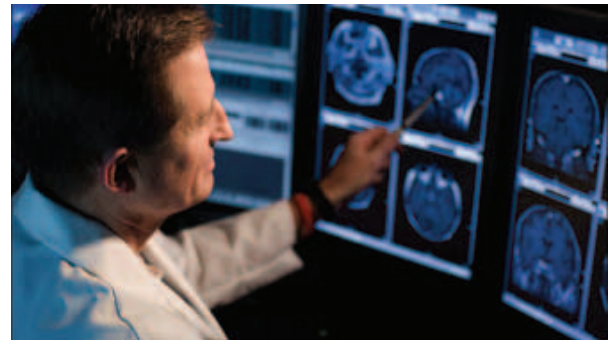
---

*"We rely on HP systems to support the core mission of our business. Month in and month out, they deliver the performance and reliability we need."*

Andrew Willy, Information Systems Supervisor, Scottsdale Medical Imaging

---

But the most importation consideration was performance. "We needed Workstations that were designed with performance as a driving goal," says Willy. "The imaging applications that radiologists use can be memory and processor intensive, so they perform dramatically better on a Workstation-class machine. And I personally believe that HP Workstations deliver great performance. " HP Workstations allow for fewer failures and less downtime, which expedites diagnoses, a primary objective of patient care.



Scottsdale Medical Imaging Radiologist William W. Horsley, M.D., FACR

"We look at thousands of images at our practice, and a single exam can involve many images," Willy explains. "The HP Workstation within the PACS needed to display those exams in a manner that's quick and convenient and makes the radiologist as efficient as possible."

The HP xw6400 Workstations at Scottsdale Medical Imaging are configured with 3 GHz Intel® Xeon® 5160<sup>1</sup> dual-core processors,<sup>2</sup> a Barco Coronis 3 megapixel graphics card supporting twin monitors with 1536 x 2038 resolution, 80 gigabyte SATA disk drives configured for RAID, and 2 gigabytes of RAM. Willy says the HP xw6400 Workstations provide a significant improvement over the older hardware they replaced.

Another important issue for Willy was reliability and the availability of the data. "Our radiologist Workstations have to be supremely reliable. We can't have a radiologist's work interrupted by a hardware failure, so we view the HP Workstations like servers. We expect them to be available almost 24/7."

"Hard drives are a common failure point in all systems, and we felt it was valuable to have our Workstations be deployed with drive redundancy," says Willy.

In addition, he says, the HP Workstations allow radiologists to multitask more efficiently, moving between image interpretation and other tasks quickly.

### Advanced desktops for demanding environments

"HP Business Desktop PCs are in every part of our organization, from the financial and billing operations to our general office and clinical operations," says Willy. "The 7000 series PCs deliver maximum stability and manageability for Scottsdale's business and clinical needs."

HP recommends  
Windows Vista®  
Business

**"The performance, the size, and the reliability of a cost effective PC are the greatest benefits of the dc7800 for us."**  
Andrew Willy, Information Systems Supervisor,  
Scottsdale Medical Imaging

HP recommends  
Windows Vista®  
Business

The practice has 250 HP Compaq Business Desktop PCs, including the HP Compaq dc7800 Small Form Factor PC, running its core business applications.

Willy adds that form factor is important to Scottsdale. "We, like most organizations, are space conscious."

"The performance, the size, and the reliability of a cost effective PC are the greatest benefits of the dc7800 for us," says Willy.

Because of dual-core technology and the affordable power of the dc7800, it has crossed over into areas typically supported by Workstation class machines, such as less demanding medical imaging placements. For example, the dc7800 can be found in Scottsdale's digital mammography exam rooms acting as a PACS station for a technologist.

---

*"Across the board, we've found that HP products deliver the performance and reliability we need, and they are easy to support."*

Andrew Willy, Information Systems Supervisor, Scottsdale Medical Imaging

---

Scottsdale Medical Imaging purchases HP Care Pack warranties with a six-hour repair window on critical systems, Willy says "HP Care Pack allows us to be self-sufficient. But having HP support available is the ultimate backstop," he says. "We've had good success when we do reach out to HP tech support. In one instance, an HP engineer helped us identify and resolve a business critical problem... HP stayed with it. They were tenacious and ultimately key to getting us back up and running. The significance can't be overstated."

#### **HP supports entire enterprise**

Scottsdale Medical Imaging also depends on HP beyond the desktop. In its data center, the company's

## Customer solution at a glance

#### **Primary applications**

Picture Archiving and Communications System (PACS) for medical imaging

#### **Primary hardware**

- HP xw6400 Workstations
- HP Compaq dc7800 Small Form Factor PCs
- HP ProLiant DL360 G4 and G5 servers
- HP ProLiant DL 380 G4 and G5 Storage Servers
- HP StorageWorks Modular Smart Array 20

#### **HP Services**

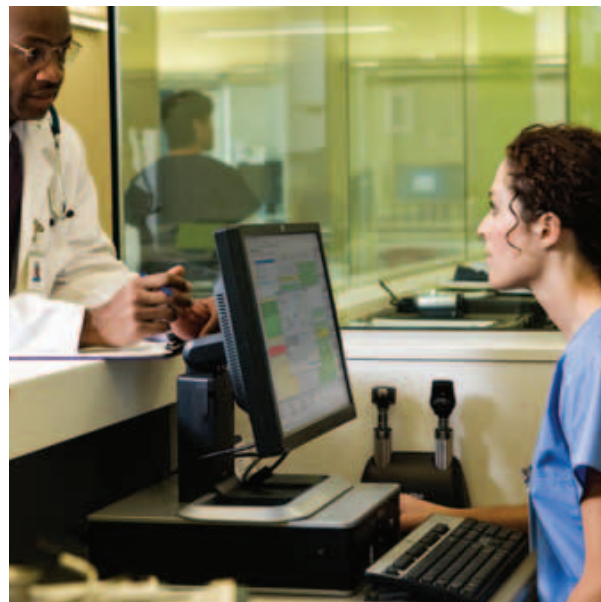
- HP Critical Systems Support

server infrastructure is almost exclusively HP ProLiant servers—40 of them—including ProLiant DL360 G4 and G5 models; DL 380 G4 and G5s; and DL580s.

The PACS architecture on HP Network Attached Storage (NAS) is based on ProLiant Storage Servers. Directly attached to the ProLiant Storage Servers are HP StorageWorks Modular Smart Array (MSA) 20 disk systems with 13 terabytes set up as short term storage and 27 terabytes for longer-term storage. The HP ProLiant DL380 G5 storage servers provide a centralized file server platform that is easily managed and protected.

"It's no accident that we rely on HP products throughout our enterprise. Each time we evaluate competitive products; we return to HP and have a good experience. Our faith in HP products has been justified again and again. And HP backs up good hardware with good service," he says.

But increasingly, radiology relies on information systems: capturing good data, having effective, productive tools to interpret that data, and being able



to share and access that data effectively. "We rely on HP systems to support the core mission of our business," Willy says. "Month in and month out, they deliver the performance and reliability we need."

HP recommends  
Windows Vista®  
Business

Contact the  
HP Reference2Win  
Program, 281-514-5755  
for more information.

To learn more, visit [www.hp.com](http://www.hp.com)

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Intel®, Pentium® and Xeon® are trademarks of Intel Corporation in the U.S. and other countries.

<sup>1</sup>Intel's numbering is not a measurement of higher performance.

<sup>2</sup>64-bit computing on Intel architecture requires a computer system with a processor, chipset, BIOS, operating system, device drivers and applications enabled for Intel® 64 architecture. Processors will not operate (including 32-bit operation) without an Intel 64 architecture-enabled BIOS. Performance will vary depending on your hardware and software configurations. See [www.intel.com/info/em64t](http://www.intel.com/info/em64t) for more information.

Dual/Quad/Triple Core is a new technology designed to improve performance of multithreaded software products and hardware-aware multitasking operating systems and may require appropriate operating system software for full benefit. Not all customers or software applications will necessarily benefit from use of this technology.

This customer's results depended upon its unique business and IT environment, the way it used HP products and services and other factors. These results may not be typical; your results may vary.

4AA21155ENW, September 2008

