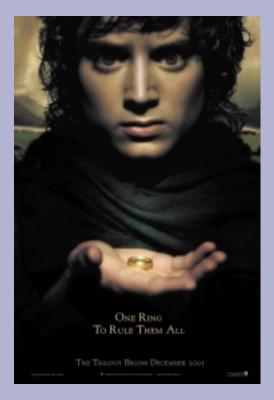# sgi®

ESP at Weta Digital, Ltd.:
Keeping *The Lord of the Rings* on Schedule

"SGI's New Zealand group and its service organization were certainly the first to understand the potential of LOTR."

—Jon Labrie, Chief Technology Officer, Weta

In a campus near Wellington, New Zealand, hundreds of digital artists are bringing J. R. R. Tolkien's *The Lord of the Rings* to vivid three-dimensional life on SGI® workstations, servers, and storage products. New Line Cinema's epic adventure film trilogy, which will include *The Fellowship of the Ring, The Two Towers,* and *The Return of the King,* has already been four years in the making. The artists at Weta Digital are synthesizing mass battle scenes, creating CG lead characters, and building a fantasy world of Middle Earth landscapes for the trilogy's more than 1,200 visual effects shots. SGI™ Global Services helps the creative team stay on schedule by solving hardware and software problems before they arise—using the SGI Embedded Support Partner (ESP).

Weta Digital: Building a World-Class Production Facility
Director Peter Jackson approached Weta four years ago with his production concept for *The Lord of the Rings* (LOTR to the industry). The simultaneous production of three epic adventures had never before been attempted. It demanded a digital production facility rivaling anything in the world. SGI was part of the concept from the beginning.

"We've always had a great working relationship with SGI and its service organization," said Jon Labrie, Weta's chief technology officer. "SGI's New Zealand group and its service organization were certainly the first to understand the potential of LOTR." The SGI presence at Weta includes more than 230 SGI® IRIX® and SGI Linux™ OS-based visual workstations, and several SGI® Origin® 2000 and SGI® Origin® 200 servers.

To keep LOTR on schedule, this massive hardware presence requires consistent attention and maintenance. This is particularly true because of the nature of the project. "When there were 40 or 50 artists, we knew everybody by name," said Labrie. "Now we have 155 artists whose skill sets we don't know. We don't know what they've done with their machines because we may not have worked on them for years if the artists haven't complained. And suddenly you realize you've got a facility full of equipment that you don't know very much about." SGI offered Weta a solution that puts current knowledge of the machines and their status at their fingertips.

ESP: Reducing Total Cost of Ownership
Weta requested the activation of ESP, an integral part of the IRIX operating system, on its IRIX OS-based machines in August 2001. ESP proactively monitors SGI systems for

SGI Embedded Support Partner (ESP)
ESP, part of SGI Electronic Support, is an embedded feature of the IRIX operating system. ESP provides the following services:

· 24x7 monitoring of system performance and availability
· Customized alert notification, including e-mails and pages, of critical system events
· Access to system performance, availability, and configuration reports in real time
· Proactive notification of SGI Global Services, which can trigger automatic support functions such as service case logging, Systems Support Engineer notification, and a database search of more than 7,000 problems and their solutions
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environmental conditions, potential software and hardware failures, performance metrics, system availability, and hardware and software configuration changes, and sends alerts or reports to IT administrators. SGI New Zealand Service Manager Ewan McKissock and Systems Support Engineer Rob Van Etten took less than a day to deploy ESP on a group of Weta's SGI machines. Within two weeks ESP was activated on all 125 Silicon Graphics® Octane® workstations and on all three SGI® Origin® family servers at Weta. Weta later deployed ESP System Group Manager (SGM), which centralizes status and event reporting from a single server.

The benefits were immediate. "It has just really taken the worry away for me," said Weta Systems Administrator Paul Gunn. ESP e-mail alerts not only describe problems but also include known fixes, allowing the Weta IT staff to take action before performance or availability is affected. Gunn reports that some workstations have logged automatic calls to the ESP control console about problems that his staff might never have heard about because some artists simply reboot their workstations and start working again. In other cases, artists may need application upgrades that require specific OS versions. ESP and SGM allow Gunn's staff to run a quick report that shows the exact software configuration and OS level on each machine.

ESP's ability to report IRIX OS versions has already resulted in significant savings in administration time. When Weta inventoried the hardware and software configurations of all workstations, Labrie found that it was taking at least half an hour to open each of the 60 to 80 workstations that weren't based on IRIX and extract the information. It took eight staff members two days, or roughly 150 hours, to do the job. "But because of ESP, we didn't have to open up an Octane system to know what was inside it," says Labrie. "We just walked up and queried ESP through the keyboard in a few seconds." ESP saved Weta approximately 300 hours in inventory time for the IRIX OS-based Octane workstations and will maintain the inventory data plus any future changes automatically.

SGI Global Services: Making a Difference behind the Scenes
New Line Cinema, which produced the LOTR trilogy, takes a pragmatic view of expenses. Labrie took a similar approach to his choice of vendors and support services. "Like any support staff, we have to battle to keep the head count," says Labrie. "Any support from our vendors that makes it possible to throw fewer people at the hardware—leaving the department, running out into the facility, working with the machine—is tremendous. And it's a win; it helps us with total cost of ownership."

Labrie and Gunn agree that one of the greatest attributes of the SGI Global Services support team is that it requires very little face-to-face time. "We don't have to get in contact with them," says Gunn. "And when they do call, they often say something like, 'We think you've got a problem and here's the potential solution,' sometimes before we even realize we've got a problem."

"SGI is far and away the vendor with whom I have the best relationship," says Labrie. "And we will rely on that relationship in the years ahead. ESP's an example of SGI service: enterprise-level software that helps us manage an environment more efficiently and that differentiates SGI from other vendors."

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