gdzip reduces storage and bandwidth requirement for major European semiconductor company

ABOUT THE CLIENT

The client, a major European semiconductor manufacturer, is a leading innovator in the international semiconductor industry. They design, develop, manufacture and market a broad range of semiconductors and complete system solutions targeted at applications in multiple industries.

THE GDSII FILE SIZE PROBLEM

With so many of today's electronics products requiring more and more capabilities, semiconductor companies are addressing these needs with larger and more complex IC designs. As these designs continue to grow at an alarming rate annually, many semiconductor companies face significant issues with their infrastructure reliability and performance to handle the large volume of large GDSII chip design files.

THEIR GDSII ISSUE

This semiconductor manufacturer was not happy with several aspects of their IC design infrastructure.

- The amount of online storage required for their semiconductor design file repository
- The time it took to transfer design files between their storage systems and their design workstations
- The amount of time required to perform their data archive process.

Being thorough strategist, this manufacturer was also greatly concerned with the continued explosion in their design sizes with many designs currently in the GB file sizes and their constantly shrinking available portion of resources.

Lastly, they also hoped to help ease their network bandwidth requirements between themselves and their foundry and mask shop partners (most of whom had already adopted Solution-Soft's gdzip compression technology).

THE gdzip SOLUTION

When presented with Solution-Soft's gdzip compressor, which is optimized for GDSII files, the client systematically tested it against their current solution (a gzip based compression technology). They conducted an intensive evaluation that compared the performance of gdzip versus gzip on their GDSII file repository of nearly 3,000 design files. In summary, their results showed that on average, gdzip compressed GDSII files were 3 times smaller than gzip compressed files and the gdzip compressor performed nearly 1.5 times faster than gzip.

With so many GDSII files, it made immediate sense to replace gzip with gdzip throughout their entire process. This meant modifying a number of process management scripts and replacing calls to gzip with similar calls to gdzip. The modification itself was quite simple and straightforward and they easily accomplished it in under 4 man-hours.

THE RESULT

Today the client has successfully completed their standardization on gdzip for all aspects of the GDSII design process. Through gdzip's use, they enjoy the benefits of tripling the compression rates of their GDSII files. These benefits include a dramatic savings in file access times, data back-up & recovery times, LAN network bandwidth, and faster and more reliable monthly tape-out's to all of their partners in throughout the world.

According to their Tapeout Engineer, Juergen Geissler, *"Solution-Soft's compressor gdzip has saved us a considerable mount of storage space, and backup time. Since our partners also use the compressors we both benefit from shorter, more reliable and more secure ftp transfers."*

ABOUT Solution-Soft

Solution-Soft is the leading provider of Intelligent Data Optimization (IDO) solutions, which address the urgent need for automated management of data in complex networking environments. IDO solutions facilitate automated data selection, movement, and redirection that optimize high availability, storage scalability, and system performance. The company has developed robust data-management software solutions for corporate data centers and storage solution providers. Solution-Soft boasts more than 1,500 customers, including 3M, AT&T, Boeing, Cable&Wireless, French Telecom and UMC. Solution-Soft's market presence is bolstered by partnerships with Citrix Systems (NASDAQ:CTXS), FalconStor.

(Nasdaq:FALC), Hewlett-Packard (NYSE:HWP), IBM (NYSE:IBM), Microsoft (Nasdaq:MSFT), Oracle (Nasdaq:ORCL) Sun Microsystems (Nasdaq:SUNW) and Synopsys, Inc. (Nasdaq:SNPS).

Founded in 1993, Solution-Soft is privately held and based in Santa Clara, Calif. For more information, visit www.solution-soft.com or call +1.408.346.1400.

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