

Ingegneria Sistemi Elaborazione Dati, S.p.A. (ISED)

Sun Mainframe Rehosting Success Story.



Ingegneria Sistemi Elaborazione Dati, S.p.A. (ISED) and I-Ter S.p.A.

Italian businesses and government agencies have long sought creative and efficient IT solutions to improve operations and reduce costs. Since 1974, ISED has offered specialized technical services to help companies find these new IT solutions.

Faced with new technology options, ISED needed to move to open systems platforms in order to continue to deliver high performance systems and improved information resources to its customers. By migrating existing legacy applications from a mainframe system to Sun open systems servers, ISED has gained higher IT performance, reduced operations costs, and established a Web-based information network that allows it to delivery improved services.

ISED Systems Power Government and Business Operations

ISED's primary business involves integrating IT systems with new applications and solutions in networking, automation and control, administration, and Web-based services developed for Italian government agencies, universities, health care, pharmaceutical, and emergency services clients, and for geographic and environmental markets.

ISED has a long list of impressive customers: government agencies such as the Municipal Company for Energy and Environment of Rome, regional governments in the Lazio, Abruzzo, Puglia, Veneto, and Marche regions, universities in Rome, Florence, Verona, and Pisa, and the Consiglio Nazionale delle Ricerche (National Research Council).

The Rome-based IT firm provides a wide range of IT solutions for business and finance, public health, pharmaceuticals, agriculture and the environment, transportation, culture, and education.

Company:

Ingegneria Sistemi Elaborazione Dati, S.p.A. (ISED)
I-Ter, S.p.A. (technology partner)

Industry/Market

Information Systems and Telecommunications

Applications/Solutions

- Improve IT efficiency and reliability and reduce costs
- Distribute information over Web-based networks

Products/Services

- Sun Mainframe Transaction Processing software
- Sun Enterprise™ 10000 server
- Sun Enterprise 450 server
- Sun Netra™ t1 server
- Solaris™ Operating Environment
- Java™ J2EE library
- Oracle software

Key Challenges

- Reduce cost of IT operations by eliminating costly mainframe
- Increase system integration using a more flexible open systems platform
- Improve information access for users

Key Solutions

- Application response times on the high performance Sun Enterprise system are 66 percent faster than on the mainframe
- Batch run times are one hour, compared with 10 hours on the mainframe
- Web interface provides essential high-speed connections for application services

Application response times on the high performance Sun Enterprise™ system are 66 percent faster than on the mainframe.

A turnkey solution provided full migration and application development support, Web services, and training.

Mainframe Limits Performance

Because ISED has been developing applications for nearly 30 years, many of its original applications ran on mainframe computers. With the advent of open systems servers that offer better performance and lower cost to businesses and government agencies, both ISED and their customers wanted to integrate new applications with the existing mainframe applications and move them to newer, more efficient hardware systems. If ISED continued to rely on its IBM ES9000 mainframe, it would limit their ability to provide customers with the application performance they required, especially in the light-speed Internet age, where information and control systems needed split-second response.

ISED needed to offer its customers applications that could run on an open systems platform, yet remain compatible with the IT investments they had made over the years. To meet this goal, ISED teamed with I-Ter S.p.A., an IT service provider in Milan that offers specialized IT solutions, especially for mainframe application rehosting, and Sun Microsystems. Sun offers the high-performance, efficient Sun Enterprise™ UNIX® servers and the Sun Mainframe Transaction Processing software, software that has been used to successfully migrate mission-critical enterprise applications from mainframe systems to open, affordable UNIX systems at more than 600 customer sites worldwide.

I-Ter was the critical link that provided the turnkey solution for ISED. I-Ter, a certified Sun mainframe rehosting partner, offered a turnkey solution for ISED providing full migration and application development support, Web services, and training.

Rehosting ISED's Applications to Sun Servers

ISED and I-Ter, began the process of migrating the applications from the mainframe, with VSE/ESA or OS/390, DB2, VSAM and CICS/Cobol to a Sun Enterprise 10000 server, with 24 CPUs. They used the Sun Mainframe Transaction Processing software to migrate 3000 online programs and 750 batch programs.

"The Sun solution has improved our ability to deliver systems and applications that optimize our customers' IT infrastructure in critical areas such as health care, telecommunications, defense, and automation and control – areas that require reliable, efficient, and accurate information. Their precise requirements had outgrown the mainframe's ability to deliver information."

Raffaele Giannetti
CEO
ISED



The migration project also involved 250 VSAM files, 2400 screens, 650 batch jobs and 2400 transactions to support the 1000+ users.

ISED replaced the mainframe with new hardware from Sun: the Sun Enterprise 10000 for production environment, a Sun Enterprise 450 for development and testing, and a Sun Netra™ t1 for the business' front-end system. In addition to ISED's specialized applications, the new system hosts an Oracle suite for financials and a JAVA™ J2EE library for the production and development environment. The mainframe was retired after the rehosting process was completed.

With the experienced assistance of I-Ter, ISED was also able to create the Web solution. ISED used special libraries in the Sun Mainframe Transaction Processing software to develop a product that automatically converts the 3270 maps in pages for Web server presentation (http, jsp or XML format). This enables the secure protocol to be used to access application transactions and all services can be distributed on an Internet/intranet network without any 3270 terminal emulator. This was a critical requirement of the project because ISED customers require high-speed connections for the services they buy from ISED. Also, high speed Internet connections are less expensive than the dial-up connections used previously, especially in the health care and pharmaceuticals area, where the connections must be open continuously.

Get the details.

Learn how enterprises use Sun mainframe rehosting solutions to reduce IT costs, improve performance, and gain open systems flexibility.

<http://www.sun.com/datacenter/mainframe/rehosting/>

Batch run times have been reduced from 10 hours to 1 hour.

Sun Environment Offers ISED and Customers Future IT Path

With the mainframe migration project completed, ISED and its customers are now able to develop new applications on the more efficient, less costly open systems platform. In addition, performance gains from the Sun system are huge — response times are just one third what they were on the mainframe and have been reduced to milliseconds. Batch run times have been reduced from 10 hours to 1 hour.

ISED customers can now plan for their own future hardware and software purchases to take advantage of the newest technology that comes on the market and save millions of Euro in annual operating costs that legacy mainframes require. And, Sun Microsystems' legacy migration program will allow dozens of Italian government agencies, educational and health care institutions, and businesses to operate more efficiently.

“In this era of instantaneous information access, organizations are challenged to integrate legacy applications with open platform solutions and Web-based systems. The Sun Enterprise servers and Sun Mainframe Transaction Processing Software allowed us to move all of our legacy code to a high performance environment and provide our customers with a path to the future.”

Raffaele Giannetti
CEO
ISED

Sun Microsystems, Inc. 901 San Antonio Road, Palo Alto, CA 94303-4900 USA 1-650-960-1300 or 1-800-555-9sun www.sun.com

AFRICA (NORTH, WEST AND CENTRAL): +33-13-067-4680 • ARGENTINA: +5411-4317-5600 • AUSTRALIA: +61-2-9844-5000 • AUSTRIA: +43-1-60563-0 • BELGIUM: +32-2-704-8000 • BRAZIL: +55-11-5187-2100 • CANADA: +905-477-6745
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UNITED ARAB EMIRATES: +9714-3366333 • UNITED KINGDOM: +44-1-276-20444 • UNITED STATES: +1-800-555-9SUN OR +1-650-960-1300 • VENEZUELA: +58-2-905-3800



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