

ENERGY,
PETROCHEMICAL
& GEO SERVICES

Energy, petrochemical and geo-services organizations control costs while providing worldwide access



“BEFORE IMPLEMENTING TARANTELLA, THERE WAS NO WAY WE COULD RUN AN APPLICATION ON THE BOAT AND RECEIVE THE DATA IN FIVE MINUTES. PREVIOUSLY WE WOULD HAVE TO TRANSFER LARGE DATA FILES, WHICH COULD TAKE 20 HOURS, AND THE PERFORMANCE OF HEAVILY GRAPHICAL APPLICATIONS BETWEEN OFFICES WAS VIRTUALLY UNUSABLE.”

RICHARD MCNALLY, PETROLEUM GEO-SERVICES ASA

CHALLENGES

Energy, petrochemical and geo-services companies must deal with a unique set of business and technology challenges, from deregulation, consolidation, mergers and acquisitions, and environmental concerns to world events that precipitate extreme volatility. Costs, prices, fluctuating supply and demand bring considerable pressures to bear on the energy and petrochemical value chain. Whatever you deliver, your enterprise needs to run on real-time information, from the wellhead to headquarters.

The software applications in oil and gas exploration—seismic processing, analysis, characterization, drilling—need to be accessible in a truly remote sense. Their maintenance must be sustainable in offshore situations. Access must be seamless and dependable anywhere, anytime.

Beyond exploration, the energy generation and provisioning industries depend on the ability to optimize efficiencies in a tightly cost-controlled and demand-driven environment. Leveraging existing infrastructures—servers, clients, software and networks—is a key element in this, as any other high-risk, thin-margin sector. The challenges become more acute in events such as mergers and acquisitions when diverse systems come together—proprietary meets open, new meets legacy. This complex mix makes it difficult to share information across the teams that need it and even more arduous to administer cost-efficiently.

SOLUTION

Tarantella is helping energy and petrochemical organizations meet their multi-layered challenges with Secure Global Desktop Enterprise Edition, the industry-proven, enterprise-class solution for universal application and data access, designed around open standards, resilient security, optimum network performance and portal integration.

Secure Global Desktop Enterprise Edition

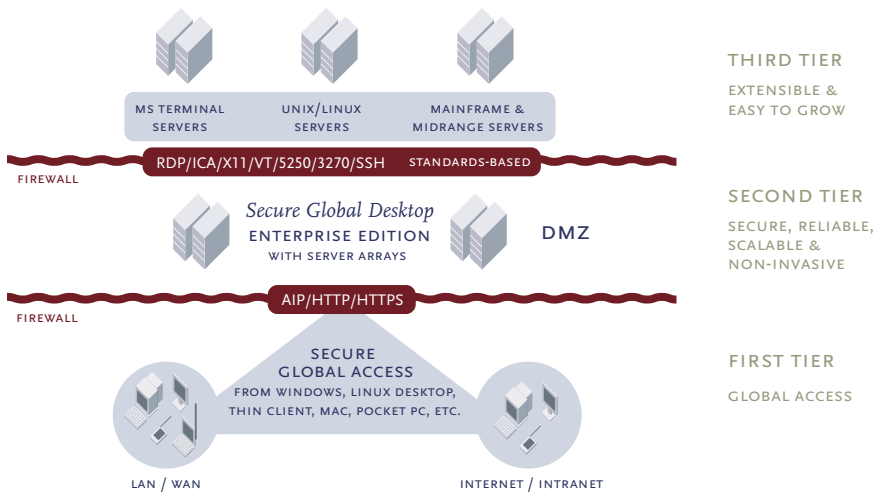
Enterprise Edition provides secure access to server-based applications running on Linux®, UNIX®, Microsoft® Windows®, Mainframe and Midrange operating systems. No application rewrites or software installations are required on either the client or the application server. Enterprise Edition consolidates critical applications and data onto centrally managed application servers, providing access to users through a standard web browser. IT staff can provision applications to end users who are assigned appropriate access rights based on individual or group criteria.

Enterprise Edition's unique three-tiered architecture delivers enterprise applications over the public Internet, corporate intranet or extranet without requiring software installation on either the application server or the client devices. It breaks down the typical barriers of IT infrastructure, allowing easier, secure access to mission-critical applications. IT staff organizes the typical Enterprise Edition installation as follows:

Tier 3 - Applications run on centrally managed application servers. No additional access software is required on these servers.

Tier 2 - Enterprise Edition software is hosted on one or more dedicated UNIX or Linux servers and runs multiple protocol engines that communicate with the third-tier application servers using their native protocols. These protocol engines convert the native data streams into the platform-agnostic AIP protocol, which is used between the clients and the Enterprise Edition server. Multiple Enterprise Edition servers can be joined together into an array for increased scalability while retaining a single point of administration.

Tier 1 - A wide variety of client devices such as Microsoft Windows PCs, UNIX or Linux workstations, thin clients and Pocket PCs can authenticate to the Enterprise Edition server using a standard web browser



THIRD TIER
EXTENSIBLE &
EASY TO GROW

SECOND TIER
SECURE, RELIABLE,
SCALABLE &
NON-INVASIVE

FIRST TIER
GLOBAL ACCESS

Figure 1: Enterprise Edition's unique three-tiered architecture secures the delivery of enterprise applications.

or Enterprise Edition native client. Once logged in, the user can access any application on the third-tier application servers to which they have been given privileges, regardless of what platform the application is actually running on.

Using this architecture, Enterprise Edition protects access to the applications, the data the applications use and the data in transit between the Enterprise Edition client and server. When unprotected, threats to these assets include unauthorized access or users exceeding their authority.

BENEFITS

Centralized Application Access and Management

Enterprise Edition provides energy customers access to all applications hosted on centralized servers within the organization's network, regardless of location. All applications can be published to the web immediately, saving money and creating a centralized computing model with diverse access points. The organization can deploy more applications to more users rapidly and cost-effectively, from virtually anywhere in the world. Enterprise Edition uses the patented Adaptive Internet Protocol (AIP) to provide high-performance application access to users employing almost any type of connection, including dial-up. The solution frees IT staff from having to install applications on individual desktop or laptop computers and allows mobile access from any device. There's no need to install software on individual end-user devices, and IT maintains better

control over user access.

Technological Edge

Being able to share crucial data in seconds provides a competitive advantage in the energy industry. Headquarters can interact with powerful on-board or remote processing systems in real time and at LAN-like speeds. Due to Secure Global Desktop Enterprise Edition's scalable nature, servers can be installed at key worldwide points so users can log into the remote locations and collaborate with local staff to examine geological, chemical or other critical and time-sensitive data.

Security

In a geographically-dispersed industry where applications are numerous and systems are complex, providing secure, controlled access to applications is as difficult as it is critical. Enterprise Edition installs on Linux and UNIX servers, platforms that offer superior reliability and security. Furthermore, the unique three-tiered architecture provides an added layer of protection against malicious attacks to the data center. Enterprise Edition employs leading dual-factor authentication mechanisms, such as RSA SecurID, and integrates with LDAP, Directory Services, Microsoft Windows Domains and UNIX passwords. Industrial-strength SSL and TLS technologies protect data and keep user sessions private. Encryption options include the industry-standard AES 256 encryption algorithm.

Users benefit from high-performance, reliable access to critical applications and information from wherever they are working.

Reduced Operational Costs

By centralizing application administration, Enterprise Edition reduces the overhead associated with PC-based upgrades and refresh cycles. It accelerates training of new staff and eliminates the retraining of existing employees. Because applications are web-based and accessible from a variety of devices, multiple workstations are no longer needed, reducing capital expenses as well as maintenance and support costs.

Over time, integrating Secure Global Desktop Enterprise Edition will have an impact on the total cost of ownership by:

- Reducing IT management costs—reduces client refresh, supports shadowing, provides audit log and user reports, provides a universal printing architecture
- Bringing any existing application to the web without expensive rewrites—assures application consistency
- Providing a secure, stable method of scaling to meet demand
- Extending the lives of existing desktops
- Reducing per-user cost of the access infrastructure—no emulator is necessary to deliver X11 applications

Why should your energy, petrochemical or geo-services organization integrate Tarantella Secure Global Desktop Enterprise Edition software?

- Allow users to access and share data quickly and reliably from worldwide locations
- Ensure business continuance and resilience to unanticipated events
- Reduce operational costs of traditional “fat client” computing models that require extensive support and maintenance
- Improve security by controlling user access to applications from a centralized server