

# ESSAR GROUP EMBRACES MOBILITY WITH JUNIPER SSL VPN AND JUNOS PULSE

## Summary

**Company:** Essar Group

**Industry:** Multinational Conglomerate

### Challenges:

- Help globe-trotting executives be more productive while remote and mobile
- Enable external partners to access Essar Group applications
- Eliminate the need for IPsec client installation, securely supporting the full range of mobile IP-enabled devices

**Selection Criteria:** Short-listed two potential solutions for proof-of-concept testing with live users, with a particular focus on ease of use, granular security control, and business continuity

### Network Solution:

- Juniper Networks Junos Pulse Client
- Juniper Networks SA6500 SSL VPN Appliance

### Results:

- Implemented “bring your own device” (BYOD) policy
- Increased remote access users by 10% in 6 months, with 30% higher average connect time
- Reduced remote access operating costs while improving security, access control, and availability

The Essar Group is a multinational conglomerate based in India with interests spanning steel, oil and gas, power, business process outsourcing (BPO), telecom services, shipping, ports, and infrastructure projects. With operations in more than 25 countries across five continents, the Essar Group employs 75,000 people and has revenues of \$17 billion USD.

## Challenges

As a large, diverse, and fast growing organization, the Essar Group was facing an increasing challenge in keeping its far-flung and often globe-trotting executives productive and “in the loop” while on the move. They needed access to e-mail, sensitive files, and critical applications, and there were a growing number of partners and vendors who needed to access various Essar Group applications and resources as well.

“The existing IPsec technology used for remote access had too many limitations and was confined to laptops,” says Jayantha Prabhu, chief technology officer, Essar Group. “We wanted to support the latest mobile devices like Wi-Fi and 3G-enabled smartphones and tablets as well as laptops. We also recognized that—especially at the smartphone end of the spectrum—these devices are personal, so rather than burdening our executives with a separate corporate device, we wanted to adopt a ‘bring your own device’ concept.”

However, Prabhu and his team also saw clearly that introducing this concept—and the wide variety of mobile platforms it entails—would greatly increase the number of potential on-ramps for security breaches that could threaten the Essar Group’s corporate network and resources. They therefore set out to find the best way to securely enable connectivity for mobile executives and partners across as wide a range of mobile platforms as possible.

## Selection Criteria

Based on the maxim that good security is an enabler, Essar Group sought a solution to safeguard corporate resources and at the same time support qualified access to specific applications and information from any IP-enabled device. It wanted a solution with maximum ease of use, anytime and anywhere, and without requiring a software download for each business application.

To meet these diverse and dynamic requirements, the Essar Group’s technical team started researching potential solutions available in the market before short-listing two for a more detailed evaluation. Juniper Networks and another vendor were invited to establish live proof-of-concept systems that could be tested by a group of mobile device users. Through this live testing, Juniper and its local partner, AGC, were able to demonstrate conclusively that their solution met all of the Essar Group’s requirements in terms of mobility, remote access, security policy, and business continuity.

“It rapidly became apparent during testing that Juniper had come up with what we regard as a definitive, no compromise solution for our mobility and remote access needs. It was therefore, in the end, an easy choice to make,” Prabhu says.

## Solution

The remote access and mobility solution deployed by the Essar Group is comprised of two major components: Juniper Networks® SA Series SSL VPN Appliances and Juniper Networks Junos® Pulse client. Together, this solution allows Essar Group to connect and protect its far-flung mobile workforce.



The Juniper Networks SA6500 SSL VPN Appliance is designed to deliver secure, mobile remote access and connectivity with best-in-class performance, scalability, and redundancy. It is particularly well-suited for organizations requiring high volume, granular role-based secure remote VPN access, and authorization for up to 10,000 concurrent user sessions. Use of SSL, the security protocol found in all standard Web browsers, eliminates the need for Essar Group to install and support VPN client software or make any changes to its internal servers.

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- Jayantha Prabhu,  
Chief Information Officer, Essar Group

The SA6500 also offers sophisticated partner/customer extranet features that enable controlled access to differentiated users and groups without requiring infrastructure changes, demilitarized zone (DMZ) deployments, or software agents. By simply and seamlessly integrating the SA6500 appliance with its existing single sign-on (SSO) and authentication, authorization, and accounting (AAA) systems, Essar Group was able to extend its established, individualized, role- and policy-based access control to its expanding universe of remote and mobile users.

“Junos Pulse is the magic that has enabled us to safely realize the ‘bring your own device’ vision. We had an ambitious agenda, but Juniper Networks’ robust, secure mobility solution made it possible for us to achieve connectivity and access to our networks from secure, managed mobile devices,” Prabhu says.

Junos Pulse client interoperates with SA Series appliances to provide Essar Group’s mobile executives and partners simple and secure network access via Layer 3 VPN. Junos Pulse securely connects, protects, and manages the mobile devices for Essar Group’s globe-trotting employees and executives.

While the Junos Pulse client for mobile devices is available as a free download from smartphone app stores, the Essar Group has also leveraged a network of more than 1,000 mobile device retail outlets across India to provide hands-on assistance during the rollout to smartphones owned by employees and other targeted users.

## Results

Prior to the introduction of its new remote access and secure mobility system, the Essar Group was supporting about 4,000 mobile executives using laptops with “thick client” VPN software. In the first three months since going live with the Juniper Networks solution, more than 2,000 employees and 20 partners have started using the system. More than 100 users are now connecting using personal mobile devices running Junos Pulse.

“Enabling our mobile executives to get connected anywhere, anytime, and from almost any device has certainly had the desired effect of improving productivity. Our monitoring shows they stay online 30% more than they were before, and they tell us they’re very happy to be able to get on with their jobs no matter where they are. Being able to bring partners into the loop is also a very powerful capability,” Prabhu says.

“From an internal perspective, we’ve reduced the operational cost of providing remote access while implementing better, more granular security and providing a superior service to our users. It is now a lot faster and simpler to make new applications available, accessed through a secure single sign-on, whereas it used to take days to publish new application-specific URLs. The whole system is also a lot more resilient, with seamless switchover of remote access to our disaster recovery site in the eventuality that our production site has a problem.”

## Next Steps and Lessons Learned

Prabhu says that there were a few issues to deal with during the deployment stage but these provided good learning for his team and demonstrated the strength and responsiveness of Juniper’s technical support.

With Essar Group operations in India now fully supported by secure remote and mobile access as well as mobile device security and management from Juniper Networks, the company is replicating these capabilities in other regions, including Europe, North America, and Southeast Asia.

## For More Information

To find out more about Juniper Networks products and solutions, please visit [www.juniper.net](http://www.juniper.net).

Information about SA Series SSL Appliances with Junos Pulse support for mobile devices can also be found at [www.juniper.net/us/en/products-services/security/sa-series/](http://www.juniper.net/us/en/products-services/security/sa-series/).

## About Juniper Networks

Juniper Networks is in the business of network innovation. From devices to data centers, from consumers to cloud providers, Juniper Networks delivers the software, silicon and systems that transform the experience and economics of networking. The company serves customers and partners worldwide. Additional information can be found at [www.juniper.net](http://www.juniper.net).

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