

# SIEMENS AG INSTRUMENTATION & CONTROLS

Stratus® Always-On solutions helps Siemens continue to set the standard in power plant automation

Challenged with developing an industry-defining product in the power plant automation control market, a small research and development team chose to leave the comfort of their German headquarters to set up a base in the USA. Doing so would ensure a best-of-breed product, developed with the customers' needs and "no history" in mind.

"There was a real need for a comprehensive enterprise management instrumentation and control system in power plants which delivered the right information at the right time for minimum investment and minimum maintenance costs," said Thomas Schoch, head of Products and Systems for the Siemens' Instrumentation, Controls & Electrical Business Unit.

## Siemens' objectives

"Many of our competitors were wrapping web-based functionality around existing systems to deliver this. We wanted to go further. We needed to find a way to deliver a web-centric solution which seamlessly integrated enterprise management with power plant control whilst minimizing management and maintenance costs. We wanted to ensure that our customers' needs drove the decision-making process, rather than what we had in our existing tool kit. We wanted to take full advantage of global resourcing and to maximize the product's life cycle whilst using as many off-the-shelf components as possible," Thomas Schoch explained.

"Isolating ourselves from our past enabled us to explore new technologies and new partners capable of enabling our vision of the future. Discovering ftServer®, Stratus Technologies' fault-tolerant server which delivers greater than 99.999% uptime, gave us the key," he added.



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Head of Products and Systems  
Siemens' Instrumentation, Controls & Electrical Business Units



For an **Always-On** World

[www.stratus.com](http://www.stratus.com)

## ftServer delivers guaranteed uptime at the heart of Siemens' SPPA-T3000

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### The solution

Finding a fault-tolerant server that could guarantee 99.999% availability enabled Siemens to develop the three tier architecture required to deliver a truly web-based solution.

It became more than the key to the SPPA-T3000 product specification. It became the product's processing layer—its heartbeat.

It enabled true universality: with all functions (operation, engineering and diagnostics) performed on one machine and made available to any authorized web-enabled application (the Thin Client).

ftServer allows for load-and-go simplicity. Embedding it into the SPPA-T3000 solution as the processing tier was simple. This enabled Siemens to guarantee unprecedented enterprise-wide availability of information, without the need for any modifications. And, it reduced risk, maintenance and total cost-of-ownership for both Siemens and their end users.

Guaranteeing the right information at the right time and in the right place allowed Siemens to provide its power plant customers a foundation stone for their future success.

## Five nines availability and simplicity help Siemens own the power generation management space

### Business results and impact

In 2005 Siemens launched its SPPA-T3000. Its lean system structure, comprising fewer components than existing solutions and presented as an all-in-one software system, ensured its success. It quickly became the new benchmark in power plant controls. More than 2700 orders for SPPA-T3000 were placed, including the largest new fossil-fuel fired power plant project worldwide, BOA II in Germany, and the largest modernization project worldwide, Kriel in South Africa.

The SPPA-T3000 has helped to give Siemens ownership of the power generation management space.

### Looking ahead

"We are the unrivaled market leaders in power plant control. This will remain." Thomas Schoch continued: "With such success comes enormous responsibility, which we take very seriously. We believe that it is our duty to continue to innovate in this sector. Why? Because:

- the demand for worldwide energy is set to increase by 40% in the next 25 years
- emerging countries who need affordable solutions account for two thirds of this increase
- the increasing share of CO2-free energy sources challenges existing plant assets with even higher flexibility requirements
- energy diversity is unlikely to fundamentally change in the next ten years, meaning today's providers need to take care of tomorrow."

"Stratus's announcement about its Avance availability software opens up many new doors for us."

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Power your plant & power your business SPPA, the Siemens Power & Process Automation family, covers the full spectrum of power plant I&C, electrical engineering and IT solutions. Our specialists have created solutions by power plant people for power plant people. With more than 2700 installations around the world, our solutions have been proven to help maximize not only the full potential of each individual plant but of the entire fleet.



## Taking care of tomorrow with innovative software-based availability

Future innovations include software-based availability “History shows that we deliver, even though doing so initially required starting with ‘no history in mind’. Now, as we approach our tenth year of partnering with Stratus it is time to change that view point. Stratus’s announcement about its Avance availability software opens up many new doors for us,” Thomas Schoch continued.

Delivering industry-leading availability via software changes the landscape for Original Equipment Manufacturers. It means they will be able to deliver Stratus’ reliability and operational simplicity even more efficiently and offers the potential for developing whole new markets.

Thomas Schoch concluded: “We look forward to the next ten years, developing affordable power plant automation solutions which extend our share of the solar, renewable and emerging markets, whilst answering some of the world’s toughest questions regarding energy.”

### About Stratus

Stratus delivers uptime assurance for the applications its customers depend on most for their success. With its resilient software and hardware, backed by proactive availability management services, Stratus products help to save lives and to protect the business and reputations of companies, institutions, and governments the world over.

To learn more about worry-free computing, visit [www.stratus.com](http://www.stratus.com)

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