Cloud Solutions for Smart Distribution

IDMS on Demand – Economical, Reliable and Secure

Sy**nergizing** our Strengths

E**nergizing** your Business
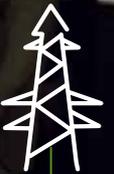
Photo provided courtesy of Alstom Grid

Is the current economic climate driving Cloud uptake?

91%

Agree

Energy/ Utility
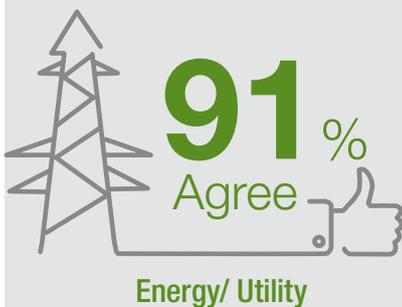
Capgemini 2012 report:
Business Cloud: The State of Play
Shifts Rapidly

Capgemini and Alstom Grid—two global organizations leading the way in Smart Grid and technology services for the Electric Distribution Utility industry.

Capgemini and Alstom Grid have partnered to provide an innovative **Integrated Distribution Management System (IDMS)** solution, delivered via Capgemini's **Infrastructure-as-a-Service (IaaS) Cloud** offering.

Our Services

We are collaborating to address the needs of distribution utilities through industry-leading applications, IT technology and architecture, and integration services:

- Full function solution that is the first of its kind for distribution utilities
- Real-time management of distribution networks; complete suite of applications – SCADA, DMS, OMS, Simulation and Network Modeling
- Standardized approach to implementation and support tailored for distribution utilities
- Highest level of data privacy and cyber security
- Service levels that drive uptime, performance, and efficiency metrics
- Multi-tenant Virtual Machine occupancy
- Large capacity for customer expansion

People matter, results count.

Alstom Grid - YOUR Grid. Reinvented.

- Highly virtualised infrastructure controlled by a software management layer
- Reciprocal dual site for security and disaster recovery capabilities
- Infrastructure-as-a-Service (IaaS) offers layered options for additional services, connectivity; back-up and storage
- Full suite of system integration, consulting and project management services offered in a managed business service model

Value Proposition

In today's competitive environment, distribution utilities are driven to reduce costs through more efficient processes, systems and organizations. Existing assets must be used more effectively to take advantage of the full capacity of the distribution network while deferring capital expenditures. At the same time, regulators and customers are requesting reliability improvements and increase in customer service levels.

Alstom Grid's e-terradistribution 3.0 suite of smart grid applications has been designed from the ground up for distribution utilities. These applications provide a full range of high quality operational tools that are configurable to the needs of today's distribution utilities for real time management of distribution networks providing conservation voltage regulation (CVR), grid self-healing and advanced switching operations functionality.

Capgemini's Managed Business Services framework empowers distribution utilities to optimize capital costs and enable new services. In concert with Capgemini's global Infrastructure-as-a-Service offering, distribution utilities can now take advantage of the latest in distribution management applications deployed on state-of-the-art IT infrastructure while minimizing capital investments. As an experienced system integrator for the utility industry, Capgemini is strategically positioned to manage the overall project, design the IT architecture, and perform the business and technology integrations. Capgemini also manages the IT operations including program schedules, resources, change control and risk management.

Capgemini, as a leading system integrator with deep expertise in the electric utilities domain and Alstom Grid, with proven technology and deployment of IDMS, can jointly provide an industry-leading experience that drives efficiency for your organization while reducing capital expenditure.

Why You Should Consider the Capgemini-Alstom Grid Cloud-Based IDMS Solution for your distribution network

- **Integrated Distribution Management System**
  - Fully integrated real-time control environment with situational awareness tools
  - Smart Grid-ready configurable system that meets your current needs with the flexibility to expand the scope and functionality in the future
  - Maximize distribution network utilization and support for advanced distribution automation devices
  - Scalable, secure and open SOA-based architecture
  - Seamless integration with existing enterprise network modeling tools including geographic information systems and asset management systems
  - Provides a high-performance storm-ready platform capable of managing large scale outages

Alstom Grid:

30+

Years developing control room software for Electric Utilities

1st

IDMS in the industry – Largest number of deployments

Capgemini:

1st

Secure virtual private Cloud for Electric Utilities in North America

#3

IT Services provider to Utilities worldwide

- **Infrastructure-as-a-Service (Cloud)**
  - State-of-the-art virtual private cloud-based IT infrastructure managed and maintained 24 x 7, 365 days a year
  - Managing the issues, risks, actions and change control activities for IT infrastructure, business solutions and system integration
  - Maximizing the benefits from your investment in your business processes and applications such as mobile workforce management, asset management, geographic information systems, customer management systems, etc.
  - Ensuring uniformity and adherence to integration standards along with meeting the highest levels of cyber security requirements
  - Ensuring the solution aligns to the business needs and fits into the overall enterprise architecture and budgets

Alstom IDMS

Alstom's **e-terra***distribution* IDMS can help electric utilities reduce peak demand, improve service quality, inform consumer energy use decisions, and integrate renewable energy. Alstom's **e-terra***distribution* suite of smart distribution applications integrate information from the smart grid network to improve monitoring and control of distribution systems and distributed energy resources (DER).

The **e-terra***distribution* suite helps you improve grid self-healing, power quality and energy efficiency for enhanced customer satisfaction. The **e-terra***distribution* platform is integrated with smart grid data to provide distribution utilities with enhanced visibility into your distribution grid operations and control over distributed energy resources.

Capgemini Infrastructure-as-a-Service

Capgemini's IaaS offers a "pay-as-you-go" cost model with the security of an on-premise or off-premise state-of-the-art IT infrastructure to support your distribution management system. All is managed and maintained by Capgemini. IaaS provides scalable and flexible infrastructure capacity, offering rapid provisioning, high availability and the potential to reduce carbon footprint, combined with full end-to-end management of your IT environment.

Capgemini's breadth of technical capability and depth of utility industry knowledge enables the delivery of IDMS via the Cloud by pooling the skills of many of our technology and industry experts in core enabling technologies, including Cloud Assessment, Identity and Access Management, Service Management, Service Oriented Architecture, Risk Management and Compliance. Capgemini offers a wide array of additional services, such as Model Management (GIS, AutoCad, etc.), integration with legacy systems, Reporting and Dashboards, and much more.

Sy**nergizing**
our strengths
E**nergizing**
your business

Distribution utilities face many challenges today: the need to operate the distribution network safely, enhance customer satisfaction; continually improve reliability indices; maximize network utilization, delaying asset investments; and preparing your distribution utility for the Smart Grid evolution.
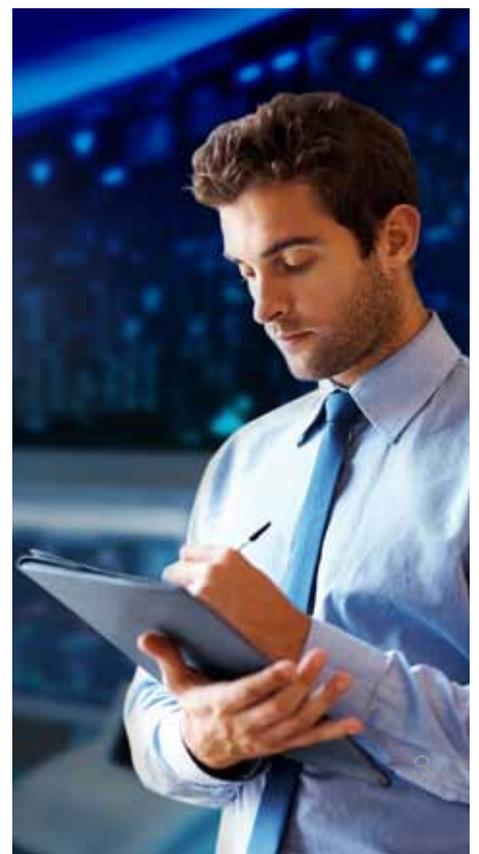
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About Capgemini

With more than 120,000 people in 40 countries, Capgemini is one of the world's foremost providers of consulting, technology and outsourcing services. The Group reported 2011 global revenues of EUR 9.7 billion. Together with its clients, Capgemini creates and delivers business and technology solutions that fit their needs and drive the results they want. A deeply multicultural organization, Capgemini has developed its own way of working, the Collaborative Business Experience™, and draws on Rightshore ®, its worldwide delivery model.

Capgemini's **Global Utilities Sector** serves the top Utilities worldwide and draws on a network of more than 8,400 dedicated sector consultants. As a leader in smart grid and advanced metering infrastructure solutions, Capgemini's **Smart Energy Services** is helping Utility customers throughout the world. Our integrated **Digital Utilities Transformation** framework empowers utilities to drastically improve their customer experience, operating and business models through disruptive technologies.

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More on industry specific solutions is available at
www.capgemini.com/utilities

About Alstom

Alstom is one of the world's leaders in power generation, power transmission and rail infrastructure and sets the benchmark for innovative and environmentally friendly technologies. Alstom provides turnkey integrated power plant solutions and associated services for all thermal and renewable energy sources. It offers a wide range of solutions for power transmission, with a focus on smart grids. The Group employs over 90,000 people in around 100 countries, and had sales of €21 billion in 2010/11.

With over 100 years of expertise in electrical grids, Alstom Grid brings power to its customers' projects. Alstom Grid ranks among the top 3 in electrical transmission sector with an annual sales turnover of more than €4 billion. At the heart of the development of Smart Grid, Alstom Grid offers products, services and integrated energy management solutions across the full energy value chain.

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Learn more about us at:
www.alstom.com

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