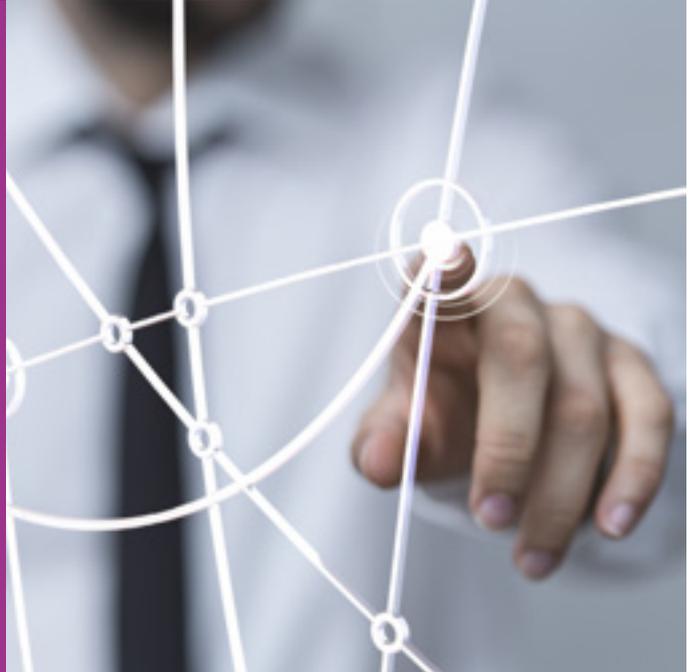


t

testing



**get**  
it right  
the first time

With our global team of over 8,000 application test specialists, Atos can help you reduce testing costs by as much as 40%. Even more importantly, however, our Test Services deliver the business assurance and agility which now underpin success for every software-enabled enterprise.

---

# Testing underpins business assurance

Competitive advantage is increasingly determined by the rate at which you store, process and analyze data. New applications determine how rapidly you gain insight and turn it into action. Every organization that recognizes digital transformation as central to success must be able to develop great software with confidence - and that confidence is rooted in the quality, speed and accuracy of testing.

---

Application test teams are under intense pressure to work effectively and efficiently. A rigorous set of process controls is essential too, in increasingly complex regulatory and compliance landscapes.

Business assurance demands accurate digital content delivery - and that requires a managed risk model which ensures privacy and instills trust. Testing services need to be able to handle petabytes of social or customer data; large ERP and CRM systems; complex traditional and cloud infrastructures; context-driven mobility; machine-to-machine interaction; and more.

Atos Test Services cover it all. Our global team of over 8,000 application test specialists delivers application testing and quality assurance. We deliver the business assurance and agility which must now underpin success for any software-enabled enterprise.

## Manage Risk - Protect the Brand

Testing is not an end in itself. All changes to existing applications and processes must function correctly; they must be applied without affecting essential business continuity; and they must be accepted by the people affected by them. But the real prize gained through world-class testing lies in protecting your brand.

Application errors which result in loss of service or security breach can cause lasting damage - destroying trust and reputation. Your testing program must be designed to counter this risk.

You need to test every change in application and process from three perspectives:



**In isolation** looking specifically at the test application



**In combination** considering the application's active interoperability within the enterprise and beyond



**In context** examining change in terms of usage and acceptance

## CIO Team Paradox

Across both public and private sectors, CIO teams manage a real contradiction. On the one hand, you seek to rationalize. Where applications and processes have been developed at a departmental or national level, often over many years, the drive is on to consolidate and harmonize. Every change carries risk, and every risk must be addressed.

In parallel to this drive to reduce complexity, you are faced with continual demand for new applications and IT-driven processes. This may be prompted by the need for smart mobility; it may be due to the explosion in online and cloud-based products and services; to regulatory and organizational change; mergers and acquisitions or international expansion.

But whatever the reason, the rules remain the same: you must mitigate risk and achieve or exceed the target results (while, of course, delivering on time and within budget).



## Technology-driven testing for the digital enterprise

<b>Provisioning instant cloud-based test environments</b>	<p>As more business applications and processes move to cloud-based delivery, so do testing models. These reflect all the benefits of the cloud: notably service-on-demand, scalability and transparent costing.</p> <p>Canopy is the specialist Atos cloud unit, offering instant test environment provisioning and live code propagation allowing you to create multiple test environments at zero CapEx.</p>
<b>Cloud-based testing for Big Data and Analytics</b>	<p>Our specialist test platforms are designed for business intelligence and analytics using Oracle Exadata and SAP HANA environments.</p>
<b>Smart mobility testing (Contextual mobility)</b>	<ul style="list-style-type: none"> <li>▶ Private and hybrid clouds with over 3000 real devices available</li> <li>▶ Over 200,000 apps tested</li> <li>▶ Market-specific test utilities for retail, banking, travel, hospitality and entertainment</li> <li>▶ 30-day SLAs for new devices and OS upgrades with realtime App Store review tracking, remediation and verification</li> </ul>
<b>Service virtualization for DevOps testing</b>	<p>For many, Agile has now evolved into DevOps. This becomes both the answer to the demand for rapid and virtually spontaneous application development and also bridges the gap between previously siloed development and maintenance disciplines.</p> <p>The method demands an approach to Testing that is characterized by:</p> <ul style="list-style-type: none"> <li>▶ People - highly-dynamic, multi-disciplinary, product-oriented teams</li> <li>▶ Process - Agile, LEAN and model-based, and</li> <li>▶ Technology - maximum automation and virtualization</li> </ul> <p>The Atos approach to DevOps embraces our mature testing method; an integrated development and test environment; best-of-breed technology; and, perhaps most importantly, agile, SCRUM Master certified test professionals.</p>
<b>Cloud-based Shared Service Center (end-to-end SDLC toolsets)</b>	<ul style="list-style-type: none"> <li>▶ Test Platform-as-a-Service (TPaaS) - one of the world's largest instances of HP ALM</li> <li>▶ Choice includes: HP ALM, Performance Center, UFT, MicroFocus, IBM Rational, Oracle ATS, Worksoft and NeoTys</li> <li>▶ Zero CapEx - no license or hardware costs</li> </ul>
<b>Cloud-based performance testing</b>	<p>Performance testing is always a hot ticket - especially when there is an urgent need to investigate unforeseen service degradation. Our forensic analysts are expert both in rapidly and reliably identifying the root causes of performance degradation issues - and more importantly, of resolving them.</p> <p>Performance testing is not always driven by alarm. It can also be prompted by anticipation of change in business operations and with the Atos SaaS model for HP Performance Center, for example, systems are always "good-to-go".</p>
<b>Security test lab for mobile, cloud and non-cloud</b>	<p>Cloud application security and penetration testing. Combines automated application security testing with in-depth manual business logic tests.</p>
<b>Business model-based test automation</b>	<p>TEMPPO is the Atos model-based test automation for commercial distribution.</p>
<b>ERP Testing</b>	<p>ERP remains the foundation of so many business processes, and with significant changes in ERP thinking come changes in demand for ERP Testing and Acceptance.</p> <p>Atos is resourced for both Transformation and Consolidation &amp; Harmonization on all major platforms, including SAP and Oracle.</p> <p>We have 10,000 SAP and Oracle specialists. Atos is an Oracle Platinum Partner; an SAP Global and gVAR Partner; and a 2013 SAP Pinnacle Award Winner.</p> <p>Atos ERP Testing capability is also enhanced by expertise in third party integration; cloud; mobility; and front and back office</p>

# Testing the Extreme

Atos welcomes the challenge of testing under extreme pressure in extreme scenarios. With our Olympic showcase, we have the world's largest cultural event in which no deadline can be missed: every result, for example, from every event must be guaranteed available for digital consumption within 0.5 seconds of the judges' decision. Over 255 million security events were thwarted during the 2014 Sochi Games alone through "extreme" security and vulnerability testing for both cloud and non-cloud infrastructures.

Beyond the Games, Atos is entrusted with testing responsibility across many organizations in which there can only be zero-defect tolerance. We are active in crash-testing and stress-testing for the aerospace industry; we ensure fully operational capability for European Space Agency systems and satellites; we test simulators and control systems for nuclear power stations; and we are routinely called on to perform stringent testing for public sector defense and security organizations.

## The Real Differentiator - Industry-specific enablement

With the combination of our "extreme" testing experience along with the significant investments in establishing sector-specific test enablement solutions, our Testing Practice is able to make certain that change initiatives within your enterprise are tested with "fit for purpose" resources, tools, labs, and reusable test assets.



 <p><b>Transport</b></p>	<p>The online experience for passengers is the start of the journey: ticketing, price comparison, seat-booking and variable tariffs all count. Atos conducts exhaustive automated transaction and payment testing and in-depth consumer trials for travel service providers.</p> <p>Our Aviation Lab tests airport systems and the Atos Certified Aeronautics Facilities test both products and mechanical engineering projects. These include validation for flight test campaign certification; physical crash-tests; and airframe stress testing.</p>
 <p><b>Financial Services</b></p>	<p>Effective channel management is critical in financial services. Atos has established industrialized test facilities embracing retail and wholesale banking applications with a special emphasis on channels.</p> <p>Our Payments Lab focuses on transactional systems and with over 1,000 point-of-sale devices is equipped to test every possible European POS configuration.</p>
 <p><b>Telecommunications</b></p>	<p>Telecommunications companies are under extreme pressure to get new products to markets in which customers are increasingly digitally sophisticated. Atos has established shadow test facilities for telco development teams, minimizing time-to-market and boosting the chance of product success.</p>
 <p><b>Public Sector</b></p>	<p>Trans-national public bodies live by IT-enabled process: the effectiveness of every decision, submission and regulation is strongly influenced by the quality of tools and workflows. Atos has developed extensive toolkits of test scripts for public bodies, allowing up to 80% automation.</p> <p>Our Embassy Lab provides test facilities for consular applications, processes and workflows while our Siren Lab focuses on emergency response and resource management.</p>
 <p><b>Energy</b></p>	<p>The growing influence of smart technology coupled with widespread liberalization has left the applications and processes used for energy billing and account management showing their age. Atos specialist testing units are helping utility companies face rapid evolution with confidence.</p>
 <p><b>Manufacturing</b></p>	<p>An increasing range of manufacturing companies are now adopting Manufacturing Execution System (MES) and Product Lifecycle Management (PLM) systems. Scope can extend beyond individual plants and across the supply chain. Atos covers the entire PLM scope and places particular emphasis on user acceptance testing with its manufacturing clients.</p>
 <p><b>Major Events</b></p>	<p>Our Major Events Lab has grown out of our long experience as official Worldwide IT Partner to the Olympic Games and offers the benefit of our investments in these extreme test environments to clients in other sectors, with particular emphasis on media and entertainment.</p>

---

# Heads you win. Tails you win

---

Atos has a distinguished Global Testing Practice. Active for over 30 years - we keep pace with every development in technology and business. Originally designed to ensure that our own solutions performed to the highest standards, we soon realized that it shouldn't stop there.

Today Atos offers rigorous and independent testing in two distinct flavors.

## Manage Risk - Protect Brand

Atos itself delivers major digital transformation projects to clients around the world. In addition, we manage a continuous stream of major and minor enhancements to applications and processes under Atos management.

Our Testing Services are the gatekeepers for quality in Atos systems development and integration projects.

## Third party projects

We also provide a complete portfolio of Independent Testing Services for third party projects. These can be conducted either in collaboration with our clients' in-house resources or with third party suppliers.

In both cases, the rigor and independence of the Atos services ensure fitness for purpose. We deliver clear and focused reporting, pinpointing potential weakness, and making practical suggestions for refinement and resolution.

Although our industry is fiercely competitive, every mature IT service company understands the need for active collaboration. When Atos is called to test, our focus is clear: to collaborate with the solution provider to ensure the best result.

Whether we're working together on an Atos solution or validating third party projects, we remain fixed on a simple and unchanging principle: the Atos testing program will be scoped and coordinated according to our own standards of best practice, and the objectives will be agreed, monitored and measured.

---

# Business and technology focus

---

Technology expertise is key in all testing engagements. We have a coordinated global team of over 10,000 SAP specialists. In addition, we have Centers of Excellence in other leading ERP solutions - notably with Oracle's Application Suites and core technology stack. We have similar strengths in the many specialties demanded by our clients. With transactional processing, both for payment and the management of loyalty programs and CRM, our dedicated Worldline unit is a market leader.

In terms of core technology platforms, we have invested both in alliances and in developing and sustaining our own skills base. We are experts in the technologies and products of CA Technologies, EMC, Microsoft, Oracle, SAP, VMware and many others. We have an especially strong partnership with HP, and are expert in their own highly-regarded testing solutions.



# Method and delivery: an industrial model with a personal touch

When you engage with Atos, you buy into a robust, industrial and sustainable approach to testing. Atos has clients who after asking us to perform tests for a single project have subsequently embedded our services in all application and process change management activity: the wider the adoption, the better the return.

The Atos model is comprehensive in scope and the discipline tight ...

<b>Standards and methods</b>	Throughout the engagement, Atos ensures that all associated industry standards are met. The client's own rulebook is applied as agreed.
<b>Monitor and tune</b>	Every step of every engagement is monitored and intelligently documented allowing us to tune as we progress: agility is essential.
<b>Plan</b>	We plan at an enterprise and a project level, establishing a sustainable testing policy and scoping milestones in terms of execution and interoperability. Both technology and cultural perspectives are considered.
<b>Prepare</b>	The test environments are (virtually) provisioned and the required test data is set up. Relevant, metrics and essential resource allocation are also considered
<b>Execute</b>	We manage test execution from end-to-end. On test completion, applications can be delivered directly for release, or where appropriate, further development and review.
<b>Refine</b>	During refinement and review, various stakeholders work together to critically assess outcomes in order to implement improvements for subsequent builds, releases or projects..
<b>Deliver</b>	The move to production is the closure point. Testing must, however, ensure that applications and processes remain agile and fit for changing purpose. In this respect, the entire cycle can be regarded as one of continuous review and revision.

# Coordinated Global Delivery

Every business feels protective towards its applications and processes. They're critical, they're personal and often, they're a source of genuine competitive differentiation.

Not surprisingly, this impacts the way in which you want testing services to be delivered. Our model always establishes close working relationships between all directly involved parties, be they members of your team, of third

parties or of Atos specialist units: quality of communication is essential.

The Atos model combines the strength of personal relationships with the highest degree of structured industrial automation. A global network of specialist testing resources draws on dedicated Test Labs in India, Spain, Argentina, Morocco and Poland. These resources in turn are coordinated with teams across UK, Europe,

APAC and North America, many of which are centers of industry-specific expertise.

This seamless combination of the personal and industrial makes it possible for you to embed and sustain an end-to-end test program within your own enterprise at acceptable cost - with strong scalability.

# The Olympic Showcase

Atos is the official IT partner of the Olympic Games. The Games are the premier showcase for our testing capabilities. Every four years, the world's largest sporting event starts on the minute – and every single application and process must be guaranteed to run faultlessly from start to finish.

With every edition of the Games, the application and process portfolio increases as the audience of over four billion selects from a growing mix of rich media to enjoy the spectacle.

For London 2012 our labs ran more than 200,000 hours of tests for the over 80 applications and processes needed to manage everything from accreditation through media management to the actual results of over 300 events.

Full testing of the new Olympic Video Player was particularly critical. Launched for the London 2012 Paralympics, this smart player managed all video and data feeds to all devices around the globe, with 8 billion connected devices being served at peak times.

Atos Olympic testing is also a powerful example of our ability to scale resources according to need. For an intensive five week period, we scale up our permanent five-strong Olympic test team to a unit of some 500 testing specialists. Between the London closing ceremony and the start of Rio 2016, an extended team of over 1,000 application and process specialists will perform an even more extensive battery of tests.

## Next steps

Members of our Testing Advisory Practice will be happy to help you address the big picture. If you already have a clear and comprehensive policy for testing, we are keen to compare notes. If you don't, then it's a great opportunity to consider the benefits and choices open to you.

Your business technologists. Powering progress.

---

# About Atos

Atos SE (Societas Europaea) is an international information technology services company with 2013 annual revenue of €8.6 billion and over 76,000 employees in 52 countries. Serving a global client base, it delivers IT services in 3 domains, Consulting & Technology Services, Systems Integration and Managed Services & BPO, and transactional services through Worldline. With its deep technology expertise and industry knowledge, it works with clients across the following market sectors: Manufacturing, Retail & Services; Public sector, Healthcare & Transports; Financial Services; Telco, Media & Utilities.

Atos is focused on business technology that powers progress and helps organizations to create their firm of the future. It is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and is quoted on the NYSE Euronext Paris market. Atos operates under the brands Atos, Atos Consulting & Technology Services, Worldline and Atos Worldgrid.

For more information, visit: [atos.net](http://atos.net).

---

**For more information, contact: [dialogue@atos.net](mailto:dialogue@atos.net)**

[atos.net](http://atos.net)

Atos, the Atos logo, Atos Consulting, Worldline, Atos Sphere, Atos Cloud and Atos Worldgrid are registered trademarks of Atos SE.  
October 2014 © 2014 Atos.

