



# Cards Testing Solutions & Services

**Capgemini combines financial services expertise with proven accelerators, tools and methodologies to provide end-to-end solutions and support for cards systems.**

Credit card customers look for convenience, accessibility, low cost and security from their card providers, so success for any card issuer is driven by the accuracy of day-to-day operations which rely on high volume events and continuous innovations. Over the past two decades, Capgemini has helped leading card issuers and acquirers overcome challenges and thrive in a changing global economy by maintaining and improving the quality of the applications that run their business. Our successful quality assurance services are powered by Capgemini's deep domain expertise, proprietary industry standard Test Process Improvement (TPI-Next<sup>®</sup>) and Test Management Approach (TMap-Next<sup>®</sup>) solutions, and our Rightshore<sup>®</sup> global delivery model.

To support your testing initiatives, Capgemini brings together industry experience, proprietary tools and methodologies, and a repository of use cases, test scenarios and automation scripts specifically for use with banking and cards systems. Our testing practice has over 1,600 financial services test professionals—more than 400 of those devoted to cards—who follow CMMi Level 5 standards and procedures to select the right technology architecture and applications to test your systems.



# Capgemini's Quality Assurance Services span the full lifecycle from requirements to production

## How does a Center of Excellence help with testing?

Centers of Excellence are proven to help accelerate projects by providing a place to share knowledge, learnings and best practices on active projects as they are uncovered. By providing a structure for test leads and managers to collaborate, COEs foster innovation and support the creation and standardization of testing processes and methodologies that work in the real world.

Credit card issuers and acquirers rely on Capgemini for testing critical changes such as system conversions or new product launches. We perform testing across the full application lifecycle and have successfully helped convert over 70 million accounts for leading financial institutions. Our offerings include:

- Advisory and consulting services to support your test organization:
  - Test Strategy Definition
  - Test Process Improvement
  - Test Maturity Assessment
  - Test COE Setup
- Functional testing to improve the quality of your applications:
  - System Integration Testing
  - Regression Testing
  - User Acceptance and Usability Testing
- Other testing to improve the speed and performance of your applications:
  - Performance Testing
  - Load Testing
  - Volume and Stress Testing
- Test Automation to improve test speed and coverage
- Test Environment Management to provide the right infrastructure

## Capgemini provides software quality assurance services across the full spectrum of cards business areas and applications

Domain Areas	Card Types	Applications
<ul style="list-style-type: none"> <li>■ Account Receivables</li> <li>■ Account Servicing</li> <li>■ Association Interface</li> <li>■ Authorization</li> <li>■ Behavioral Scoring</li> <li>■ Collection and &amp; Recovery</li> <li>■ Credit Scoring and &amp; Decision</li> <li>■ Customer Interface</li> <li>■ Fraud Management</li> </ul>	<ul style="list-style-type: none"> <li>■ Interchange Tracking</li> <li>■ Loyalty Management</li> <li>■ Merchant Processing and &amp; Settlement</li> <li>■ Originations</li> <li>■ Payments</li> <li>■ Print &amp; Mails</li> <li>■ Risk Management</li> <li>■ Transaction Processing &amp; Management</li> </ul>	<ul style="list-style-type: none"> <li>■ Chip Cards</li> <li>■ Commercial Cards</li> <li>■ Corporate Cards</li> <li>■ Credit Cards</li> <li>■ Dual Cards</li> <li>■ Prepaid or Gift Cards</li> <li>■ Private Label</li> </ul>
		<ul style="list-style-type: none"> <li>■ Advantage+</li> <li>■ AUTOSCORE</li> <li>■ Base 24</li> <li>■ CACS</li> <li>■ CardPac</li> <li>■ Chordiant</li> <li>■ Equasion</li> <li>■ FALCON</li> <li>■ ICP</li> <li>■ Magnum</li> <li>■ Postillion</li> <li>■ PRIME</li> <li>■ Probe</li> <li>■ Strategyware</li> <li>■ TRANSACT</li> <li>■ TRIAD</li> <li>■ TS2</li> <li>■ VisionPLUS</li> </ul>

Capgemini's Cards Testing team offers...	Benefits
<p>Innovative solutions to shorten the testing lifecycle, such as the Test Workbench which includes:</p> <ul style="list-style-type: none"> <li>■ CardsGEM: Key accelerator containing generic business test scenarios specifically for the Cards domain. The 3,000+ test scenarios are independent of application or technology</li> <li>■ VisionPLUS: 6,000+ reusable test conditions</li> <li>■ PRIME: 2,000+ reusable test scenarios</li> <li>■ Virtualized test labs</li> <li>■ Quality Blueprint maturity and industry assessment and road map</li> </ul>	<ul style="list-style-type: none"> <li>■ Reduce the test effort to shorten test cycles and lower costs</li> <li>■ Increase test coverage to help raise quality</li> <li>■ Decrease dependencies on high-value resources like business users or stakeholders</li> <li>■ Understand the maturity of your test organization against other credit card companies and banks and build a roadmap to move to CMMi Level 3 or higher to lower costs by 50% or more</li> </ul>
<ul style="list-style-type: none"> <li>■ Card and VisionPLUS Automation Frameworks</li> <li>■ Cards-specific automation tools and frameworks</li> </ul>	<ul style="list-style-type: none"> <li>■ Improve productivity and efficiency through test automation to minimize test execution</li> </ul>
<p>Leading industry techniques such as Orthogonal Array Testing (OAT) and Defect Prediction Model (DPM)</p>	<ul style="list-style-type: none"> <li>■ Improve estimation accuracy</li> <li>■ Choose the optimal number of test cases without sacrificing quality</li> </ul>
<p>Dedicated Cards Center of Excellence with focus on building solutions and providing support for both domain and technology areas</p>	<ul style="list-style-type: none"> <li>■ Access readily available help from subject matter and technology experts</li> <li>■ Implement best practices and innovations uncovered by our testing teams working on other cards systems</li> </ul>
<p>Collaborative partnerships with leading technology vendor partnership such as First Data, TSYS, Fair Isaac and Experian</p>	<p>In depth knowledge and training on latest and upcoming systems from leading vendors.</p>

### Accelerators & innovation speed your testing efforts

With over 20 years of experience in testing cards systems for some of the world's largest banks and credit card companies, Capgemini has built proven accelerators and tools to help reduce the time you spend testing common processes and applications. Our testers are trained and experienced in the cards domain to help close the gap between your developers and business users, lowering the time for knowledge transfer or transition.

Capgemini's library of cards testing assets are managed and updated by a global Center of Excellence which brings together learnings and best practices from hundreds of engagements for banks and credit

card companies. This library includes over 6,000 reusable test conditions and scenarios for cards systems which reduce the overall test effort and lowers costs. Our library also lets financial institutions increase test coverage and quality by providing iterative, reusable assets to test core systems in the same way across divisions or geographies.



**World class expertise**

Capgemini has over 6,400 career quality professionals globally, 1,650 devoted exclusively to financial services testing. We bring industry standards such as TPI-Next®, TMap-Next® and Quality Blueprint to your testing engagements as well as world-recognized thought leadership with over 10 books published on Quality Management. Our experienced testing leadership averages 10-15 years experience and we have over 600 professionals certified in technology, business and leadership domains such as Certified Software Test Engineer (CSTE), ISTQB, CSQA and above 350+ Certified professionals in VisionPLUS (Base I II & III).

In addition to our experienced team, we deliver testing services using our Rightshore® network of centers in 32 cities across 15 countries Capgemini has long lasting and strong alliance partnerships with leading quality assurance and testing vendors including HP, IBM, Blueprint, Surgient, and iTKO.

**IN PRACTICE: Card Systems Migration and Data Conversion Testing**

After a period of acquisition, our client, a leading global bank, found themselves with multiple systems and applications for cards processing. While integrating the systems, the team was spending too many resources and time testing isolated code bases.

**Capgemini Approach**

Capgemini proposed a common code base for VisionPLUS® using the best of the acquired systems. We filtered the set of peripheral applications to identify the final interface list and re-engineered the interfaces to provide an optimal layer to our client.

Our team extensively tested the migrated code base on the common platform including integration, SIT and user acceptance testing.

**The Benefits**

- Reduced costs: Lowered maintenance and support labor costs by over 15%
- Decreased time to market: Regulatory mandates and other changes can now be implemented on only one system
- Increased efficiency: Business users now have a common view of data for all businesses; eliminated the need for merging multiple sources for reporting
- Minimized training: One common system lowered user training costs and customer support needs

For more information, contact us at [banking@capgemini.com](mailto:banking@capgemini.com)



**About Capgemini and the Collaborative Business Experience**

Capgemini, one of the world's foremost providers of Consulting, Technology and Outsourcing services, has a unique way of working with its clients, called the Collaborative Business Experience.

Backed by over three decades of industry and service experience, the Collaborative Business Experience™ is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and collaboration-

focused methods and tools. Capgemini utilizes a global delivery model called Rightshore® which aims to offer the right resources in the right location at competitive cost, helping businesses thrive through the power of collaboration.

Capgemini reported 2009 global revenues of EUR 8.4 billion and employs over 90,000 people worldwide.

More information about our services, offices and research is available at [www.capgemini.com](http://www.capgemini.com).