VASCO Consulting Services
OVERVIEW OF ALL VASCO CONSULTING SERVICES

1. VASCO Consulting Services **BEFORE** your implementation
   - Strong authentication for e-Banking: overview and best practices
   - Two-factor authentication for mobile applications
   - e-Banking security: online threats and defenses

2. VASCO Consulting Services **DURING** your implementation
   - EMV-CAP and CTVS technical consulting
   - VACMAN Controller integration validation
   - IDENTIKEY large deployment
   - aXsGUARD Gatekeeper module
   - DIGIPASS parameterization
   - VACMAN Controller time window parameterization
   - Key management consulting

3. “**ON DEMAND**” VASCO Consulting Services
VASCO Consulting Services

Extensive expertise, proven methodology and best practices in deploying strong authentication

OUR OFFER
VASCO’s Consulting Services are designed to complement our strong authentication solutions with a spectrum of quality service options that help customers make the most of their investment. In addition to complete implementation assistance programs to fit unique needs of our customers, VASCO also offers individual consulting services on major aspects of Strong Authentication and Online Fraud Prevention.

OUR EXPERTISE
Whether you would like to know more about the current security challenges and threats in e-Banking, e-Commerce, and Network Security, or if you need advice about your current implementation, VASCO is there to assist you. VASCO’s extensive experience and best practices help decrease time to market, and our proven methodology and track record ensure any issues that emerge are quickly identified and resolved. You will be benefiting from the combined expertise of thousands of successful strong authentication deployments worldwide.

OUR TEAM
Our Consulting Services team is comprised of engineers and deployment, fulfillment and customer service specialists. VASCO’s consultants are best in class and are there to deliver the professional advice you need for a successful strong authentication roll out.
VASCO Consulting Services **BEFORE** your implementation

**STRONG AUTHENTICATION FOR E-BANKING: OVERVIEW AND BEST PRACTICES - 3 DAYS**

VASCO takes a holistic approach to define the business drivers for implementing a strong authentication solution for Internet Banking. Our consultants introduce best practices in Strong Authentication deployment for e-banking to help customers bring their own projects to success. Banks get an in-depth overview of all aspects of such a project from planning to implementation. This is done through three modules that each span a day, but individual modules can be offered upon request.

1. Planning and Analysis
   This module covers the planning aspects of a strong authentication project. The first part deals with business and financial planning, as well as the distribution strategy. The second part talks about the product strategy and development, while the day ends with the marketing strategy overview focusing on positioning, branding and marketing actions.

2. Deployment
   This session will cover the internal procedures related to deploying a strong authentication solution. ICT continuity management, monitoring & auditing, quality assurance and service management make up this session. Legal affairs related to contracts and liability are also covered in this module.

3. Implementation
   The last module provides some in-depth details of the actual implementation, examining industry best practices, investigating competitors’ strategies and discussing real-life examples. Such practical matters as marketing communication strategy, customer notification, logistics, and fulfillment make up this module. The module also deals with setting up customer support procedures such as helpdesk management, and gives an overview of the pricing policy towards the end users.

**TWO-FACTOR AUTHENTICATION FOR MOBILE APPLICATIONS - 1 DAY**

In today’s challenging environment, the launch and deployment of a mobile authentication application becomes critical. VASCO offers banks and other organizations help in understanding the mobile industry status in their country and the challenges they may face during and after deployment.

VASCO experts provide updated information on current mobile technologies, trends and best practices in your industry. We also focus on the highly critical security aspect of a mobile authentication solution, and educate you on how to turn this potential burden into an asset.
VASCO Consulting Services **BEFORE** your implementation

**E-BANKING SECURITY: ONLINE THREATS AND DEFENSES - 3 DAYS**

VASCO’s goal is to help banks and financial institutions understand and stay up-to-date on the latest e-banking fraud techniques such as phishing, trojans, and man-in-the-middle attacks. VASCO specialists provide you with an individual benchmark analysis and vulnerability assessment of your current e-banking authentication system, and help prioritize security improvements. Three modules are available in this offering:

1. **e-Banking Fraud Schemes Overview**

This 1-day module provides an in-depth presentation of the latest security threats to e-banking authentication systems, which includes:

- Trends in phishing techniques, such as spear phishing, pharming, whaling and fast-flux service networks
- Spyware techniques such as banking trojans
- Man-in-the-middle attacks
- The cyber crime black market overview
- e-Banking fraud statistics

2. **Security Analysis Report**

Using a benchmark analysis method, VASCO will provide an assessment of your current e-banking authentication systems and methods. This analysis will result in a report that covers:

- Identification of the strengths and weaknesses of your existing authentication system
- Security benchmarking of your existing authentication system
- Prioritization of weaknesses according to the level of risk

3. **Security Advice**

VASCO will provide a thorough review and explanation of the various state-of-the-art authentication technologies, and help you choose the one best suited for your unique situation. A written report with recommendations for improvement based on industry best practices will be provided. The report will discuss the following subjects:

- Security characteristics of different authentication technologies, such as one-time passwords and electronic signatures
- Security characteristics of different authentication platforms, such as hardware authenticators, smart card-based solutions, and software-based solutions
- Proper implementation of authentication technologies to prevent social engineering attacks according to best practices
VASCO Consulting Services **DURING** your implementation

**EMV-CAP AND CTVS TECHNICAL CONSULTING - 1 DAY**

This 1-day module addresses a question of how to leverage EMV cards for strong user authentication to improve transaction security. It offers an overview of Strong Authentication concepts based on hardware authenticators (tokens) and card readers. The first part of this module covers the basic working principles of these devices, and examines the advantages of each solution, as well as their Total Cost of Ownership.

The second part summarizes the various aspects an organization should consider when deploying an EMV-CAP project. These include business and technical requirements of an EMV-CAP implementation, such as back-end infrastructure, multi-channel compatibility, supported applications, usability, reader preference, and customer convenience.

The day ends with an overview of alternatives to CAP and solutions best suited for different markets.

**VACMAN CONTROLLER INTEGRATION VALIDATION - 2 DAYS**

Clients that have already implemented VACMAN Controller can request VASCO to perform a validation of their implementation. This review will take place at the customer’s site. VASCO experts will examine the VACMAN Controller implementation looking for areas where VASCO technology may be leveraged for a more secure and/or efficient implementation. Such a validation typically takes 2 days and reflects various communications between the VASCO Integration Expert and the customer IT representative. The result is a customized written evaluation report that offers critique of the current implementation and provides suggestions for change if necessary. The CTVS option will also be a part of the validation for clients who have implemented it.

The Integration Validation review is available for the following platforms:

- Intel-based platforms (Windows, Linux)
- Medium system environment (Sun Solaris, HP Unix, Alpha Open VMS, Alpha TRU64)
- Mainframe (AS/400, Z/OS)
VASCO Consulting Services **DURING** your implementation

**IDENTIKEY LARGE DEPLOYMENT - 1 OR MORE DAYS**

A standard IDENTIKEY training package is already available through VASCO’s SEAL training program. This training covers all topics regarding the implementation and deployment of your IDENTIKEY solution. Consulting Services are available for customers looking for a more in-depth approach beyond the standard training package. It covers all topics around installation and integration of IDENTIKEY. Typical examples include the integration with existing databases, web application integration and the setup of multi-location deployments.

**aXsGUARD GATEKEEPER MODULE - 1 DAY**

Clients that implemented aXsGUARD Gatekeeper can request VASCO to perform a validation of their configuration combined with a hands-on live training. VASCO also offers support for customers implementing extra or new modules/functionalities of the aXsGUARD appliance, as well as migration assistance to a new version of the product. The entire module can be customized based on your unique situation and requirements.
VASCO Consulting Services **DURING** your implementation

**DIGIPASS PARAMETERIZATION - 1 DAY**

VASCO DIGIPASS is a fully customizable product with many parameters that define how it operates. Such parameters include defining the number of digits generated in a one-time password and the frequency in which a one-time password changes. Each factor impacts the overall security and usability of the DIGIPASS. As such, this module was designed to provide a full understanding of the meaning and proper usage of these parameters and assist the customer in making the right choices.

The first part of this module covers the different types of PIN parameters, Challenge-Response applications, electronic signatures and encryption algorithms. Additionally, it includes an overview of event- and time-based scenarios and different methods of linking transactions and signatures.

The second part brings this knowledge into practice. At the end of the day, you will have 5 to 10 working DIGIPASS devices parameterized according to your needs, that could also be used to start the integration tests.

**VACMAN CONTROLLER TIME WINDOW PARAMETERIZATION - 1 DAY**

This module was created to advise customers on the parameterization of the Time Window used by the VACMAN Controller. Through the use of a time window computation model, a VASCO security consultant will work with you to define the right parameters based on your specific needs and infrastructure.

This module consists of 2 sessions:

- In the first session, you will get an overview of the VACMAN Controller Time Window Parameterization and an explanation on how to use the computation model.
- Secondly, a VASCO security consultant will hold an interactive session working with you on the time window computation model.

The outcome of this session is the definition of the client parameters based on the needs presented.
VASCO Consulting Services **DURING** your implementation

**KEY MANAGEMENT CONSULTING - 1 DAY**

The purpose of the Key Management module is to provide banks and large enterprises with expert advice during the deployment of a key management infrastructure to support one or more of VASCO’s strong authentication applications.

The Key Management module is of a practical nature and is case-driven. It addresses the specific key management issues of a given customer in the context of a certain application of VASCO’s strong authentication technology, according to industry’s best practices.

Topics addressed in the Key Management module include, but are not limited to:

- Best practices for managing cryptographic keys throughout their lifecycle, ranging from key generation and key storage to key usage to key termination
- Technical, procedural and organizational aspects of key management
- Preparing for and conducting Key Import Ceremonies
“ON DEMAND” VASCO Consulting Services

Should you have specific needs that are not addressed in our standard modules, VASCO can deliver customized consulting services on demand. Our on demand offering complements our traditional consulting services by providing an innovative and tailored offering that suits your security requirements.

By sharing our expertise, proven methodology and best practices, we can help you before, during and after implementation of your authentication project in your business environment.

VASCO’s consulting services consist of certified, professional IT resources allowing a speedy implementation and roll out decreasing the time to market and ensuring business continuity.

Leveraging best practice knowledge for hardware and software authentication deployments, our consultants can aid in decision making, technical knowledge, business value analysis and training; allowing you to focus on your business objectives and accelerate the decision making process.

Our on demand consulting services are specifically designed to help you make the most of your authentication investment.

For more information about VASCO’s on demand consulting services, please contact your account representative or send an e-mail to consulting@vasco.com.
Together with VASCO, we looked at different ways in which we could use our DIGIPASS devices with VACMAN Controller. Their advice not only led to significant and important enhancements, but also to an overall improvement of our security features. VASCO brought a lot of value and expertise to our project, and for this we consider them as a valuable business partner.

Daniel Ratinckx, Head of Delen-Online at Bank Delen
About VASCO

VASCO is a leading supplier of strong authentication and e-signature solutions and services specializing in Internet Security applications and transactions. VASCO has positioned itself as a global software company for Internet Security serving customers in more than 100 countries, including several international financial institutions. VASCO’s prime markets are the financial sector, enterprise security, e-commerce and e-government.

www.vasco.com

INTERNATIONAL HQ
CHICAGO
phone: +1.630.932.8844
email: info_usa@vasco.com

OPERATIONAL HQ
BRUSSELS
phone: +32.2.609.97.00
email: info_europe@vasco.com

FINANCIAL HQ
ZURICH
phone: +41.43.555.3500
email: info_europe@vasco.com

BRUSSELS (EUROPE)
phone: +32.2.609.97.00
email: info-europe@vasco.com

BOSTON (NORTH AMERICA)
phone: +1.508.366.3400
email: info-usa@vasco.com

SYDNEY (PACIFIC)
phone: +61.2.8081.3700
email: info-australia@vasco.com

SINGAPORE (ASIA)
phone: +65.6323.0906
email: info-asia@vasco.com

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