

## TECHNOLOGY LEADING SECURITY LEVEL

**SMS PASSCODE®** - An award winning more secure login process that offers greater protection against modern threats on the Internet.

Unlike traditional two-factor authentication solutions - widely known as "tokens" - SMS PASSCODE® deploys a more secure challenge and session specific login process that unlike traditional solutions protects against the modern threats on the internet.

Essentially, a user is first authenticated with a user name and password challenge. Once that is passed, SMS PASSCODE® generates a login session-specific one-time passcode (OTP), and once that is validated, the user is granted access.

This significantly improves protection against modern threats on the Internet.



## FAST INSTALLATION AND DEPLOYMENT

**Out of The Box Installation:** Connect SMS Gateway modem(s), run plug-and-play installation of the SMS PASSCODE® software, and the system is ready for use. Support two-factor authentication dedicated service for SMS delivery or Secure E-mail for Blackberry or mail centric countries.

**Simple Enterprise Deployment:** SMS PASSCODE® allows for one-click integration to Active Directory (AD) without schema changes or extensions. SMS gateway hardware is included and the advanced cloud enabled component architecture offers maximum installation flexibility.

**Installation Flexibility:** Distribute SMS PASSCODE® components for unmatched on-the-fly scalability and fault-tolerance. Distribution of hardware-tokens is history, you can get thousands of users up and running within minutes by extracting all cell phone numbers from your Active Directory, import users from any source via CSV files, or via user updates through the Self Service Portal.

## EXCELLENT USER COMPLIANCE

**SMS PASSCODE®** - The leading global technology for two-factor authentication via your mobile phone - Lets you stay in business wherever you are.

### SEAMLESS INTEGRATION

SMS PASSCODE® transparently integrates to all the major login systems, for an intuitive and user-friendly login experience.

### USER SELF SERVICE

A Self Service Portal allows users to configure their preferred login process such as regular or Flash SMS, Voice Dial-out or Secure E-mail for Blackberry users and some Asian countries. The self service privileges are defined by the administrator.

### STATUS FEEDBACK

SMS PASSCODE® provides an unrivaled status feed-back feature that enables the user to follow the actual login progress. Status feedback inspires user confidence and reduces the number of support calls to IT personnel.

### FLASH SMS

By default, passcodes are sent as Flash SMS, which automatically pop up on the user's mobile phone without any user action, and the Flash SMS is not stored on the cell phone.

Regular SMS is supported as an option.

### ALWAYS CONNECTED

As opposed to tokens, users rarely forget their cell phone, which in turn means more productive hours.

### MEMOPASSCODES™

Innovative easy-to-read passcodes.

### SECURE PASSWORD RESET

The Password Reset Module "PRM" offers Active Directory password reset via an easy to use 24/7 self service page, secured by SMS PASSCODE two-factor authentication.

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CITRIX

CISCO

Microsoft

Juniper

Check Point

VERSION  
6

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**TECHNOLOGY LEADER IN  
GLOBAL REAL-TIME TWO-FACTOR  
AUTHENTICATION**

SMS PASSCODE® is the leading technology in a new generation of two-factor authentication systems protecting against the modern Internet threats. It is the first solution to implement a global real-time OTP delivery platform combined with a more secure login process, plug-and-play protection of standard login systems and a reliable, scalable architecture.

## GLOBAL TWO-FACTOR AUTHENTICATION PLATFORM

SMS PASSCODE® is designed as an easy to implement and easy to administer enterprise class platform that consists of a transmitter and OTP Delivery Service, an advanced Policy- and Load balancing Service, a Self Service Portal for leading edge user authentication flexibility and activation and the industry's broadest set of authentication clients.

### SMS PASSCODE® DELIVERS INDUSTRY LEADING VALUE IN FOUR KEY AREAS

**More secure login process:** A more secure login process that prompts the user to first validate user name and password before a session specific code that is valid only for that login attempt is generated and send real-time to the users phone. This protects against the modern threats on the internet.

**Plug-and-play installation:** The solution plugs transparently directly into the leading VPN systems from vendors like Cisco, Juniper, Checkpoint, F5 and Microsoft, Citrix or web systems. This gives an easy-to-use and intuitive user experience including user status feedback during the login process.

**Fault tolerant and scalable:** The platform is designed from the ground up as loosely coupled cloud-ready components that can securely be distributed around the globe. This makes it easy to configure and manage fault tolerant designs as well as scaling the solution.

**Total cost of ownership:** The cost of ownership is typically about half that of a legacy hardware token based two-factor authentication solution as it is easier to implement and require no client hardware handling. This gives a more agile solution and free up resources to focus on other tasks.

### EFFORTLESS OPERATION AND ADMINISTRATION

SMS PASSCODE® runs on Windows Server 2003, 2008 and 2008 R2 in both 32 and 64 bit versions. No administration of hardware-tokens required. No need to involve IT personnel in the event of a lost cell phone. Users will quickly recognize the loss, and act on own impulse to block the SIM-card.

SMS PASSCODE® takes full advantage of Active Directory:

- Supports all configurations including LDAP and Global Catalog lookups
- No schema extension of your Active Directory! Simply add users to a group
- Multiple separate domains are supported via a list of LDAP / Global Catalogue lookups
- Even nested groups, child domains and trusted domains are supported!

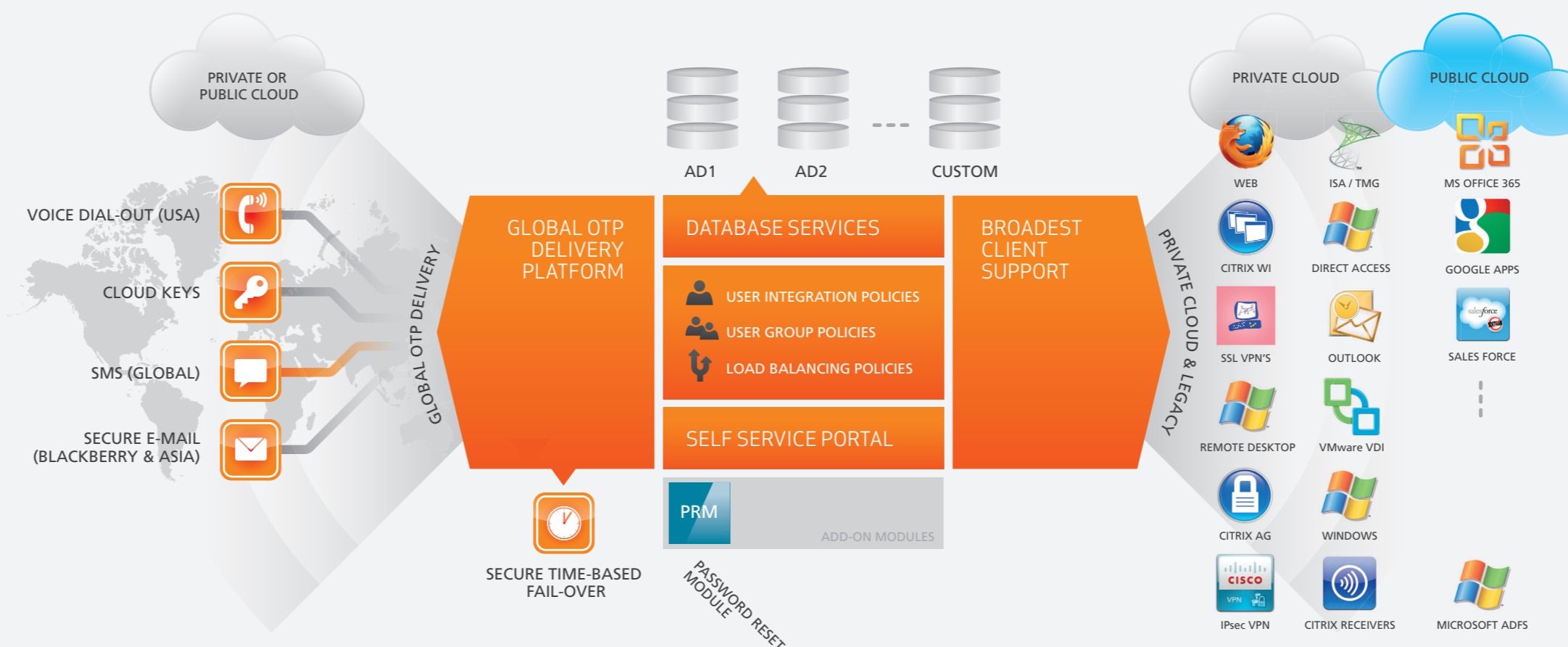
### A STRONG TECHNICAL FOUNDATION AND GREAT USER SATISFACTION

The strong technical foundation of SMS PASSCODE® ensures greater protection as the authentication process is challenge-based and session specific. The solution supports all the leading login systems through a plug-and-play easy installation. The platform is designed from the ground up as fault-tolerant and inherently scalable.

Passcodes are cryptographically strong random OTP's using FIPS-140 validated crypto modules and all communication between components is AES 256bit encrypted. And SMS PASSCODE® makes use of advanced brute force and Denial-of-service attack detection and protection.

Users care about their mobile phone. Therefore, when lost, users take action to block the phone themselves. However, if notified, central IT can also remove the mobile phone from authentication with just a single click. This has proven to deliver quicker response times and increased security compared with traditional token-based solutions.

## COMPREHENSIVE PLATFORM WITH EASY IMPLEMENTATION AND ADMINISTRATION



### GLOBAL ONE-TIME-PASSWORD DELIVERY PLATFORM

The SMS PASSCODE® global distribution platform supports a broad range of geographically specific delivery services to ensure safe and secure authentication regardless of where and when the login session is initiated.

#### Delivery services include

The user preferences and mobile infrastructures vary from region to region. To meet the different premises and cloud delivery needs across the globe, delivery services include:

- Globally or locally deployed SMS Gateways to enable local services in different countries
- Multi-carrier operation for redundancy or as sheer gateway pools for infinite scalability
- Voice dial-out to read the code at two-factor authentication "quality of service" level
- Secure E-mail when deployed on Blackberry and in certain Asian countries
- Secure Time-based codes can be set by helpdesk or user if the administrator has granted rights

### ENTERPRISE CLASS POLICY- AND LOAD BALANCING ENGINE

SMS PASSCODE® ships with an advanced, yet easy to configure and administer, policy- and load balancing engine that offers greater user integration flexibility and improved self service capabilities:

**User Integration and Group Policies:** When a user or group of users are protected, the integration and group policies allow for import and advanced settings such as North American users go to the North American modem or all Blackberry users are allowed to use e-mail.

**Load balancing policy and service:** For mission critical deployments including larger enterprise or global implementations, load balancing and fail over on the system is done intelligently based on load parameters like primary or secondary gateway service, domain relationship for hosting or alternate one-time-password delivery as a fall-back routine. Secondly, critical components and data are replicated across nodes providing the ability for a service component to enter and leave the "SMS PASSCODE® cloud" on the fly without downtime for 24/7 operation.

**Self Service Portal:** Self service is not a new concept in SMS PASSCODE®, but the ability for an administrator to configure and manage a service that allows users to go to a Self Service Portal at activation and define their preferred OTP delivery method, specific phone settings and their own encrypted time-limited code delivers new levels of user satisfaction.

### SECURE PASSWORD RESET WITH THE NEW PRM MODULE

A critical part of any remote access solution is the secure handling and maintenance of user passwords. Most password reset solutions rely on a simple one-factor challenge. I.e. a question like "what is the name of your favorite movie", or an equally simplistic verification.

For users who want to adhere to a more secure two-factor approach, SMS PASSCODE® now offers a module extension called PRM or Password Reset Module, that supports secure Active Directory Password Reset.

When a user access the Self-Service Password Reset page, they are first asked to validate user ID and their personalized encrypted PIN, after which a passcode is generated and delivered in real-time. Once the passcode is entered the system allows for an AD password reset.

This is a simple and modern approach that can easily be deployed in a private cloud configuration.

### BROADEST CLIENT SUPPORT FOR LEADING LOG-IN SYSTEMS

SMS PASSCODE® supports the broadest set of login systems used by remote access. The solution is designed to integrate seamlessly into any of the third party systems listed below, to ensure a more secure login process, that is intuitive to the end-user.

While named "client support" there is client deployment requirements as the SMS PASSCODE® components are installed or integrated on the server side. The following systems are supported:

#### RADIUS VPN/SSL VPN Clients:

- Check Point
- Cisco
- Citrix Access Gateway (CAG) & Netscaler
- Juniper
- Microsoft Forefront (UAG) incl. Direct Access VPN
- Microsoft SharePoint Portal Server <sup>1</sup>
- Any other RADIUS client supporting challenge/response
- SMS PASSCODE enabled clients, ex. Citrix Receiver for iPhone

#### Microsoft ISA/TMG Server & Web Sites:

Support for Microsoft ISA/TMG published web sites:

- Outlook Web Access 2003 / 2007 / 2010
- Terminal Service / Remote Desktop Service (Windows Server 2008)
- Microsoft SharePoint Portal Server
- IIS Web Sites using Basic or Integrated Windows Authentication
- Any Web Site not requiring any Authentication Delegation

#### Cloud Application Authentication:

- Microsoft Active Directory Federated Services plug-in for two-factor authentication
- Transparent support Cloud Applications such as Salesforce.com, Microsoft Office 365, Google Apps etc.

#### Internet Information Services (IIS) Web Sites

Support for the following types of web sites:

- Outlook Web Access 2003 / 2007 / 2010
- Terminal Service / Remote Desktop Web Access (Win Server 2008)
- Web Sites using Basic / Integrated Windows Authentication
- Web Sites using Custom / SAML based Authentication <sup>2</sup>

#### Windows Logon, Remote Desktop/Terminal Services:

Support for the following Servers and Services:

- Remote Desktop / Terminal Services (RDP Connections)
- Windows Servers 2003 / 2008 / 2008R2
- Windows XP, Vista and Windows7 (incl. Single-Sign-On)
- VMware Virtual Desktop Portal & Client Access

#### Citrix Access Gateway Advanced Edition

#### Citrix Web Interface

#### Citrix Receiver for iPhone SMS Authentication

(1) Protection of SharePoint Portal Server using RADIUS is only supported, if the SharePoint Portal server is published through an Application Gateway, which will ensure that the user is only required to authenticate once during the initial logon. E.g. using the Microsoft IAG/UAG, Citrix Access Gateway configured to make use of persistent cookies. (2) Configuration required.