



emAS Multi-Factor Authentication

Conventional, credential-based approach for user authentication can only take you so far. It is time to combat security risks with an adaptive approach to risk management using CARTA (Continuous Adaptive Risk and Trust Assessment).

With malware, ransomware and other cyber threats constantly thrown at Enterprises, a holistic security platform is required to securely enable digital identity and transaction management. eMudhra's flagship product eMudhra Authentication Server has been empowering millions of users securely manage their online identity and authentication needs by offering a single holistic security perspective!

Trusted by several large Banks, emAS offers a host of strong authentication options that help

Enterprises secure physical, mobile, logical access to applications.

15 Factors of Authentication

emAS supports 15 factors of authentication- from Digital Certificates, OTP and Biometric factors of authentication to adaptive analytics driven by behavioral insights into how users login.

Risk Based Parameter Definition

emAS gives you the flexibility to define the type and layers of authentication based on an individual user risk profile. Risk parameter definition is flexible and can be dependent on a single or a cumulative measure of multiple parameters. emAS can also work with any existing system to pull the risk score and invoke relevant authentication layer(s).

emAS addresses the need of the hour – Mitigating risk for Enterprise and it’s end users while keeping it simple

Threats are Multi-Channel

With customers, employees, suppliers accessing applications across web, desktop, mobile and cloud, enterprises have to constantly worry about newer threat dimensions. emAS’s behavioral analytics module runs machine learning algorithms to detect anomalies and put in place risk mitigation measures.

Cloud Applications Add a New Dimension

With the explosion of cloud offerings and hosting providers and sensitive data on cloud, security officers have to constantly think about how to protect authentication on the cloud.

emAS’s plug and play architecture allows quick addition of newer platforms and factors of authentication.

Ensure Legal Non-Repudiation Using PKI

Plain username/passwords & OTPs are today most vulnerable for cyber-attack. emAS offers the ability to attach users to a risk profile to allow creation of trusted networks using Public Key Infrastructure offering strongest form of protection to enterprises and its customers.

Behavioral Risk Parameter Detection

emAS MFA can be paired with emAS Adaptive to build a behavioral model around user-login to provoke authentication layers in line with real-time adjusted risk profile..

Different types of Authentication



Username/
Password



Mobile
Soft Token



Digital Signatures
– Crypto Token/



Web Token
Mob



See What you
Sign – SWYS Key



Mobile APP
Token



Smart Card



Hardware
Token



Bluetooth
Token



Grid Card



Mobile Device
Certificates



QR Code



Knowledge
Based



Biometrics
IRIS



Behavioral (uses Anomaly
Detection based on
Machine Learning)



Face
Recognition



Biometrics
Fingerprints

Success Stories

A leading bank with over 16 million customers used our MFA solution to provide comprehensive security across various banking channels including Internet Banking, ATM, Mobile Banking and Treasury

The Result:

Authentication throughput at 7 milliseconds

Savings by replacing hardware tokens by

Near zero fraud reported on digital channels

Product Benefits



Ultra-fast processing of authentication requests



Cost effective deployment of strong authentication across Enterprise



Mobility enabled for leveraging mobile authentication options



Acceptance of global CA certificates for Digital Signature Certificate & Public Key Infrastructure based authentication



Platform agnostic – deployed across Solaris/ Windows Server/ Red Hat Linux/ IBM AIX



Built for the future with FIDO Compliance measures

Technical Specifications

- **Recommended Hardware**

Processor: 2 * Quad Core Processors, RAM: 16 GB, HDD: 500 GB SAS HDD

- **OS Compatibility**

Microsoft Windows 7 x64, 10 x64; Windows Server 2008 R2 x64, 2012 R2 x64, 2016 x64
Red Hat Enterprise Linux AS/ES 6 x64, 6 x86, 7x64; SUSE Enterprise Linux 11 x64 SP2, 12 x64
Oracle Solaris 11 (SPARC), Oracle Solaris 11x64
IBM AIX 7.1 (POWER6, POWER8), HP-UX 11i v3
Oracle Enterprise Linux 6.8 x64 and 7.1 x64

- **DB Compatibility**

Oracle 10g+, SQL Server 2008+, MySQL 5+, DB2 9+, Postgre 9+

- **App Server**

Apache Tomcat 7+, JBoss 7+, Web Sphere 8+, Web Logic 12+

- **Web Services**

SOAP, REST

- **Protocols**

LDAP, SMPP, HTTP, HTTPS, FTP, WSS, OAuth 2.0, JWT, U2F, EST

- **Java**

Oracle JDK 1.7+

- **Key Features**

- Online/Offline CRL Verification
- User Management
- Signer Component
- Self-registration portal
- Configuration Module
- Tamper proof logging
- Advanced Reporting
- Back office admin module with dashboard

About eMudhra

eMudhra, a global provider of digital identity and cybersecurity solutions, specializes in digital signature certificates, Public Key Infrastructure (PKI) services, and robust authentication protocols. Our impactful presence in India and international presence have allowed us to support governments and enterprises in safeguarding their digital transactions and vital information.

eMudhra offers digital certificates, PKI-based solutions, authentication and identity governance services. With a strong presence in India and a global footprint, eMudhra helps organizations securely manage their digital transactions and protect sensitive information. Being a leading digital identity and cybersecurity solutions provider, eMudhra is now focused on futureproofing cybersecurity using Post Quantum Ready Cryptography and Zero-Trust Identity Governance model.