Introduction

CENTAGATE® is a gateway that provides various kind of authentication services for corporate Web, client/server, and existing applications. CENTAGATE® is also a comprehensive authentication and fraud detection platform with its Adaptive Intelligence System. It implements a risk and rules based approach with extra additional Identity assurance such as out-of band (OOB) authentication.

CENTAGATE® is an on-demand identification and access management services that enable cloud-based services to adopt strong multi-factor authentication seamlessly. Together with its Adaptive Intelligence, CENTAGATE® is a perfect solution for enterprise applications that are now rapidly moving to a secure, cloud-based services.

Next-Gen Adaptive Intelligence Authentication Platform

Objectives

To develop Next-Gen Adaptive Intelligence Authentication Platform that helps organization to protect critical information with new technology to effectively overcome issues of emerging threats in the digital world.

Powered by cutting edge technology, this new, scalable and flexible platform enables your organizations to prevent cybercrime and online fraud.

To contribute to Critical National Information Infrastructure (CNII) development.

Benefits

- Detect against various attacks effectively
- Ease of use (Machine to Human Decision)
- Open and customizable rules based security policies
- Promotes step up identity assurance such as OOB (Out-of-Band) channels
What is Adaptive Intelligence?

A technic whose the objective is to programme how the system interprets and react information rather than to programme how a system solves specific problems.

CENTAGATE®, employs an intelligent approach in detecting authentication risks based on open and customizable security policies that require step up identity assurance.

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**Patented Hybrid Adaptive Intelligence Scoring System**

- Adaptive Intelligence
  - Rule Based
  - Case Based
  - Machine Learning

- Detect, Defend, Deter
  - Contextual Awareness
  - Destroy & Deactivate
  - Multistep
  - Authentication

- Mobile Security
  - Mobile Security Token
  - Threats Detection
  - Response

- Hardware
  - Mobile PKI - IOS
  - Mobile PKI - Android

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**Technology Highlights**

- Scalability
- Interoperability

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**Multi-Factors**
- Mobile PKI (Hardware & Software)
- Advanced OTP
- FIDO (Fast ID Online)
- QR Code

**Multi-Steps**
- Broad Token Support
- Out of Band OOB

**Multi-Layer**
- Tokenization
- Key Management System

**Multi-Channels**
- PC / Laptop / Server
- Mobility / BYOD

**Multi-Interfaces**
- Web SDK
- SAML
- FIDO

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**Security Features**

- Mobile Security Token
- Out of Band (OOB)
- QR Code

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**Software Security**

- PKI Token
- SMS
- OTP Token

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**Cutting Edge Technology**

- Web SDK
- SAML
- FIDO

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**Scalability**

- Mobile PKI
- Advanced OTP
- FIDO (Fast ID Online)
- QR Code

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**Interoperability**

- PC / Laptop / Server
- Mobility / BYOD

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**Patent Information**

- Patent No.
- Issued Date

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**Contact Information**

- www.centagate.com
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Key Features

Adaptive Intelligence

How Scoring System Works

Adaptive intelligent utilizes machine learning technology to detect and respond to potential online fraud or intrusion. In this module, system will collect user’s system behaviours and user’s environment attributes in every login. Based on the rules defined, the scoring engine calculates the risk of each user authentication request. In case of high risk is detected, the system will ask for another step of authentication for identity assurance and effectively prevent fraudulent transaction to happen.

What is an Authentication Gateway?

Authentication gateway is a solution platform to get user identity without complexity on each system. This will verify the user and then give verified user access to registered apps. Few methods to validate user are by implementing PKI, OOB, Challenge Q and A, OTP and the convincing password authentication.
Key Features

Authentication Gateway

1) Multifactor and Multi-Step Authentication

- **User**
  - OTP
  - Multifactor and Multi-Step Authentication

  - Scoring Engine
    - Geolocation
    - Device
    - Time
    - IP
    - OS
    - Browser

  - Login Successful
  - Multi-Layer
  - Low risk

  - High risk

  - Out-of Band
    - Centagate Mobile App (iOS/Android)
    - Mobile Cert / Mobile PKI Token
    - Mobile OTP/CR
    - QR Code

2) Multi Channel Compatibility

Centralized Mobility Management

With the current advancement on technology, authentication is now emerging on mobile device platforms. BYOD or Bring Your Own Device is now becoming more popular than before.

Benefits

- Self service option for device management
- Tokenization and KMS to ensure SECURITY stability of BYOD
- Mobile software SDK for integration
- Centagate solution to organizations mobile apps

3) Multi Layer Protection

Key Management System

Confidentiality with military grade key cryptography and encryption. Advanced security token life cycle solution that setups secure channel between server and user mobile (Mutually verified and encrypted).
Key Features Authentication Gateway (Multi Layer Protection)

Tokenization

1. **End-to-End Protection**
   - To ensure security token generated securely on mobile with encryption in placed via Short-Live SMS as SEED CODE to complete token provisioning.

2. **Secure Container**
   - Signing Keys, Encryption Keys, Device Keys, Profile

3. **Destroy Token**
   - Threats defense mode e.g. ZEUS malware

4. **Server Detect Attack (Deactivate Account)**
   - Authentication system able to detect changes on software token environment and protect further by deactivating user account automatically.

5. **Malware Transmit Security Token**

6. **Launch Attack**

**4) Multi Interfaces Platform**

**Integration Method**

- **Web SDK** - Complete set up with services API for integration with your organization web application.

- **Client App Proxy** - Suitable for internal organization with application that offers CENTAGATE® features and with zero to minimum integration work.

- **FIDO** - Support for U2F FIDO alliance standard to extend authentication service using FIDO token.

- **Centralized SSO** - Support SAML and compatible with AD Federation Service.

**Centralized Identity Management**

A secure & simple way to identity management. User ID credentials of your organization for multiple applications are centralized to a single user source.
Key Features

**Authentication Gateway (Multi Interfaces Platform)**

**Centralized SSO**

Support for SAML V2 and integration with ADFS to support SSO authentication on Microsoft Enterprise applications.

**Reporting and Monitoring Modules**

Comprehensive and configurable notification alerts to monitor system performance and user related monitoring criteria.

Evaluates and analyzes your organization authentication statistic through its reporting charts/ dashboard and other reporting module.

Visually geo-locating your end-user’s transaction via CENTAGATE® geolocation map.

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