

# TRUST IS LEARNED

Extensive data breaches put billions at risk  
Proactively defend with Intelligence Driven Authentication™

threat detected

## USE CASES

### CONSUMER AUTHENTICATION



Web



Mobile



Telephony

### EMPLOYEE AUTHENTICATION



VPN



Applications



Desktops

## KEY BENEFITS

### Defend against cyber threats

- Prevent data breaches occurring
- Minimize impact of compromised credentials

### Provide a frictionless user experience

- Increase consumer engagement
- Increase employee productivity

### Avoid failed logins

- Reduce support costs
- Reduce user frustration

### Comply with regulations

- PSD2
- GDPR & HIPAA

## THE CHALLENGE

With data breaches and cybercrime at an all time high, companies of all sizes are under increasing pressure to implement secure authentication practices without compromising user experience.

Multi-factor authentication on its own is no longer adequate.

Companies need an agile and intelligent authentication solution that adapts to the threat level of attempts to access their services.

The hassle of unblocking profiles and resetting passwords is as frustrating for users as it is costly for businesses. Businesses need a solution now.

## THE SOLUTION

Callsign's Intelligence Driven Authentication™ (IDA) proactively defends against data breaches and cybercrime. IDA secures employee identities to prevent data breaches occurring and protects consumer identities to minimize the impact of compromised credentials.

We apply artificial intelligence to understand user patterns and intelligently adjust authentication journeys in real-time. We request the most appropriate authentication action for every situation, supporting all types of user. This balances the need to protect you and your users from unwanted cyber threats, while ensuring the most frictionless and transparent user experience.

IDA is truly unique. It applies deep learning to device, location and behavior analytics to paint the complete threat picture of every access attempt.

This enables you to protect against threats in real-time by adjusting the authentication journey to the risk, using a variety of biometric and knowledge based authenticators.

# THE TECHNOLOGY

Callsign is designed with multi-layered security to help enterprises instantly detect and mitigate threats with accuracy and precision. With Callsign's technology, enterprises define adaptive authentication journeys that react to real-time threats and accurately orchestrate user authentication actions for secure and seamless access.

## POLICY ENGINE

The Policy Engine enforces the IDA journeys based on what is being performed, who is performing it and contextual intelligence.

## AUTHENTICATION ENGINE

The Authentication Engine is the hub for authentication actions and assertions. It requests the required authentication action from the user to mitigate the identified risk.

## ANALYTICS ENGINE

The Analytics Engine applies deep-learning algorithms to understand user authentication patterns. It fuses together more than 300 data elements from device sensors to pinpoint suspicious activity in real-time.

## CALLSIGN DASHBOARD

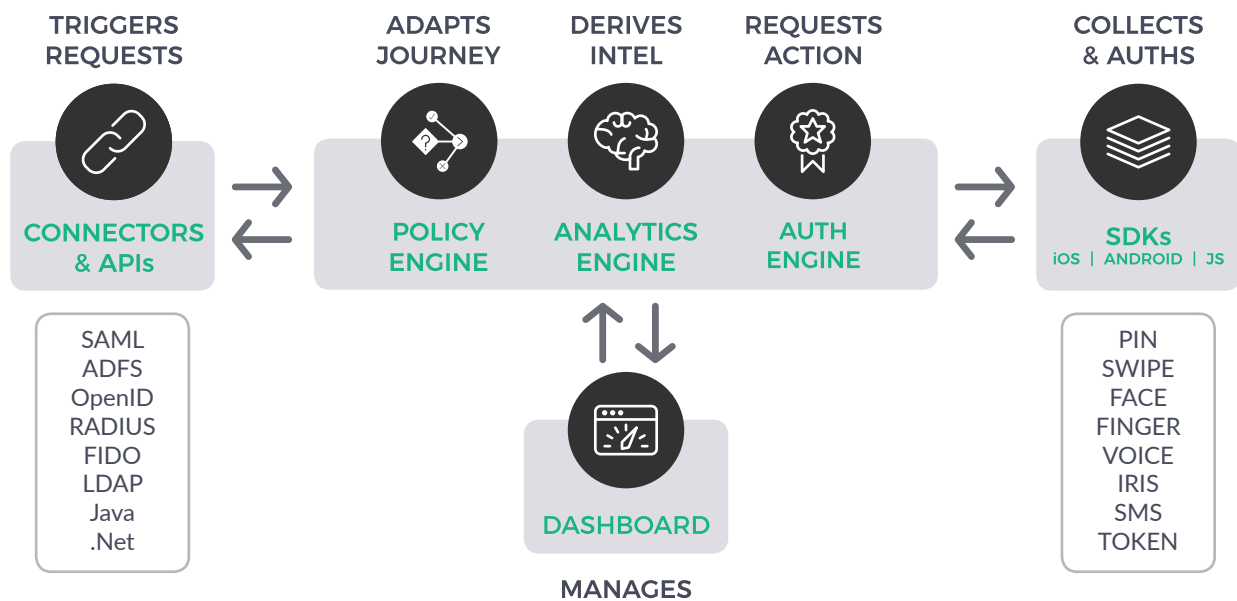
The dashboard is your control room, accessed via the Callsign web portal or by REST API.

### SERVICE MANAGER

This is where enterprises configure their services as well as onboard, remove access and manage their users. It is also the place for issuing Temporary Access Codes, accessing audit logs and viewing other transaction related information.

### POLICY MANAGER

Using Callsign's Authentication Decision Tree framework, admins intuitively define and refine IDA journeys. The Policy Manager is also the point of call for handling denied access and configuring risk policies to determine when additional authentication actions are required.



## SIMPLE DEPLOYMENT - WHAT'S BEHIND CALLSIGN?

The Callsign service can be delivered to fit your needs as a business. We offer everything from SaaS multi-tenant & single-tenant databases to on-premise deployments. In all cases, the service uses a noSQL database backend, Spring integration combined with Apache Kafka for data streaming, scikit-learn for machine learning and TensorFlow for AI.

In Callsign's on-premise solution, core components of the Callsign platform can be run on local, dedicated hardware, with the option to fail over to the cloud in real-time. The platform has been designed and developed to scale linearly with increasing demand. Our Tier 1 bank customers have proven scalability in excess of 10,000 transactions per second.