



# The Comprehensive Authentication Solution for your Enterprise



2FA/eSSO • BioAD • BioNIX • Vault • TAS • EVS

## Background

Information security issues are increasingly coming to the fore. Password compromise & identity theft are serious threats. These problems are segment agnostic – they impact organizations of all sizes and industry verticals. Market statistics confirm an ever-growing focus on identity management solutions amongst other information security solutions.

## The Case for Biometrics

Traditional methods of authentication such as Passwords (what you know) and Tokens/Character Grids/OTPs (what you have) are proving increasingly ineffective. Both these methods are fraught with risks of identity theft and impersonation.

Biometrics (what you are), on the other hand, cannot be forgotten or shared and are an effective method of performing reliable identification and preventing impersonation.

**The advantages of using biometrics for authentication:**  
**Security, Convenience, Non-repudiation, Audit Trails**

## The Case for PKI

Public key infrastructure (PKI)'s purpose is to facilitate secure transfer of information over networks. The exchange of keys ensures that bi-directional trust is established and eliminates the possibility of eavesdropping. This enhances user confidence in authentication and transactions owing to the high level of security standards adopted.

The InnaIT framework can be configured to work with Precision's InnaIT<sup>Key</sup> Hard Token, Soft Token and match on host (PB510) user authentication mechanisms.

## Introducing Precision's InnaIT Framework

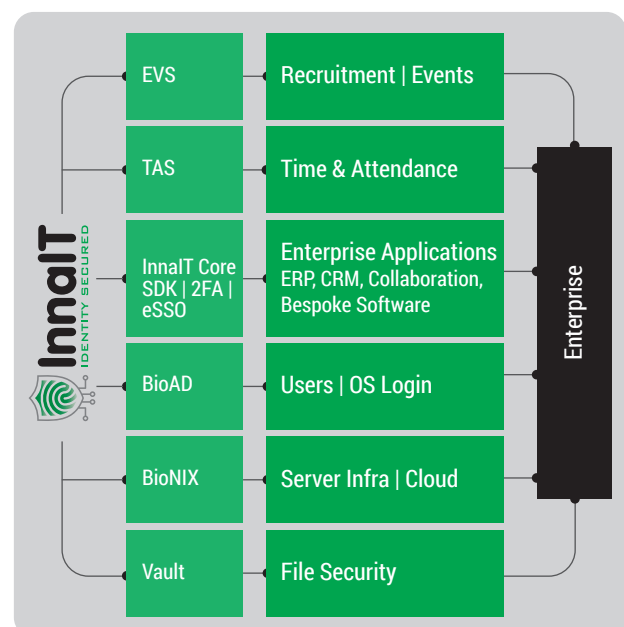
Recognizing the increasing need for reliable identification and uncompromised authentication, Precision has developed a holistic solution suite comprising of biometric hardware and software modules that can suit all common usage scenarios across industry segments. The modular design of the InnaIT framework provides flexibility – the organization may choose the specific modules that are needed and expand as the user base grows.

The InnaIT framework also simplifies the implementation - eliminating the need for complex integration of multiple security solutions. Additionally, the entire solution is provided by one solution provider, Precision Biometric, so you don't have to coordinate with multiple vendors.

## InnaIT Modules

<b>InnaIT Core</b>	The Core Framework. Contains device drivers, algorithms, DB, Services and the several modules. SDK enables integration into specific application screens
<b>2FA   eSSO</b>	Biometric authentication as a second factor while logging on to enterprise applications. Can be extended to verifying identity, using biometrics, at a transactional level (eg. maker-checker). Enterprise Single Sign-on couples security and convenience, by providing pass-through authentication to all applications that the user is authorized to use. Role based application list is provided.
<b>BioAD</b>	Biometric authentication for Windows Active Directory login. Supports VPN and VDI.
<b>BioNIX</b>	Biometric protection to secure administrator access to Servers
<b>Vault</b>	Confidential user files & data are protected using biometric encryption
<b>TAS</b>	Biometric based time and attendance system. Supports advanced features such as City/location/branch/holiday calendar/shift calendar etc.
<b>EVS</b>	Event Verification System - Helps eliminate impersonation during any multi-stage process (eg. Recruitment, verification of players participating in a series of games)

## InnaIT - Enables Biometric Authentication at all layers



# InnalT Soft token

## Solution & Security Overview

- **PKI used to ensure fail-safe token identification**
  - Digital Certificate issued for every soft token at time of registration
  - Private Key never leaves the Phone
  - Every transaction digitally signed
- **Uses Native Biometrics of the Smart Phones**
- **Out of Band Secure Channel**
- **Secure Mobile Application ensuring**
  - Mobile OS authenticity & OS is not rooted
- **Standards / Protocols – TLS 1.3, OpenID Connect**

## Why a Framework?

### Audit Trails

The InnalT framework provides non-repudiable audit logs for authentication performed across all protected applications in one place. Contrast this to having to pull-up the audit logs individually from each application and having to consolidate them whilst using only an SDK!

### Verification Algorithms

The InnalT framework includes the Identification (1:n) & Verification (1:1) algorithms which eliminate the need for you to separately identify, procure and integrate these components.

### Platform agnostic solution

Our Framework is designed to be platform agnostic. This means you can call the services without worrying about operating systems & environments. APIs will allow customization of your specific needs while remaining upward compatible.

### Database agnostic

Our Framework supports MySQL, MSSQL and Oracle. Big Data integration will be added in the subsequent releases.

### Pre Integrated modules 2FA/eSSO, BioAD, BioNIX, Vault, TAS, EVS

The InnalT framework comes with a set of pre-integrated modules saving you the effort, cost and time in developing these applications.

### Authentication and Authorization & Signing

Provides tokenization and dynamic authentication. Enables 'Zero-Trust' access - Don't trust, Verify Always approach. Enabled for multiple user-devices. Adaptive authentication in solution road map.

### Security & Standardization

We understand security is extremely important and we have got this angle covered through our experience & expertise in the domain. We ensure that the most stringent standards are adopted in the Framework and unique methods of encrypting the biometric data with user details and timestamping are implemented so that you don't have to worry about spoofing, man-in-the-middle and replay attacks. Communication between the various components of our framework and with your applications are also secured.

### Reliability, Maintainability, Performance improvements and feature enhancements

Our framework ensures smooth functioning, continued support and makes for easy troubleshooting. Use new releases of InnalT to see the benefits of emerging trends with minimal investments thus futureproofing your investments. Other biometric technologies would be added on, in future releases (eg. face, voice)

## Tech in InnalT Framework



**In-memory computing** : Comparison, matching done in memory in order to reduce latency and improve performance significantly



**Multi-threading** : Enables multiple operations to be executed in parallel, improves stability and performance



**Edge Computing** : Processing closer to the source of the data, rather than have everything sent back to the cloud



**Encryption**: User session encrypted with TLS 1.3 & secure claims are also encrypted



**Tokenization - Enhanced Security** : Ensure High-level security of user's confidential data such as User Id, Password or Pin. Instead of passing the data directly to the destination InnalT passes the token to validate the user to achieve data security during Data Transmission.



**High Performance Computing** : Compute, storage and network components are brought together as a cluster and programs & algorithms are run simultaneously. Improves



**Microservices Architecture** : Lightweight, fine-grained, loose-coupling lending to modularity, scalability, ease of off-the-shelf use, easier integration performance, reliability & scalability

## InnalT Value Proposition



Provides a holistic solution suite comprising of biometric hardware and software modules that can suit all common usage scenarios in the enterprise. Alternate solutions available are specific to one or two use-cases only



Simplified implementation - no complex integration of multiple security products



Modular design provides flexibility to organizations – choose the specific modules that are needed and expand as the user base or solution-needs grow



Complete control over your data - All data, including biometrics, stored locally



Entire solution from one solution provider – eliminating the need to coordinate with multiple vendors and the ensuing struggle to integrate multiple point-solutions



Tried and tested, robust solution - implemented across BFSI, Pharma, BPO and other segments



Subscription model – scaling up/down is easy and convenient



Completely developed in-house. Precision is only a call away!



CERT-IN certified



OIDC compliant



Subscription model - allows for spends to be spread over time and to be booked as operational expense versus capital expenditure



Delivered by an organization that has been in business for 26 years and has expertise and experience across multiple solution domains - Systems Integration, Managed Services, Biometrics, IoT & Cloud