

## Multi-Factor Authentication

### Need for MFA

In the current landscape, hackers carry out sophisticated identity based attacks to gain unauthorized access to organizations resources. With continuous increase of such attacks, the implementation of robust authentication methods becomes crucial in determining whether an organization successfully thwarts a potential attack or succumbs to a damaging data breach. Depending solely on the traditional password based user identity verification proves insufficient in safeguarding user identity, corporate resources and data. Enhanced authentication measures are imperative to fortify the defense against evolving cyber threats and ensure the security of critical business assets.

### CyLock Multi-Factor Authentication

CyLock MFA is a token-less, advanced Out-of-Band Multi-Factor Authentication (MFA) solution which provides strong authentication & authorization mechanism using end users mobile devices that defeats modern cyber threats like Man-in-the-Middle, Phishing & SIM swap fraud and provides real-time protection to user identity & data.

Built with a focus to provide strong authentication, CyLock MFA protects critical corporate resources against unauthorized access by requiring users to provide an additional factor to gain access.



### Benefits

#### Seamless Experience:

CyLock's mobile-centric approach provides a seamless Multi-Factor Authentication (MFA) experience, facilitating quick user adoption thereby reducing support requests and administrative overheads. Push and QR based authentications alleviate the challenges associated with MFA, ensuring a smoother and more user-friendly authentication process.

#### Deployment Model:

Apart from the SaaS cloud deployment available for any organization to self-register for enabling MFA for various applications; on-premise and private cloud deployments are also available for organizations to choose from.

#### Authentication Factors:

CyLock offers a wide range of built-in MFA options that can be set based on organization policies to enable strong security for application / resource access. Go passwordless with our secured QR code based authentication eliminating account takeover.

#### Security:

Our solution is PIN safe and robust built-in security measures; CyLock offers a strong defence against unauthorized access to corporate resources posed by modern cyber threats.

#### One Solution Multiple Use Cases:

Be it the SaaS platform or on-premises deployment of CyLock, one solution can protect Applications, Network Devices, VPN, Desktop Login and much more against modern cyber threats.

## CyLock MFA Features:

CyLock platform provides features that can help organizations configure, manage and control 2FA for their users and applications. Some of the key features are given below:

### 🔑 **Strong application controls:**

The CyLock portal allows for controlling and securing applications, user access, authentication modes and step-up options. These configurations can be done on an organization or application or user level depending upon the requirements.

### 🔑 **Device Trust:**

During device registration, the entire device fingerprint is captured. Every authentication response from CyLock mobile app will carry the unique device details that will be validated in the server to identify any device configuration changes much to requirement of Zero Trust framework. CyLock mobile app will not run on rooted and jail broken devices making it safe even if it falls in the wrong hands.

CyLock mobile app also detects GPS spoof apps and other malicious apps thereby making it much secured and trusted device. With device trust, organizations can enable passwordless authentication for various applications.

### 🔑 **Adaptive Authentication:**

Administrators can configure the following:

- Geo-fencing: Define a list of approved geo-locations where end-users are allowed access from
- Device Restriction: Restrict authentications from devices which do not meet minimum OS platforms and versions. Set number of devices users can register for carrying out authentication
- Authentication Restriction: Set specific authentication options for each user that are time bound with auto expiry of restrictions

### **User Management:**

- 🔑 Automatically synchronize data from Active Directory, OpenLDAP, FreeIPA and other LDAPs into SSO database for user provisioning and de-provisioning. Import data to CyLock database when synchronization is not possible. Authenticate users against AD/LDAP or CyLock database. Configure user account expiry date, account unlock and revoke, bulk enable / disable users accounts.

### **Password & GRID PIN settings:**

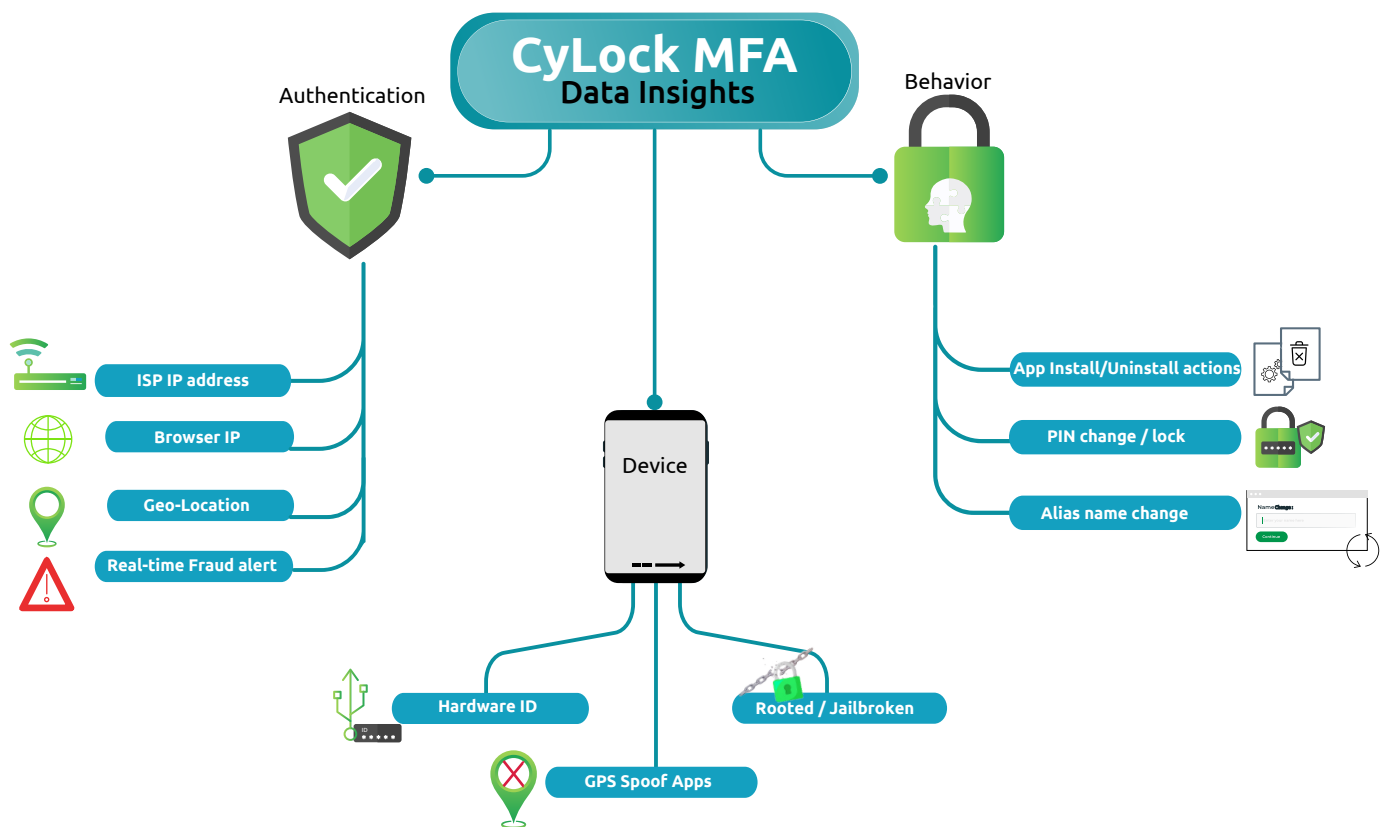
- 🔑 Pre-configured and customizable password / GRID PIN policies ensures a strong defence against brute force and dictionary attacks, providing a robust and adaptive security framework for your organization.

## 🔑 Auditing & Reporting:

Fine grained auditing and real-time data reports enable IT administrators to promptly investigate and address any issues. Choose from a set of pre-built reports to gain a more comprehensive insight into how your end-users interact with applications and assess the presence of any potential security risks.

## 🔑 Data Insights:





















































The platform offers real-time authentication details like ISP IP address, browser IP, geo-location, and real-time fraud alerts, along with device information such as hardware ID, rooted status, and GPS spoof app detection, as well as behavioural indicators like app install/uninstall actions, PIN changes/locks, and alias name changes, that can be seamlessly integrated and pushed to SIEM tools, EFRM solutions, and similar systems for enhanced security analysis and management.







## Diverse Authentication Factors:

CyLock provides a variety of online and offline authentication modes which are available to the user to perform a seamless multi-factor authentication using CyLock mobile app. Understanding the need for business continuity, end user constraints, CyLock provides authentication mechanisms like GRID OTP, SMS OTP and Email OTP that does not depend on the mobile app.

# AUTHENTICATION

MODE	TYPE	SECURITY	MOBILE DEVICES	INTERNET IN MOBILE
	 Push	 Push  Biometric  Pin		
	 QR	 Biometric  Pin		
	 CR - OTP	 Pin  Biometric		
	 CR - OTP	 Pin  Biometric		
	 CR - OTP	 Pin  Biometric		
	 POTP	None		
	 POTP	None		
	 TOTP	None		
	 GRID	 Pin		
	 HOTP	Hardware Token		

-  Online
-  Offline
-  Required
-  Not Required

## CyLock MFA Capabilities:

User can be registered for PUSH or QR or CR-OTP authentication modes. Service provider application can specify the type of authentication mode required to be completed by the end user during authentication process.

For each user account, multiple devices can be registered to carry out authentication. User can set any device as default or can select device to carry out second factor authentication.

### Geo - fencing

Geo-Fencing allows user to restrict the area within which they can carry out online authentication. If the user is outside the geo-fence, the authentication will be automatically rejected. Administrator/Users can set multiple geo-fences for each device and enable/disable them whenever required.

### Real - time Lock

CyLock provides a proactive option to the users to reject and lock their account if they suspect any malicious push authentications in CyLock mobile app. After the account is locked, no further push authentication requests will come, making their account safe from hackers.

### Secured offline authentication

Challenge Response – OTP (CR-OTP) is a secured offline authentication mechanism. In situations where the user is unable to connect to internet from their mobile phone, they can still carry out authentication by using the CR-OTP mode.

### Self - service portal




An intuitive self-service portal that can be easily used by any individual or enterprise to manage, monitor and configure user accounts, applications and security settings enabled with workflow options.

## Summary :

With CyLock, MFA deployment, management and support gets lot simplified. With secured and seamless user experience our goal is to decrease the TCO but with better security.

To learn more about our product and how it can secure your applications, talk to our support team.



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