

# Assure Multi-Factor Authentication

## Strengthen Password Security with Multi-Factor Authentication

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As stories of data breaches caused by exploited credentials continue to make headlines, it is clear that basic password protection mechanisms are no longer good enough. Organizations require an additional layer of protection that is also easy to use and doesn't impose an additional burden on administrators.

Multi-factor authentication, also referred to as two-factor authentication, has become a popular method for strengthening security since it requires a user to provide more than one identifying factor prior to accessing a system, an application or its data. These factors can include something they **know** (user id, password, PIN), something they **have** (email account, smart phone, token device) or something they **are** (finger print, iris scan).

Assure Multi-Factor Authentication, a feature of Assure Security, and part of its Assure Access Control feature bundle, improves the security of your IBM i system and core business applications. With Assure Multi-Factor Authentication you can:

- Add an authentication layer beyond memorized or written passwords
- Meet regulatory requirements and recommendations in PCI DSS 3.2, HIPAA, 23 NYCRR 500, Swift Alliance Access and others
- Invoke rules-based multi-factor authentication only for users or specific situations that require it
- Lower the risk of unauthorized access to systems, applications and data
- Reduce the risk of data theft and its costs and consequences
- Maintain an audit trail of multi-factor authentication failures for alerts, reports or integration with a SIEM solution

The use of Assure Multi-Factor Authentication can be expanded to support password self-service and the "four eyes principle" of supervised changes to sensitive data.

Passwords alone are weak. The frequency of breaches due to stolen or guessed passwords and brute-force attacks requires an additional layer of user authentication security.

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## Powerful, Flexible Multi-Factor Authentication

Assure Multi-Factor Authentication provides peace of mind by ensuring only authorized individuals obtain access to your systems and sensitive data, and delivers the flexibility to meet the needs of your environment and business. Multi-factor authentication can be integrated into the IBM i 5250 signon screen or invoked on demand.

When integrated with the signon screen, you can choose between single-step or two-step authentication. Single-step authentication requires both the user's password and a token for authentication. The user is not told which one failed if either is incorrect, delivering true multi-factor authentication. With the two-step process, a token screen is presented after the IBM i signon.

Assure Multi-Factor Authentication's rules engine makes it easy to configure the solution to invoke multi-factor authentication screens only for the users or specific situations that require it. Rules criteria are available to specify which users should authenticate through Assure Multi-Factor Authentication based on whether they:

- are registered or unregistered
- are limited capability users
- are a member of specific group profiles
- possess special authorities
- are using a specific device
- are authenticating from a specific subsystem or iASP
- have a particular IP address
- are authenticating at a certain date or time.

If Assure Multi-Factor Authentication is invoked on demand, either manually or in a program, the calling program can also be specified as a criterion. Predefined rules are provided to help you get started quickly.

With Assure Multi-Factor Authentication you also have a choice of authentication methods:

- **Built-In Authenticator** - Assure Multi-Factor Authentication has a built-in authentication service that transmits a token by email and/or popup. This method is recommended for cost-sensitive environments.
- **RADIUS-Compatible Authenticators** - Assure Multi-Factor Authentication contains a RADIUS client that runs natively on IBM i for organizations that wish to use an existing RADIUS-based authenticator or build their own RADIUS server. This includes authenticators such as the DUO Authenticator and the Microsoft Azure Authenticator.
- **RSA SecurID®** - Assure Multi-Factor Authentication is certified by RSA as compliant with SecureID to serve the most demanding environments through integration with RSA RADIUS servers and RSA RADIUS cloud services. RSA cloud services support biometrics, such as a finger print or facial image from a mobile phone, in addition to traditional voice mail token, SMS token, and push approval methods.

Authentication failures can be logged by Assure Multi-Factor Authentication for monitoring and optional forwarding to a SIEM server.

## Self-Service User Re-enablement and Password Changes

Assure Multi-Factor Authentication's on-demand authentication capabilities can also be used to grant users the ability to re-enable their profiles or change their passwords if forgotten. If configured, users can answer pre-configured security questions and/or receive a single-use token via popup, email or RSA SecurID device before performing changes to their profiles.

## Four Eyes Principle for Supervised Changes to Sensitive Data

For operations that could have significant impact on the server, or for data changes that are so sensitive they must be supervised by a second pair of eyes, Assure Multi-Factor Authentication can be used to enforce a four eyes policy. When a user wishes to perform such a change or operation, a designated administrator receives an email with a single-use token along with information on the identity of the user making the request and the job number. The administrator can then enter the single-use token into the user's screen and observe the change while it is made.

## RSA Certification

Visit <https://community.rsa.com/docs/DOC-92160> to view the RSA SecurID Access Implementation Guide for Assure Multi-Factor Authentication.

