



Salt Mobile

CASE STUDY LARGEST RETAIL BANK VIETNAM

Highlights

Our client is Vietnam's largest non-government Bank that provides a wide range of financial products and services to its business and corporate customers who increasingly rely upon the Bank's Internet and mobile Banking delivery channels for the completion of a full range of Banking activities.

- ✓ The Bank became a customer of Salt Group back in 2011, for the provision of two-factor authentication for their Internet Banking customers. At the time the solution deployed used Thales SafeSign Authentication technology, SMS One-Time passwords and hardware tokens from ActivIdentity.
- ✓ During 2016 the Bank sought out a mobile device-based security solution to complement its existing specialized hardware token offerings to enable an improved customer experience, lower capital and operational costs, and the development of innovative service delivery models.
- ✓ During 2017 the Bank deployed a transaction authentication solution for Internet Banking and 3D-Secure using Salt's mSign connected soft token in conjunction with Salt's central authentication service.
- ✓ In 2018 the Bank then built out this functionality to incorporate additional innovative and secure mobile Banking capabilities, allowing other mobile applications to use the authentication and signing capabilities of mSign via Inter-App and to provide an approved password-less Internet Banking login experience for users with biometric enabled mobile phones.

Each stage of the Bank's implementation was completed over a six-month period and delivered fully on the project objectives, generating exceptionally favourable feedback from their customers and also markedly improving customer satisfaction.

The Client

Our client is the largest non-state owned financial institutions in Vietnam and the fourth largest bank.

The Bank is at the forefront of digital service delivery across both its Retail and Commercial channels and was seeking to deploy high assurance security capabilities to support the delivery of higher value and more sophisticated services electronically.

The Solution – Salt Group’s Mobile Authentication Suite

Salt Group pioneered the development of mobile device-based authentication tokens and SDKs and back-end processes and holds important patents around mobile token authentication. Our first products supported early Java devices and importantly leveraged the connectivity of a mobile device for both provisioning of the token and for transfer of free format authentication payloads from the central authentication service to the token.

The advent of smart devices offered even greater capabilities that could be utilised to improve the user experience and security management, with fingerprints and other biometrics now providing integral components to Salt’s technology suite. Cameras and GPS capabilities further expanded the palette which we could use to construct and deliver truly user focused authentication solutions.

At a technical level, the emergence of “trusted zones” within Android devices provides a game changing opportunity to achieve highest level authentication of devices, users and transactions through the Salt suite.

Once introduced to the Salt mobile authentication opportunities, the Bank quickly appreciated the benefits offered, and after POC testing a number of use cases, adopted Salt Group’s solution to support their digital delivery extension strategies.

Importantly to the Bank, the solution would provide their customers with a streamlined registration process, not encumbered by physical logistics, along with a superior user experience, via frictionless device, user and transaction authentication across all channels.

Support for existing tokens was preserved.

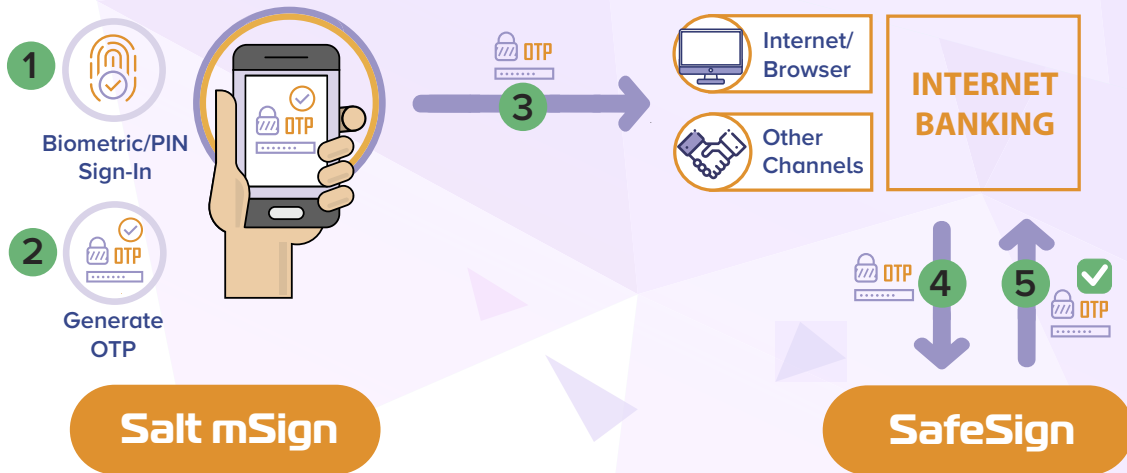
The Bank has since purchased an Enterprise license, as the resultant system has seen the overwhelming majority of the Bank’s customers elect to use the Bank’s branded Salt mSign connected mobile token.



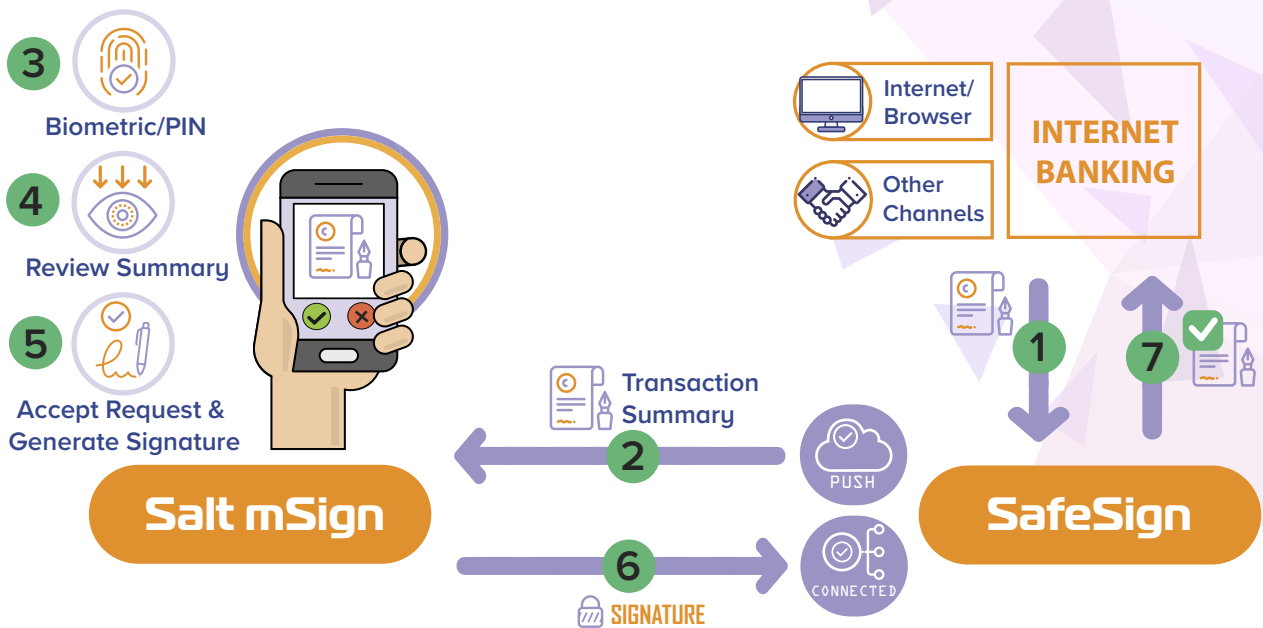
Solution Features

Strong two-factor authentication offering a range of authentication flows. Salt Mobile tokens and underlying SDK support a range of authentication online and offline use cases and authentication flows. The following use cases are at present in operation at the Bank:

- Offline OTP** generation for use in Internet Banking sign-on or low value transaction authorisation.

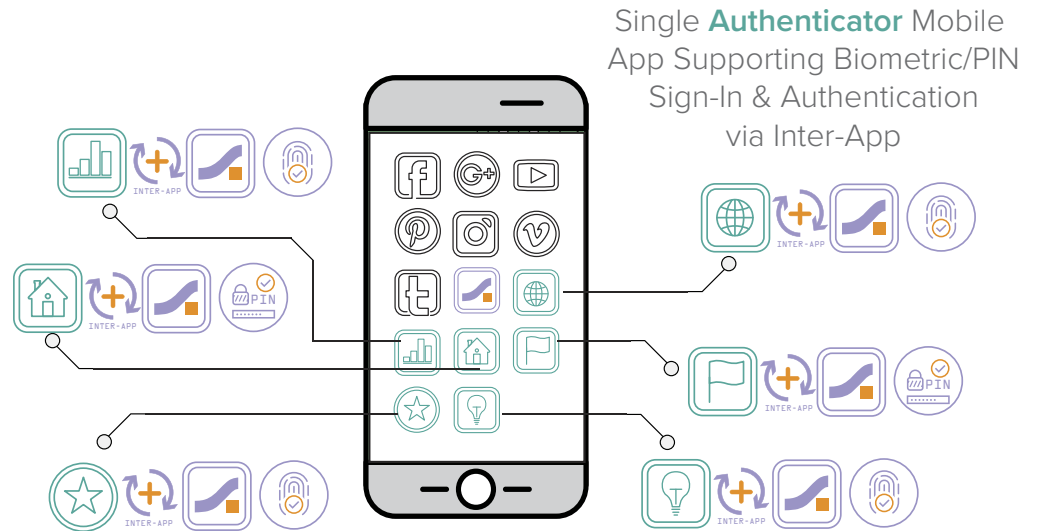


- Connected** (online) transaction signing operation. Salt mSign connected token is a mobile app that provides a convenient, high assurance solution that addresses all of the critical requirements of a contemporary electronic out-of-band authentication. This provides the user with a frictionless device, user and transaction authentication experience and is used by the Bank in their Internet Banking and 3D-Secure environments.

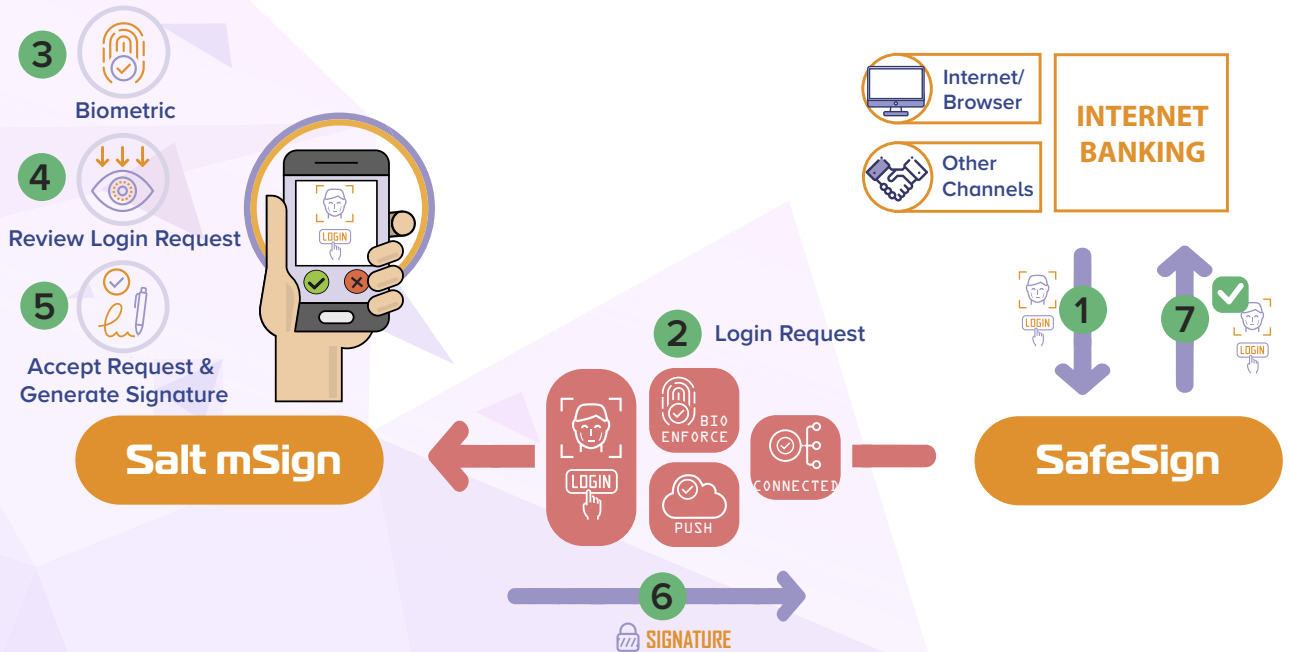




Inter-App - Salt mSign's unique Inter-App capability enabled the Bank to have other mobile apps leverage the authentication capabilities of Salt mSign with minimal changes to their mobile apps. This avoided significant app re-engineering to accommodate a security SDK, and moreover provided a consistent and frictionless authentication workflow, regardless of the channel being used. Salt mSign seamlessly accommodates situations where Salt mSign is resident on the same device as the app or even on an alternate device.



Biometric Enforcement for Login - Due to regulations, if the Bank wishes to provide a customer with a passwordless way to login to their Internet Banking, then the end user has to use a biometric to authenticate. Salt mSign connected allows the Bank to provide their customers with such a capability by utilising the on-device biometric capabilities of the customer mobile phone.



Salt mobile tokens have provided the strong two-factor authentication the Bank requires without compromising on the user experience.

Fast, High Assurance Transaction Authentication and Token Provisioning

The flexibility of the Salt Mobile Suite enabled the Bank to ensure that from registration to operations the Bank's business requirements were met along with interleaving with the existing Internet Banking flows.

The result was:

- ☑ A shortening of the token onboarding lifecycle from up to 7 days to a matter of minutes and with minimal change to the Bank's user and token management systems.
- ☑ Enhanced user experience, frictionless, yet with increased transaction security, and user authentication.
- ☑ Ability to have existing mobile applications take advantage of the additional security features.
- ☑ Added advantages were the ability to readily provision replacement tokens globally and no logistic lead time in either ordering new or replacement tokens.

Solution Benefits Summary

- ☑ **Simplifies Deployment** – Salt mobile tokens enable a simple one step installation and token activation process to be completed enabling users to start using the online service immediately upon account establishment.
- ☑ **Increases User Satisfaction** – Salt mobile tokens enable users to simply approve authorization requests on their mobile using their PIN or biometric rather than entering tedious transaction summaries into a hardware token.
- ☑ **Reduces Overall Cost** – Salt mobile tokens substantially reduce capital and ongoing device management and replacement costs associated with hardware tokens, as well as allows additional mobile applications to not have to build in and maintain their own security stack.

