



### IS IT CLOUD OR ON-PREMISE?

Usually PayConfirm is delivered as an on-premise solution. Technically it is possible to provide it in a cloud but clients in a financial space (banks) take care about security & compliance and prefer to keep PayConfirm server in-house in DMZ, because within the money transfer confirmation they deal with sensitive data (transaction details).

# WHY IS PAYCONFIRM BETTER THAN OTP-TOKEN?

OTP-based approach is not resistant to many types of attacks: OTP can be hijacked using technical tools, social engineering or phishing links sent to the user. Even OTP-token under big brand can be bypassed because of the nature of such a technological approach.

OTP is not always linked with an exact transaction. OTP does not perform integrity control checks and does not follow the principles «what you see is what you sign», so that the user can't be sure which transaction he is signing right now. With PayConfirm all these risks PayConfirm are minimized. Biometric authentication OTP-based soft-token Passwords, SMS, USB-token or smartcard Security question, push or email OTP **SECURITY, UX** Easy to hijack, SIM swap, No integrity control of No integrity control of No integrity control of Strong integrity control, operations, not omiprotection from MIMT, social engineering attacks. operation, not applicable operations, vulnerable to etc. Clients have to retype to mobile channel social engineering, etc. channel social engineering phishing Client have to retype and etc.Omni-channel manually confirmation in one tap

## WHAT IF A PRIVATE KEY IS EXTRACTED FROM THE SMARTPHONE?

Will it be possible to confirm transactions from the user's account?

Transaction authentication signature is generated not only on the basis of the private key but also on the basis of exact transaction details and time stamp and what is critical here — on the basis of exact device fingerprint (unique device characteristics). If the key is extracted somehow (which is practically hard to do), it will be not enough to confirm a transaction as the exact device (fingerprint) will be also needed.

## HOW IS IT POSSIBLE TO TRY PAYCONFIRM?

It is possible to test PayConfirm within the PoC. Just fill-in the 1-pager questionnaire to define the scope.

- the use-cases (for example, internet bank, mobile bank, ATM or any other)
- whether PoC will be based on PayConfirm reference app or mobile SDK integration
- will the server be installed on the bank's side or in our cloud for PoC

The simplest PoC configuration — internet bank with our reference app and server in cloud — can be performed within 4 hours.

# WHAT ARE THE MINIMAL TECHNICAL REQUIREMENTS TO INSTALL PAYCONFIRM SERVER?

If a bank decide that they want to test PayConfirm not in a cloud but in their infrastructure, minimal requirements will be 1 vCPU, 2 GB RAM, 20 GB HDD.

To calculate the exact tech installation requirements, we need to define several params, at least Users count and Operations per user per day.

# WHAT WILL HAPPEN IN CASE SMARTPHONE CHANGE?

In case of loss the user will have to inform the bank, so private key on a smartphone will be blocked/frozen remotely, while the new one will be generated on a new smartphone after the client's verification on it.

In case of voluntary change for a new smartphone, we can offer several options of private key activation/deactivation on a new device. One of them - the smart one - makes it possible to confirm from the old device the new keys generation on a new one with the backup of data from the old device.

#### **ABOUT US**

Airome Technologies is a Singapore-based developer of cybersecurity solutions for digital banking and e-document management systems. The company provides secure client-server software to confirm or digitally sign any type of operations, including bank transactions or e-documents, on a mobile device. Our solution lowers the risk of unauthorised transactions caused by manin-the- middle, phishing, or social engineering attacks.

Our mission is to enable our customers to provide user-friendly, secure and cost-effective digital services.

