



# HTTPS



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Comment ça marche ?





**MAIF**

~ Quentin Aubert ~



@QuentinoVega



quentinovega



<https://maif.github.io>



# HTTPS



HyperText

Transfer

Protocol

Secure

Transport

Layer

Security

HTTP

TLS

TCP

IP

Open System Interconnection

7. Application

6. Présentation

5. Session

4. Transport

3. Réseau

2. Liaison de données

1. Physique

HTTPS = TLS ( HTTP )



TLS



**Confidentialité**

*Chiffrement Symetrique*

**Clé de session**

*Chiffrement Asymetrique*

**Certification**

*Chaine de certification  
Signature*

**Intégrité**

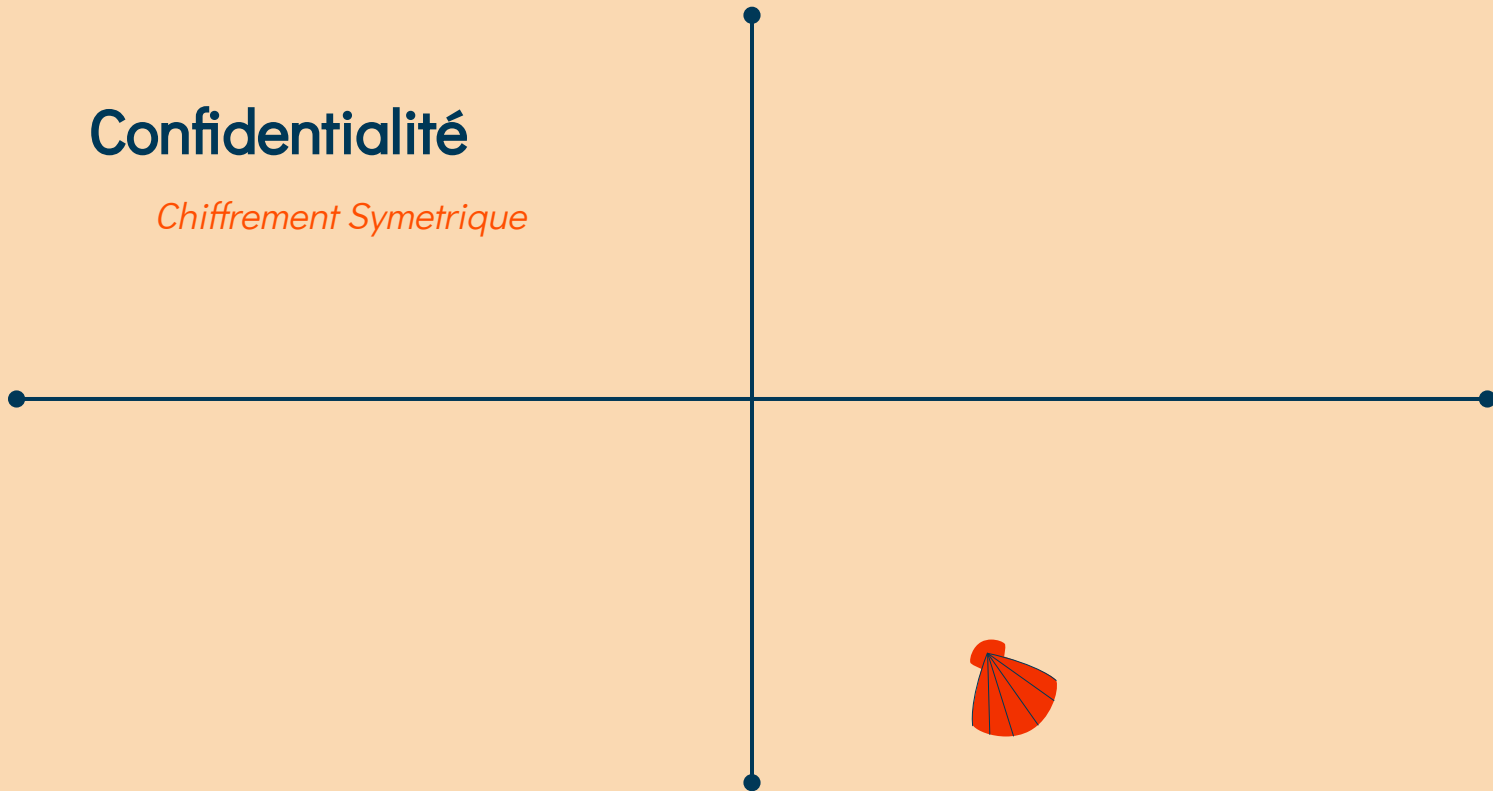
*Code MAC*

TLS



# Confidentialité

*Chiffrement Symetrique*

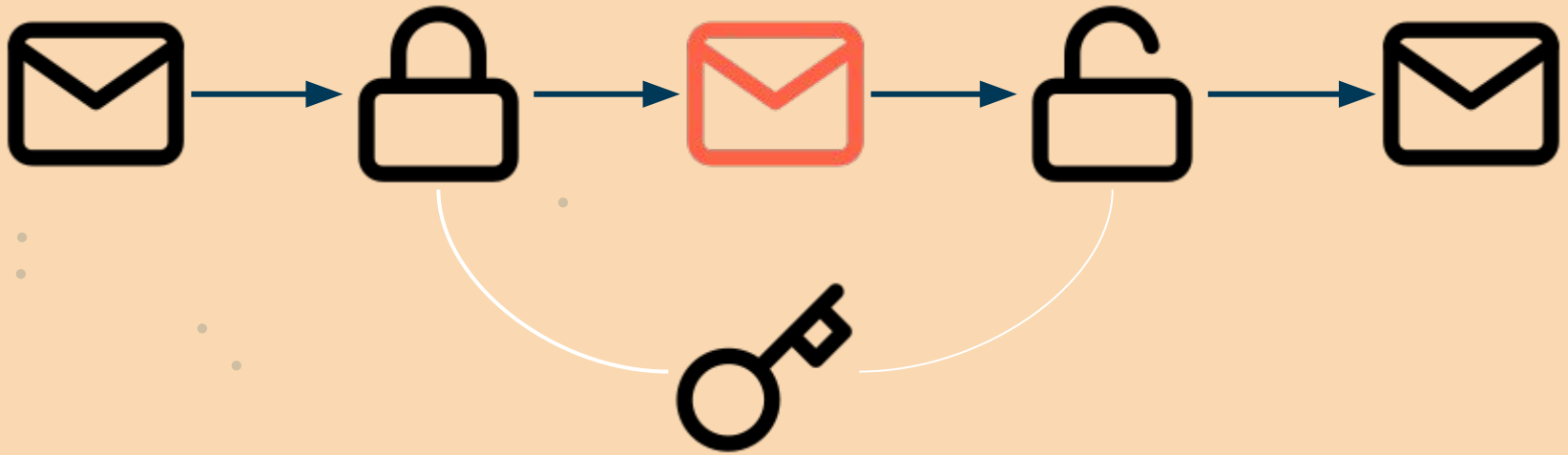


# Chiffrement symetrique



Alice

Bob

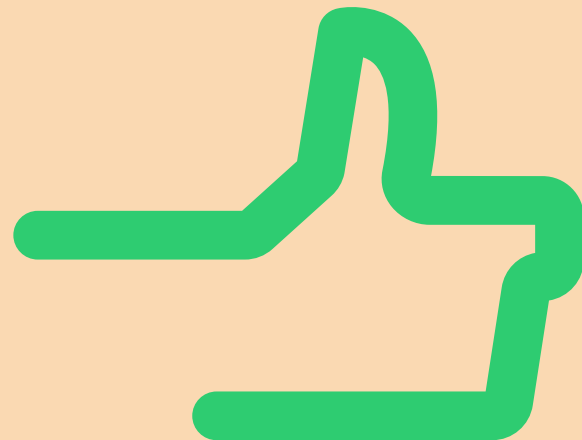
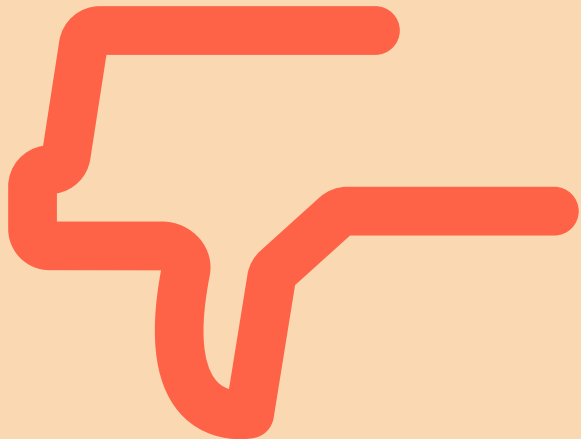


# Chiffrement symetrique



Rapide  
Puissant  
Resistant

Faillible  
Re-faillible



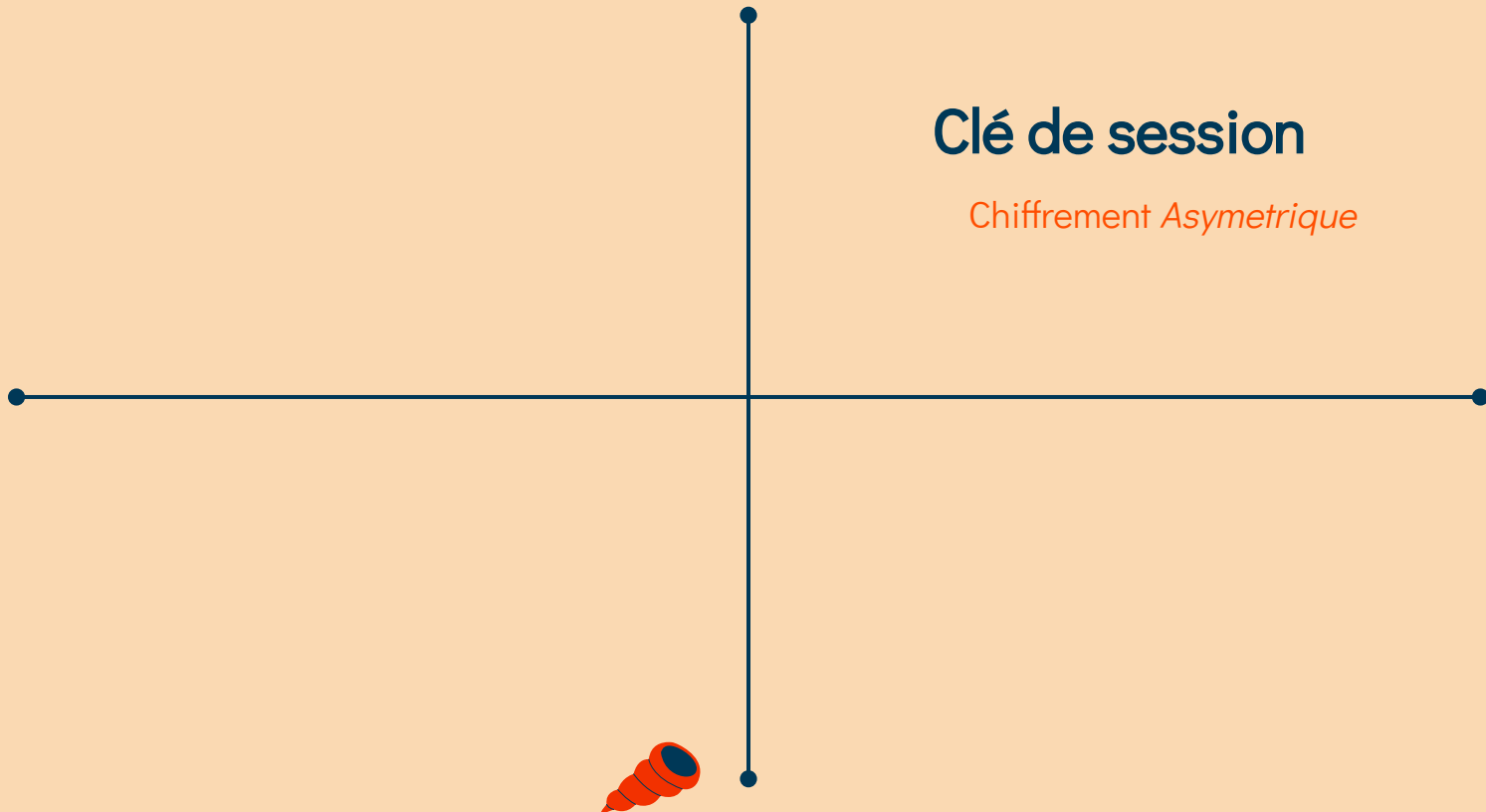


TLS

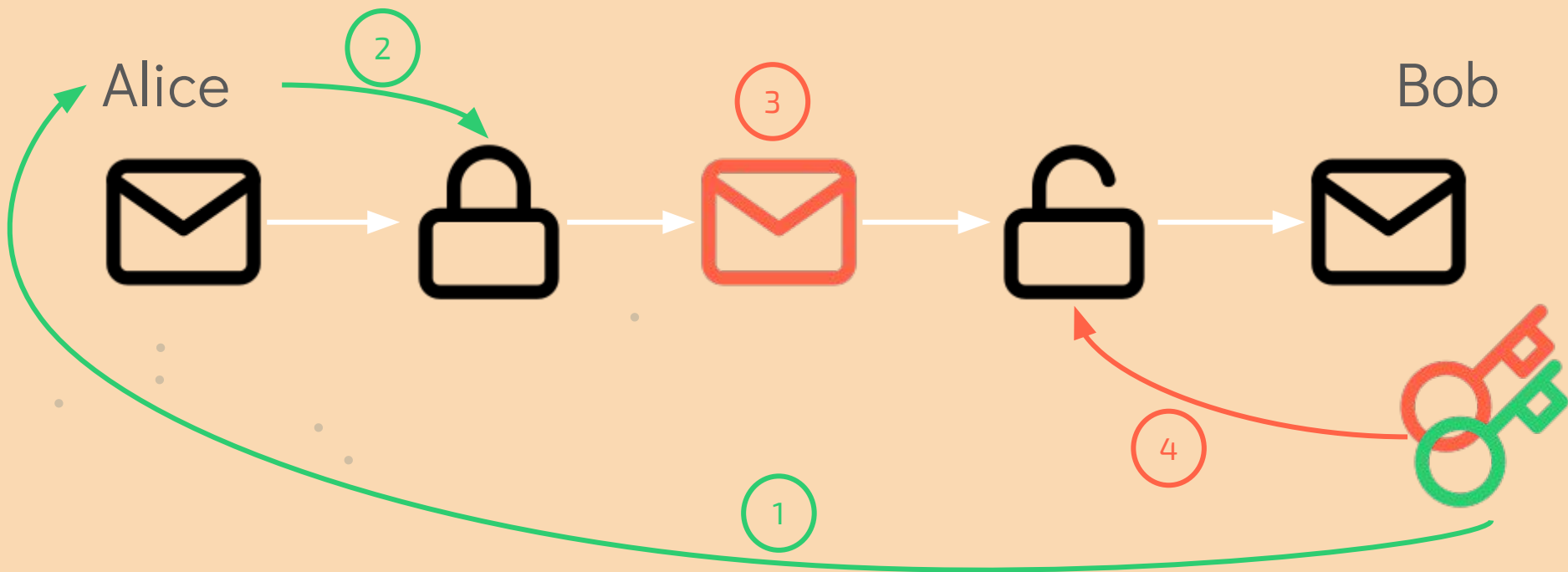


# Clé de session

*Chiffrement Asymetrique*



# Chiffrement asymetrique



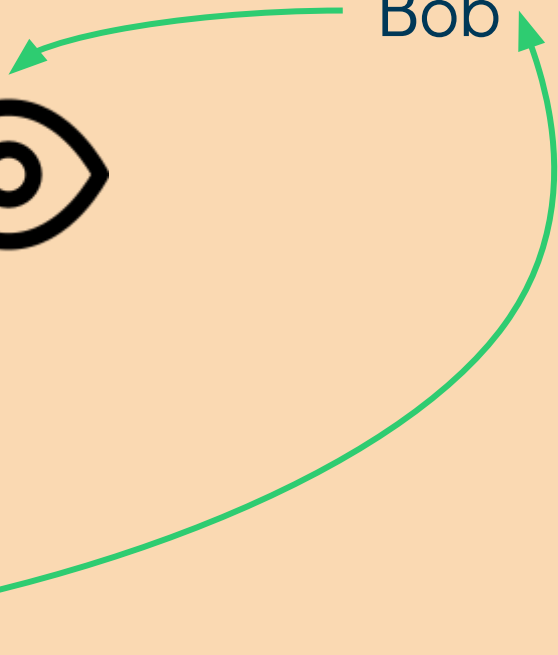
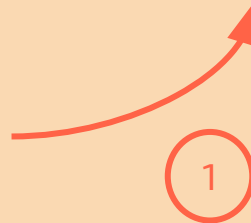
Signature



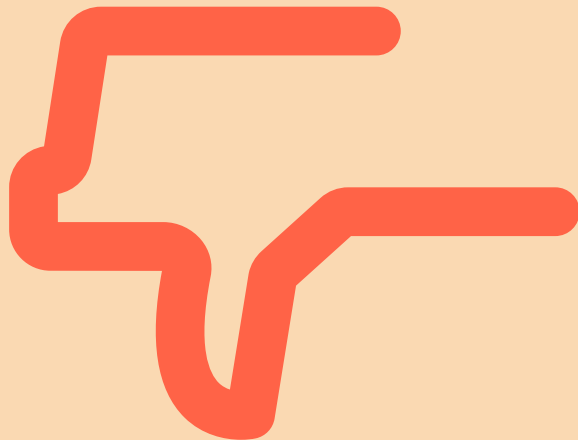
Alice



Bob



# Chiffrement asymétrique

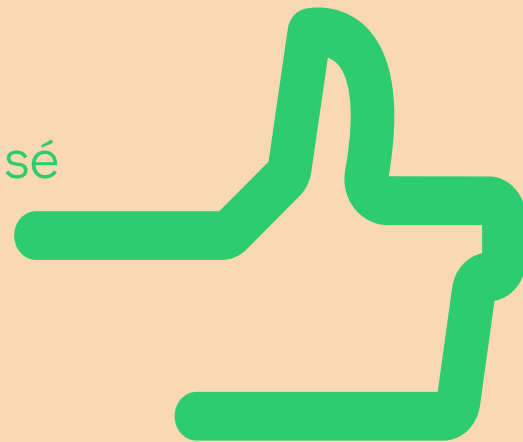


Distribution Sécurisé

Chacun sa clé

Lent

Lourd



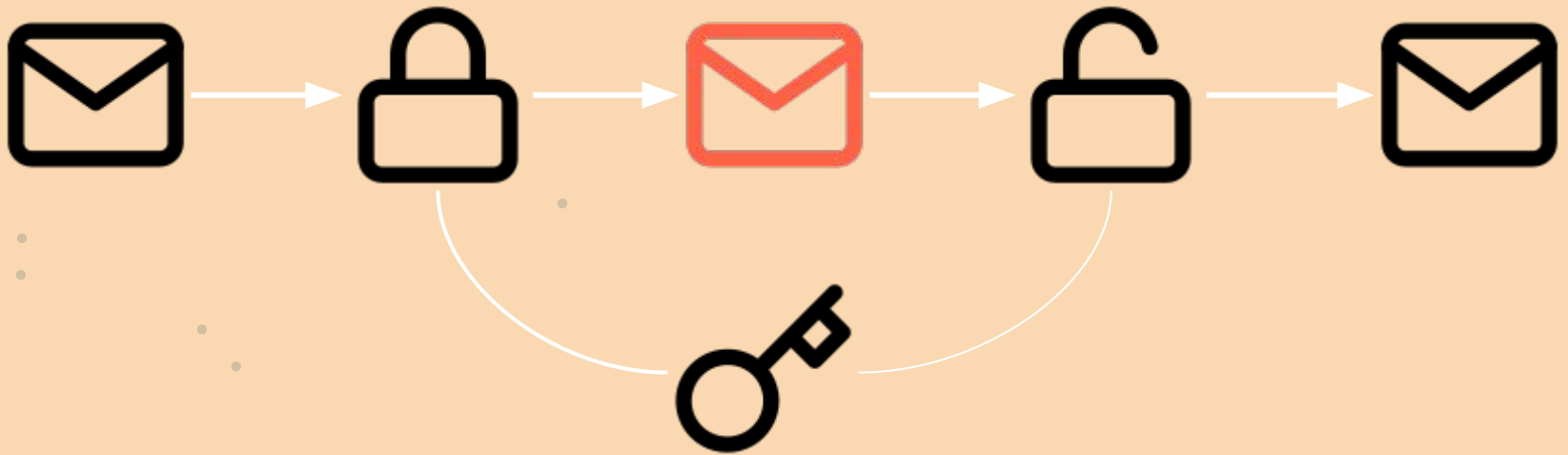


# Echange de clé



Alice

Bob

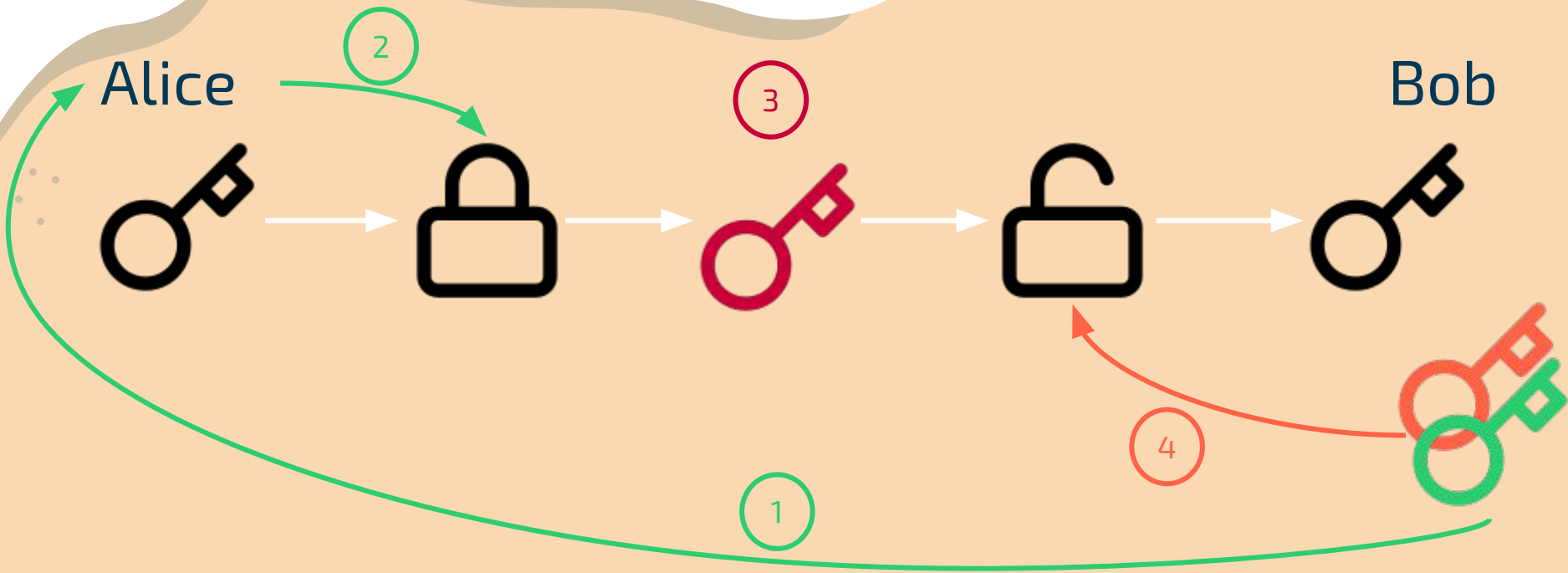


# Echange de clé



Alice

Bob



TLS



## Certification

*Chaine de certification*  
*Signature*



# La chaîne de certification



CA racine



CA Intermediaire.s



Certificat serveur

# Signature



Authentique

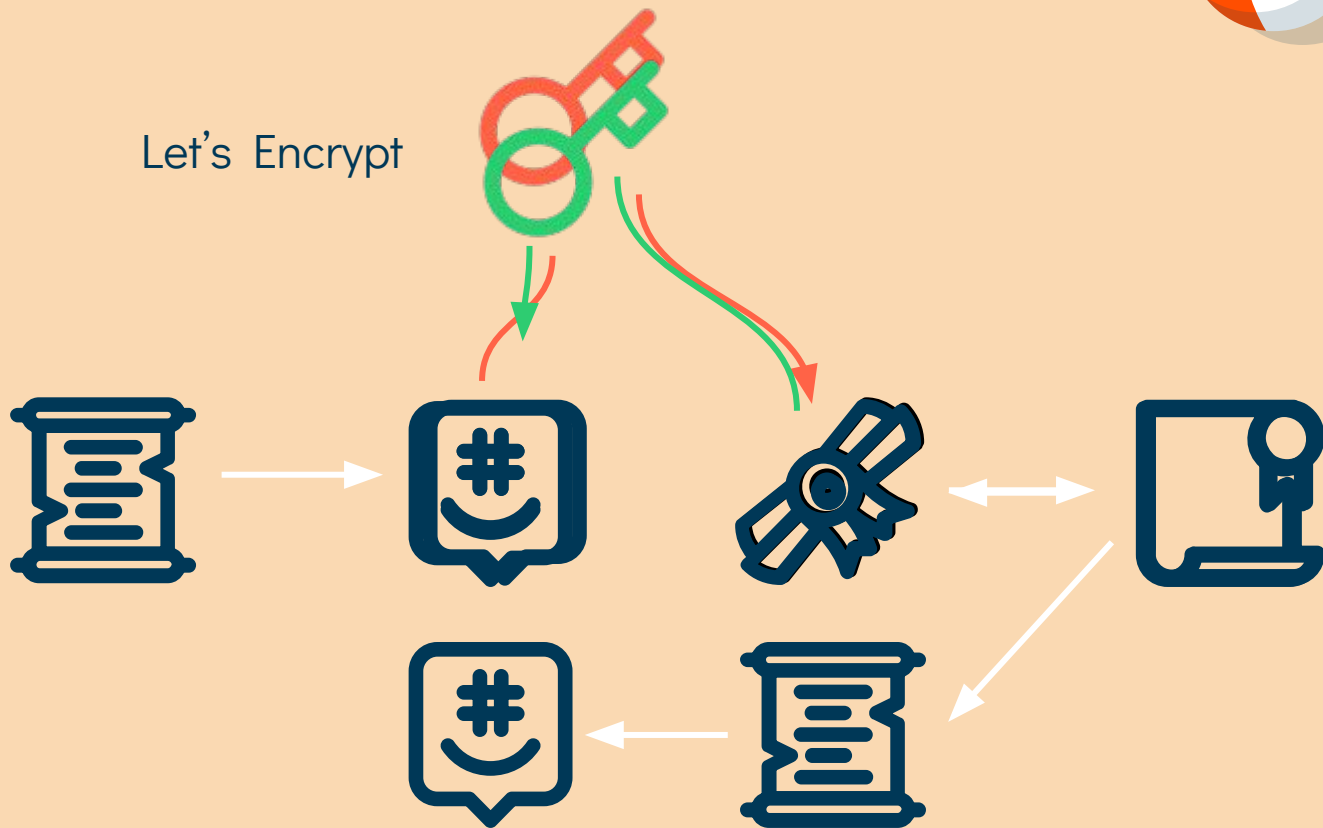
Infalsifiable

Non réutilisable

Inaltérable

Irrévocable

Let's Encrypt



# Certificat SSL



Nom **C**ommun

Nom de **S**ujet  
Alternatifs

Validité



Nom de l'émetteur

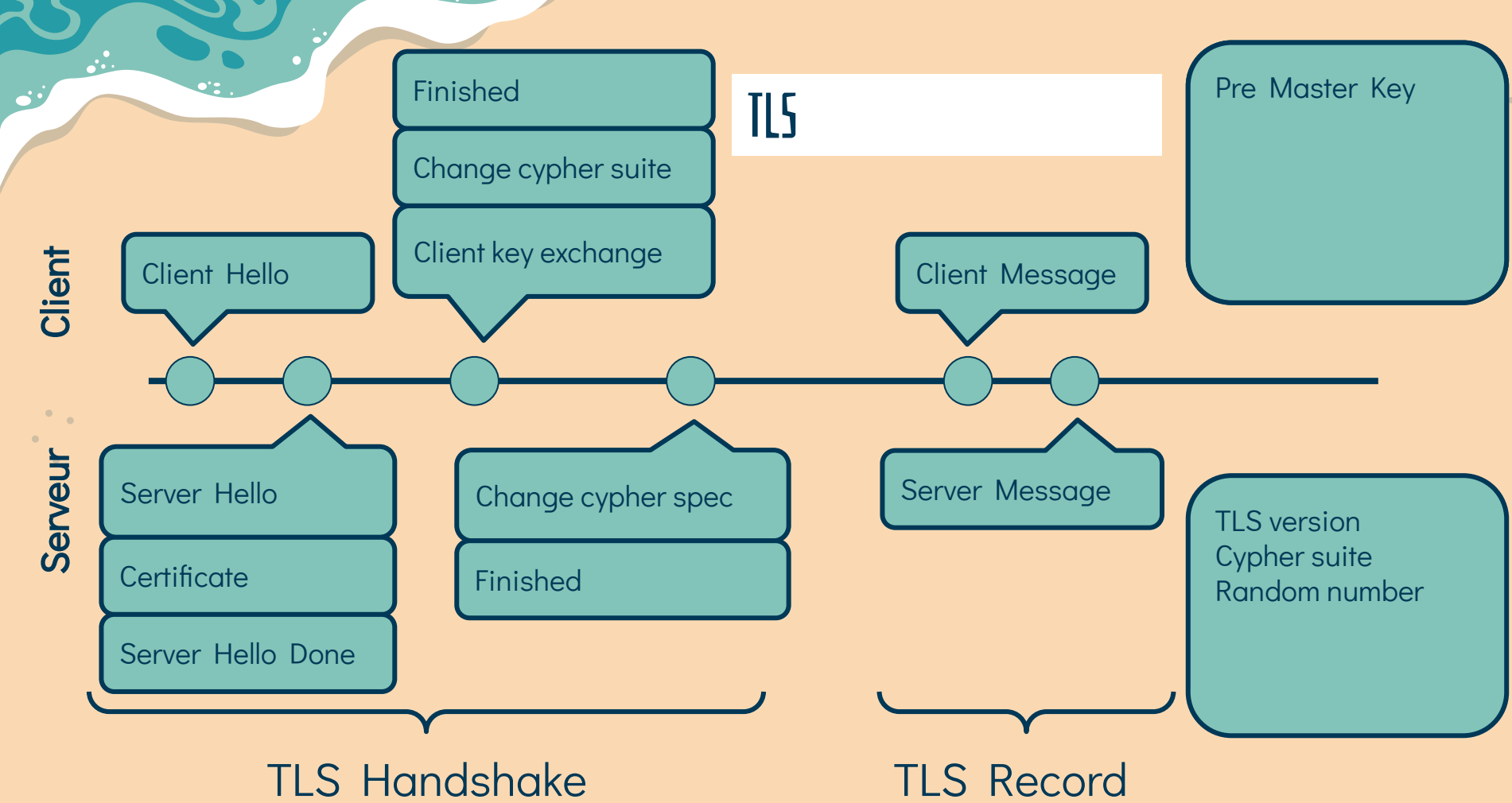
Accès aux **I**nformations  
d'**A**utorité

Clé publique



The background is a stylized beach scene. At the top left, there are blue and teal waves with white foam. Below the waves is a sandy beach area in light orange. In the center, a white rectangular box contains the word 'Finalement' in a dark blue, serif font. To the right of the box, an orange life preserver with a white diagonal stripe is partially buried in the sand. Below the life preserver, a pair of blue flip-flops is also partially buried in the sand.

**Finalement**



# Thanks!

CREDITS: This presentation template was created by Slidesgo, including icons by Flaticon and infographics & images by Freepik

