

WORKFLOW

Client A

known :

$$K_A(AES)$$

Client B

known :

 $k_{B-public}(RSA)$ $k_{B-private}(RSA)$

-----**Digital Signature**-----

-----**k_{B-public}** can be replace by any info-----

$$\mathbf{k}_{B-public} \lll \mathbf{k}_{B-public}$$
$$SHA(\mathcal{K}_{B-public})$$
$$\mathcal{D}_{\hat{k}_B.\textit{private}} \left(SHA(\hat{k}_{B.\textit{public}}) \right) <<<<<<<<<<<<<<<<<<<<<< \mathcal{D}_{\hat{k}_B.\textit{private}} \left(SHA(\hat{k}_{B.\textit{public}}) \right)$$
$$\textbf{Check : } \mathcal{F}_{\mathcal{K}_{B-\textit{public}}} \left(\mathcal{D}_{\mathcal{K}_{B-\textit{private}}} \left(SHA \left(\mathcal{K}_{B-\textit{public}} \right) \right) \right) = SHA \left(\mathcal{K}_{B-\textit{public}} \right) ??$$

-----Info Communication-----

$$IV(\textit{Initialization Vector}) \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg \gg IV$$
[illegible]
$$\mathcal{D}_{\hat{k}_{B-\text{private}}} \left(\mathcal{F}_{\hat{k}_{B-\text{public}}} \left(K_A \right) \right) \rightarrow K_A$$
$$E_{K_A, IV}(\text{Info}) \gg E_{K_B, IV}(\text{Info})$$
$$D_{K_A, IV} \left(E_{K_A, IV} (Info) \right) \rightarrow Info$$