

# Secure Video Conferencing System

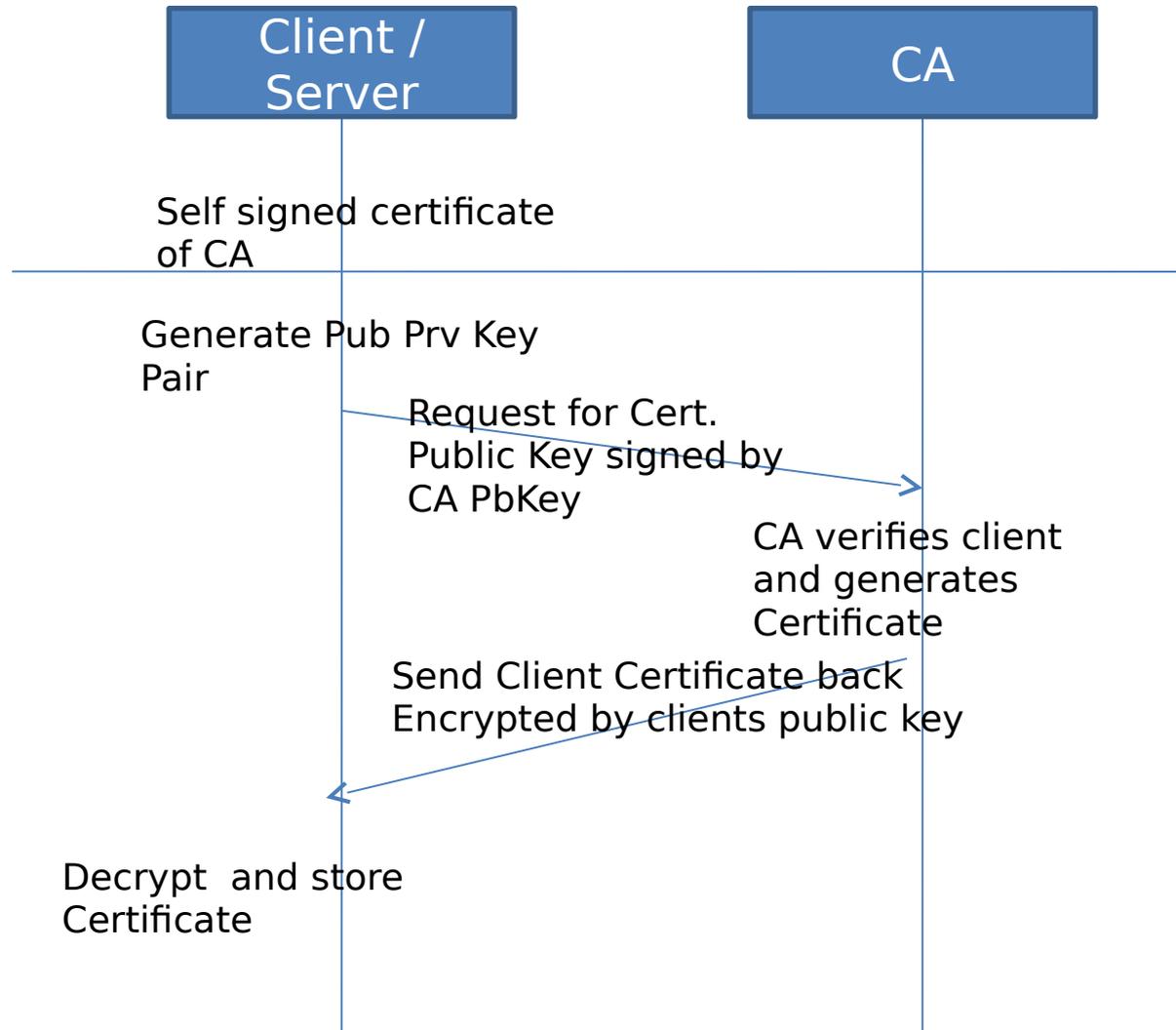
PB 173

Himanshu Karnatak, Ravibabu  
M., Mainak Garai

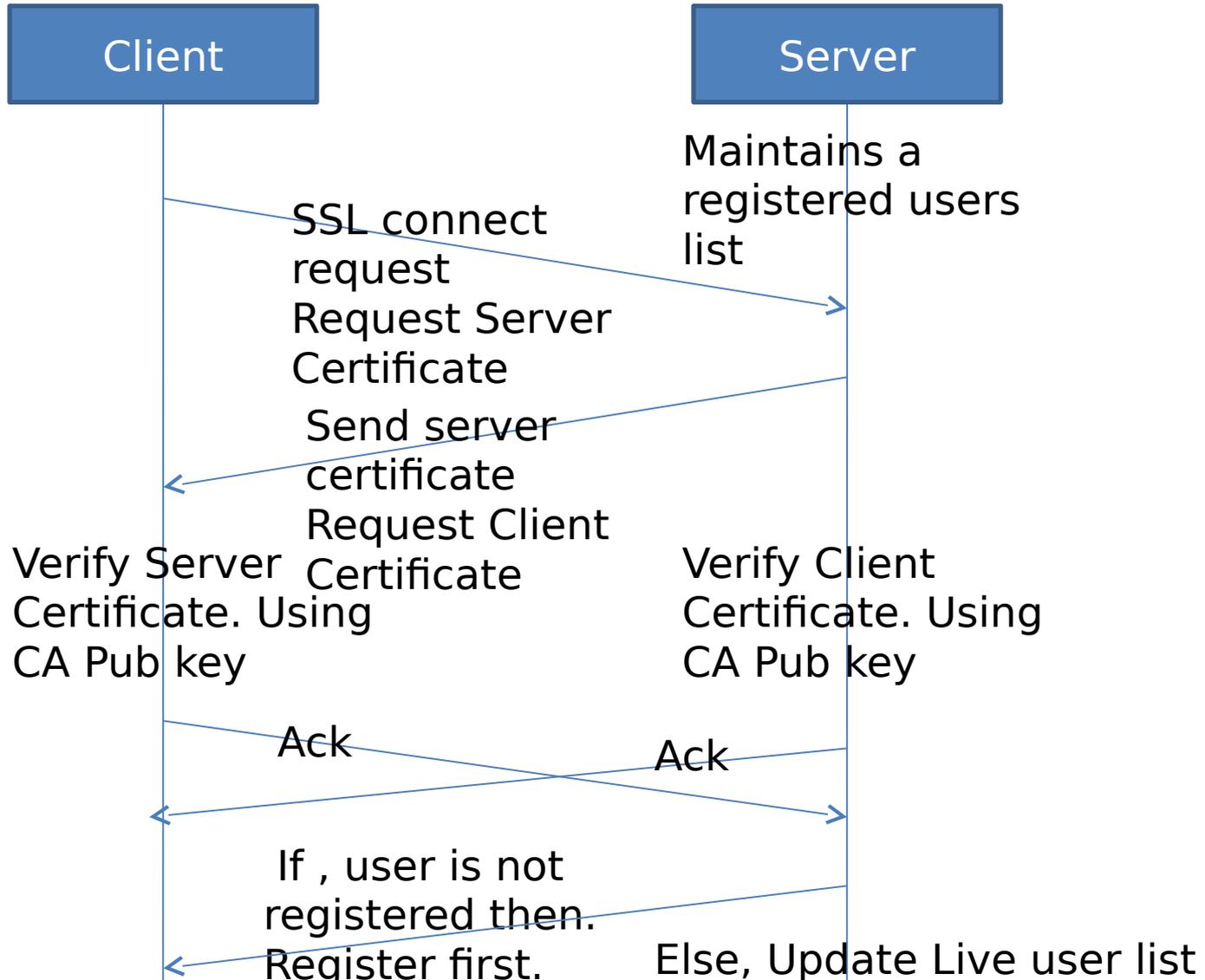
# Architecture

- Certification Authority
- Authentication Server
- Client(s)

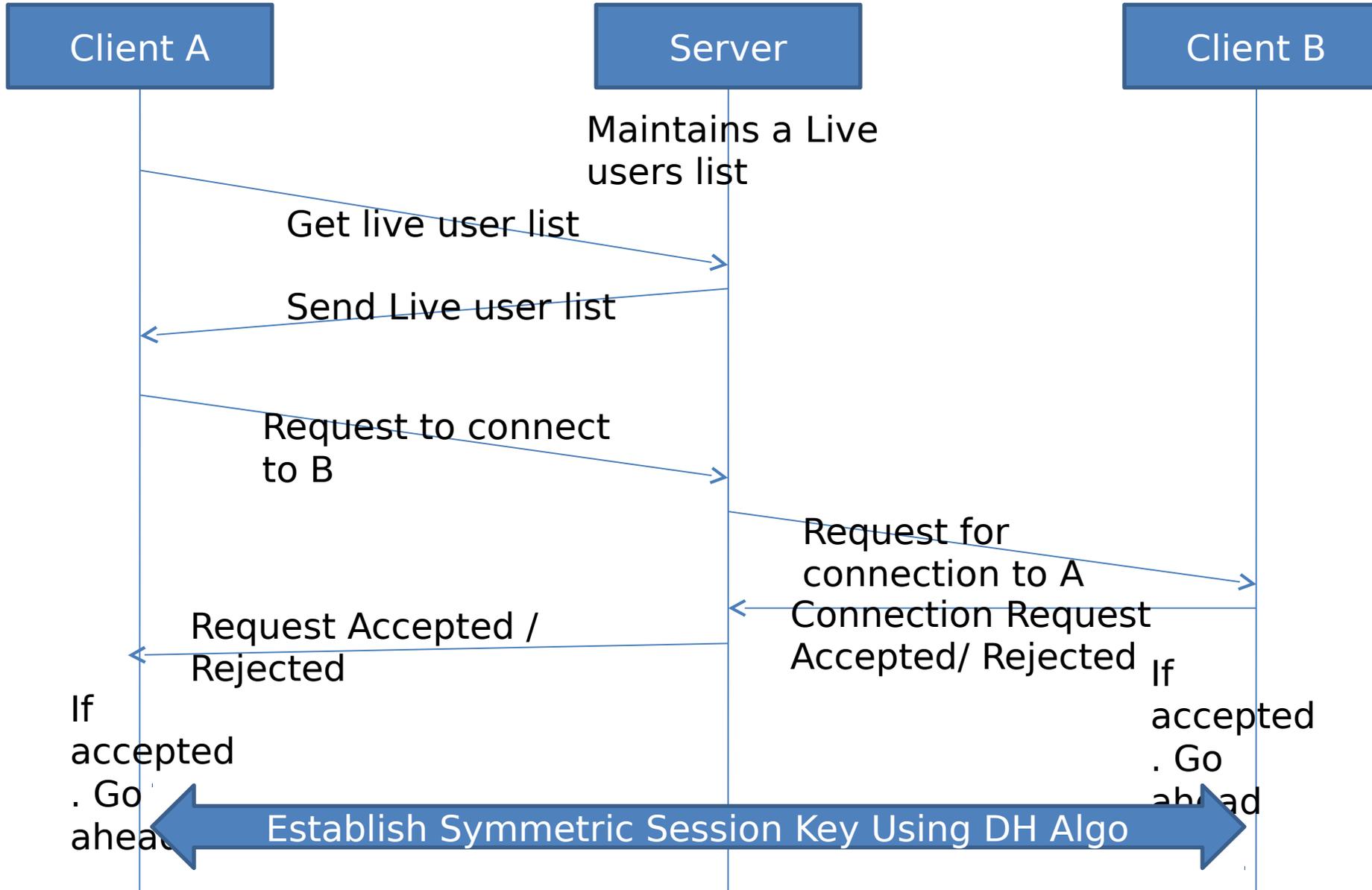
# Certificate generation



# Connecting to server



# Client to client connection



# APIs

## Certification Authority

API	Return Value	Parameter	Remarks
getNewCert()	Certificate, keyID	Public Key, ClientID	Generates a certificate to the request based on provided public key and id. And sends it back encrypted with requester's public key.
revokeCert()	Int	KeyID	Returns success or error.
updateCert()	Certificate, keyID	Public Key, KeyID, ClientID	Generates a new certificate to the request based on provided public key and id. And sends it back encrypted with requester's public key. It will revoke the obsolete certificate.

## Client

getClientCert()	Certificate		
acceptConnect()	Int	srcClientID	
establishSession()			
terminateSession()			

## Video Conferencing Server

API	Return Value	Parameter	Remarks
getServerCert()	Certificate		Returns server certificate.
registerNewUser()	Int	ClientID	Returns success or error.
updateCert()	Certificate, keyID	Public Key, KeyID, ClientID	Generates a new certificate to the request based on provided public key and id. And sends it back encrypted with requester's public key. It will revoke the obsolete certificate.
getActiveUsers()	User list	Client ID	Returns active user list
reqConnet()	Int	srcClientID, destClientID	Returns success or error status.
getAccountInfo()	Account info	ClientID	Returns clients account info.
establishSession()	-TBD		
addCredit()	Int	Credit info	
terminateSession()	Int		
closeConnection()			
unregister()	Int	ClientID	