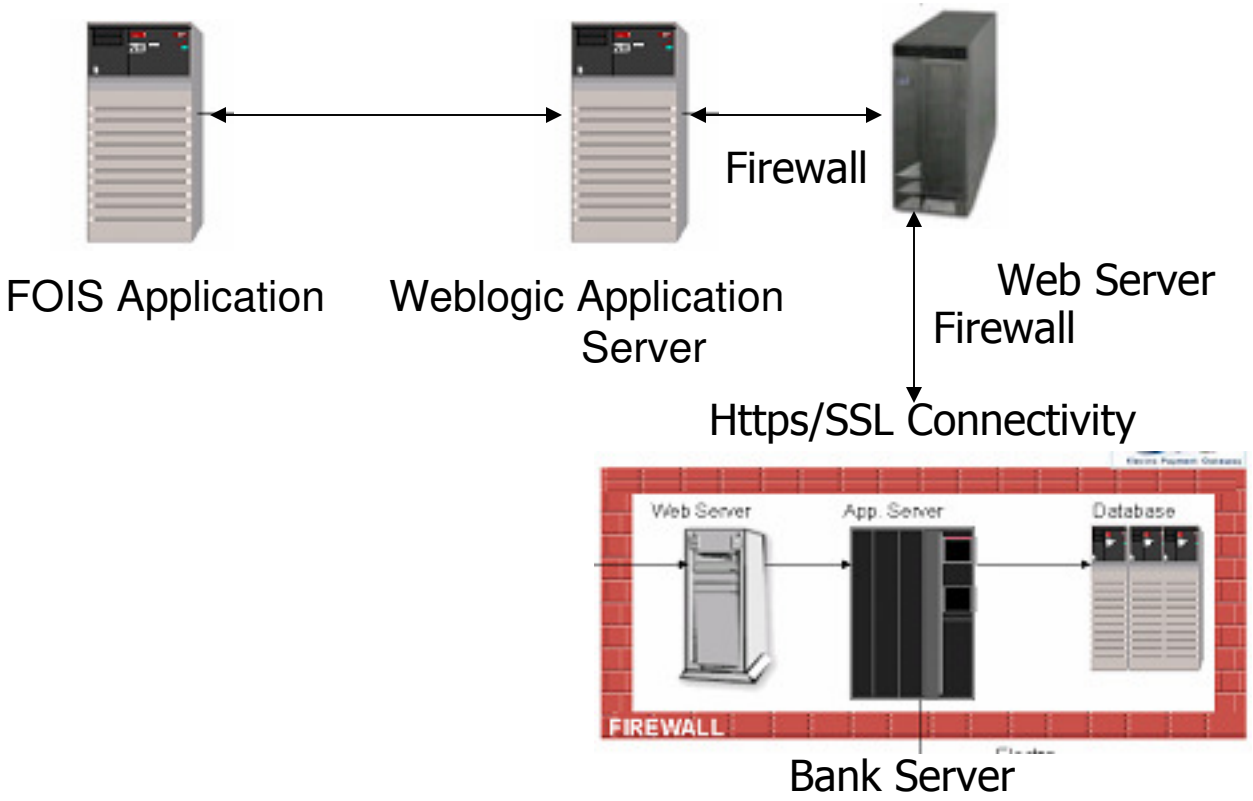
E-payment Facility Through Bank for FOIS

Presented By : CRIS, NEW DELHI

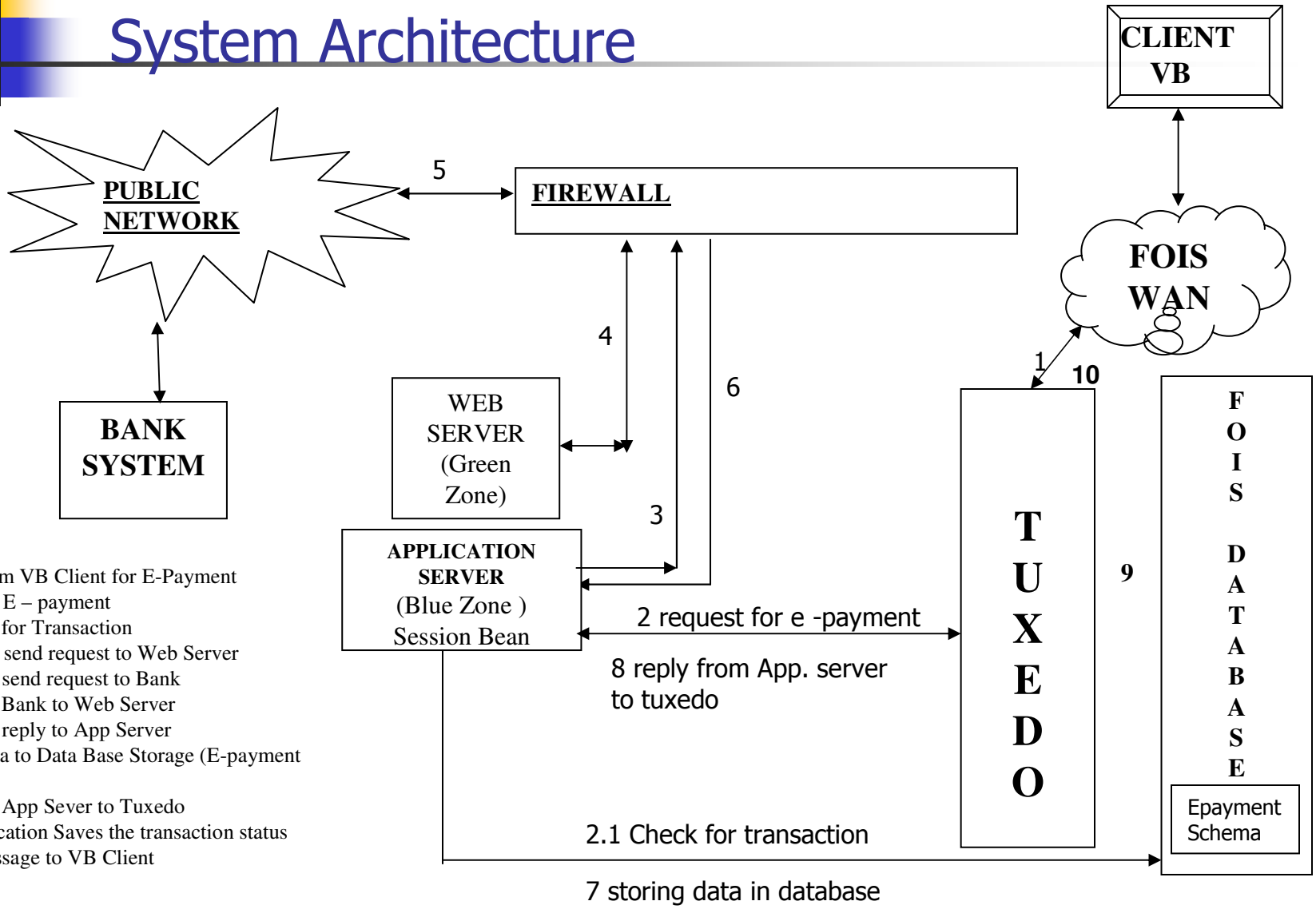
Brief On E-payment

- E-payment is mode of payment.
- Tuxedo server makes a WTC (WebLogic tuxedo connectivity) call to the web logic application server.
- WLS server calls the API of the bank through https /SSL connectivity.
- Transaction is processed at the bank server, the control is returned to the WLS server and then it returns to the FOIS application .

Network Diagram



System Architecture



1 Request from VB Client for E-Payment
2 Request for E – payment
2.1 Check for Transaction
3 App server send request to Web Server
4 Web server send request to Bank
5 Reply from Bank to Web Server
6 Web server reply to App Server
7 Sending data to Data Base Storage (E-payment Schema)
8 Reply from App Sever to Tuxedo
9 TMS Application Saves the transaction status
10 Reply Message to VB Client

Comm. Between Web Server And Payment Gateway Of Bank

- Web server at CRIS sends some parameters to bank payment gateway.
- For this an API provided by **payment gateway service provider**(PGSP),any bank, will be called.

  Parameters sent to the payment gateway
- Payment gateway API will return an approval/rejection status, bank transaction ID and error code/description in case of rejection.

  Parameters are returned from the payment gateway:
- In case response code "00" is received from the bank along with the message – completed successfully, paid RR can be generated by the system after certain checks and validations are performed.

Parameters Sent to Payment Gateway

- 1.1 Merchant code
- 1.2 Cris Transaction Id
- 1.3 Transaction Date
- 1.4 Response code
- 1.5 Zone Code
- 1.6 Customer code(Numeric for E-Payment only)
- 1.7 Customer Name
- 1.8 Railway Head
- 1.9 Invoice Number
- 1.10 Invoice Date
- 1.11 Source
- 1.12 Destination
- 1.13 Consigner
- 1.14 Consignee
- 1.15 Commodity (Numeric)
- 1.16 Debit Bank Name
- 1.17 Debit Bank Code
- 1.18 Debit Bank Branch Name
- 1.19 Debit Bank Branch Code
- 1.20 Debit Bank Account Number
- 1.21 Debit Bank LC Account Number
- 1.22 Credit Bank Name
- 1.23 Credit Bank Code
- 1.24 Credit Bank Branch Name
- 1.25 Credit Bank Branch Code
- 1.26 Credit Bank Account Number
- 1.27 RR Number
- 1.28 RR Date
- 1.29 LC Account Number
- 1.30 LC Account Valid from date
- 1.31 LC Account Valid to date
- 1.32 ERR Flag
- 1.33 Pending Rake count

Parameters Returned From Payment Gateway

- 1.1 Bank Transaction id
- 1.2 Cris Transaction ID
- 1.3 Response code
- 1.4 Response message
- 1.5 Invoice number
- 1.6 Invoice date
- 1.7 Source station
- 1.8 Destination station
- 1.9 Amount
- 1.10 Zone code (numeric)
- 1.11 Consignor
- 1.12 Consignee
- 1.13 Date and time stamp
- 1.14 Debit Bank Name
- 1.15 Debit Bank Code
- 1.16 Debit Bank Branch Name
- 1.17 Debit Bank Branch Code
- 1.18 Debit Bank Account Number
- 1.19 Debit Bank LC Account Number
- 1.20 Credit Bank Name
- 1.21 Credit Bank Code
- 1.22 Credit Bank Branch Name
- 1.23 Credit Bank Branch Code
- 1.24 Credit Bank Account Number
- 1.25 Customer code (numeric for e-payment only)
- 1.26 Commodity
- 1.27 RR number
- 1.28 RR date
- 1.29 LC account number
- 1.30 LC account valid from date
- 1.31 LC account valid to date
- 1.32 ERR flag
- 1.33 Pending rake count

- In case of insufficient messages To-pay RR shall be generated
- In case of failure at the bank end, appropriate message is required.

Status Description	Status Code
Authentication Problem	-1
Network Failure	-2
Invalid transaction request (*getTransactionStatus () will report the exact nature of invalidity*).	-3
Data Integrity Check Failed	-4
Encryption Failed	-5
Digital Signature Creation Failed	-6
Bank server to BRANCH N/W Fails	F1
Debit Account Not Found.	02
Insufficient Funds*	03
Account is dormant, please contact Branch.	04
Transaction Failed : Invoice ID (station from, to invoice number & invoice date) mismatch against this transaction ID**	-7
Transaction Failed: Transaction already performed against this transaction id. Amount mismatch in subsequent request **	-8
Transaction Failed: Amount mismatch with earlier transaction id**	-9
LC Expired #	F5
Invalid LC number #	F6

Security Measures

- Communication between CRIS Web Server and Payment Gateway is based on HTTPS protocol. (One way SSL)
- A digital certificate is required for handshaking purpose.
- An additional Encryption / Decryptions logic can be used as additional measures

Thank You