WAY4 System Architecture
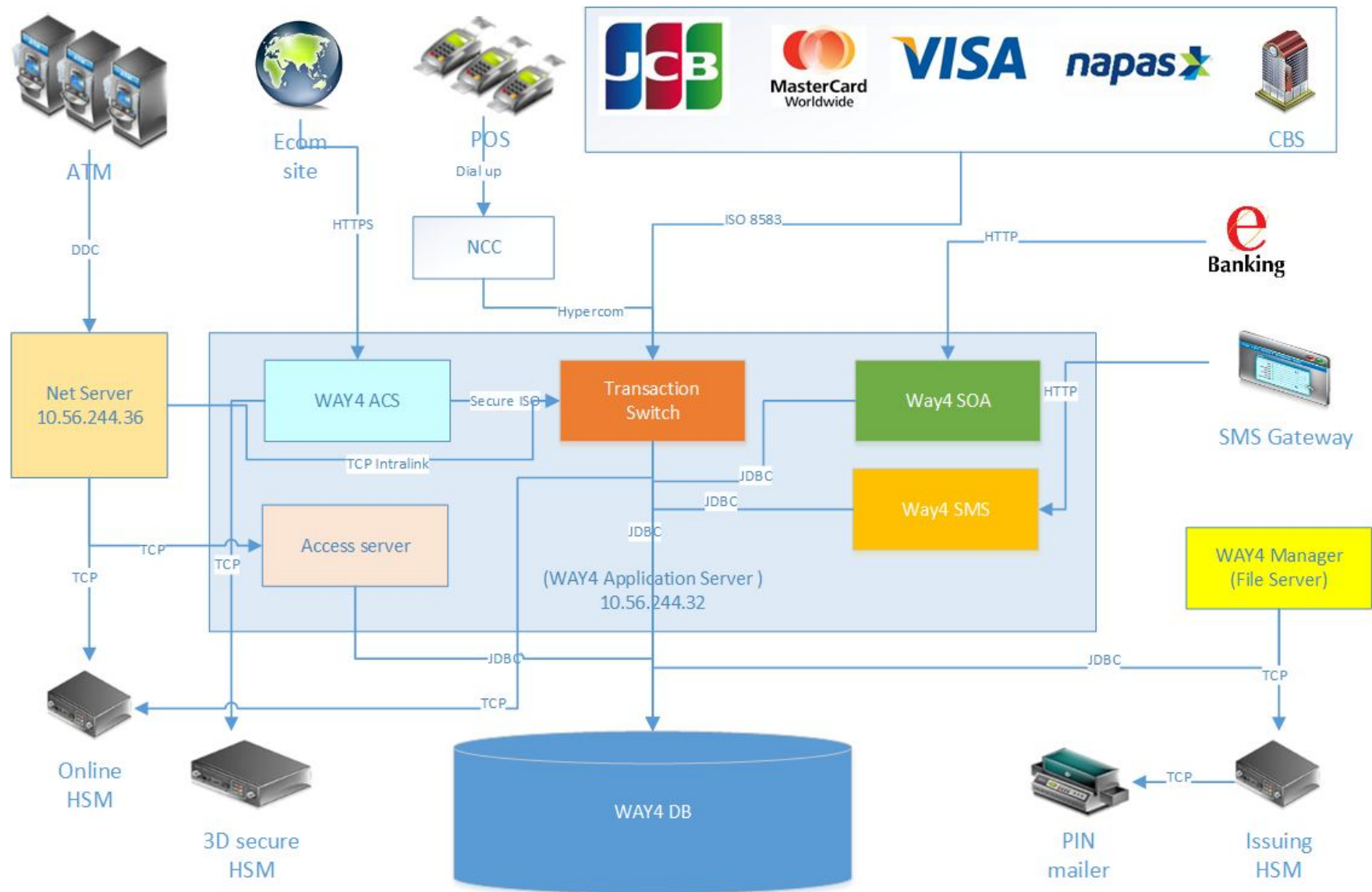
Presented by Tu B. Nguyen.

Agenda:

- WAY4 System Architecture

  - **WAY4 Transaction Switch**

  - **WAY4 Net-server**

  - **WAY4 Manager**

- Question?
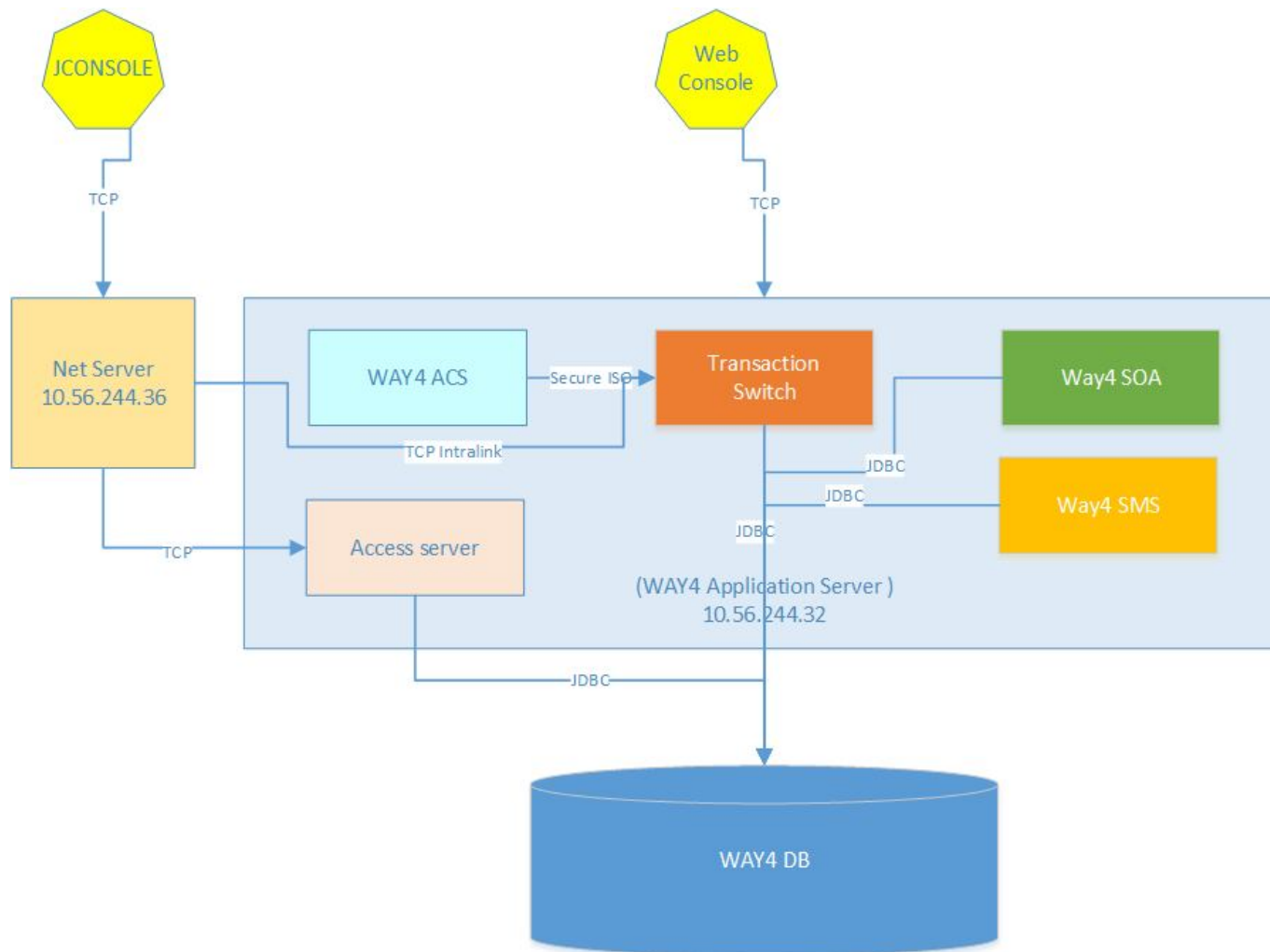
WAY4 System Architecture
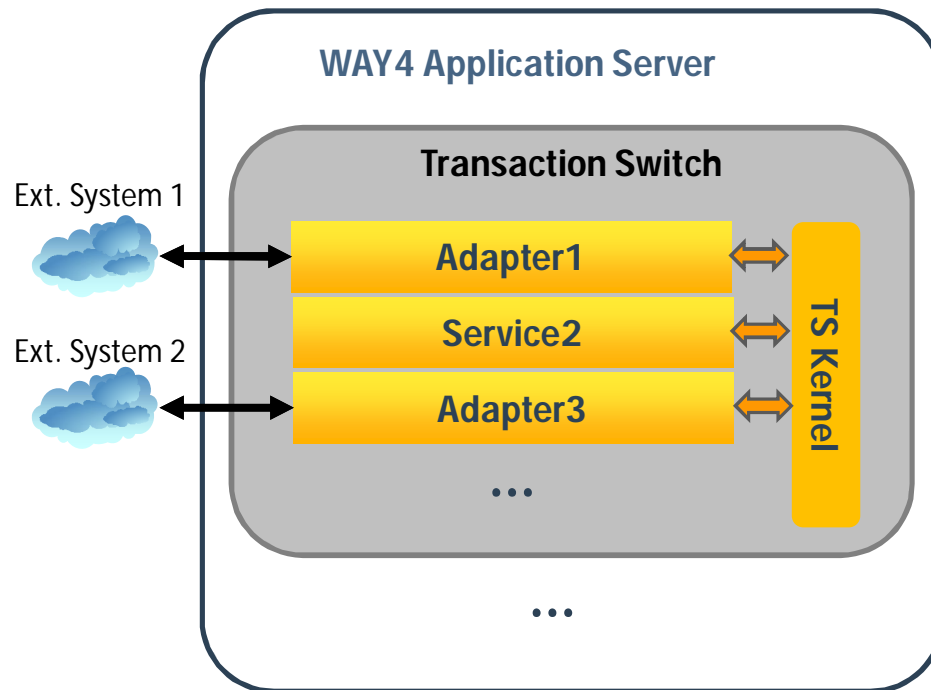
WAY4 System Architecture

WAY4 System Architecture

WAY4 Transaction Switch

WAY4 Transaction Switch - Architecture

- **_Service_** – separately manageable and configured unit. Service can implement internal _functions_ which can be called by other services.

- **_Adapter_** is a service connected to a single external system.

WAY4 Transaction Switch - Architecture

- Service can implement **functions**
- **Function** processes request and returns response

| Function Name	e.g. "debit"
Request message type	e.g. "DebitRq"
Response message type	e.g. "DebitRs"

- **Protocol** = group of related functions

"acq_fp"	Acquiring Financial Protocol (credit, debit, bill_payment, mini_statement, p2p, ...)
"iss_fp"	Issuing Financial Protocol (credit, debit, mini_statement, pin_change, ...)
"hsm"	HSM Functions Protocol

- Each service must implement one and only one protocol.
- Service may implement a subset or superset of protocol functions.

WAY4 Transaction Switch - Example
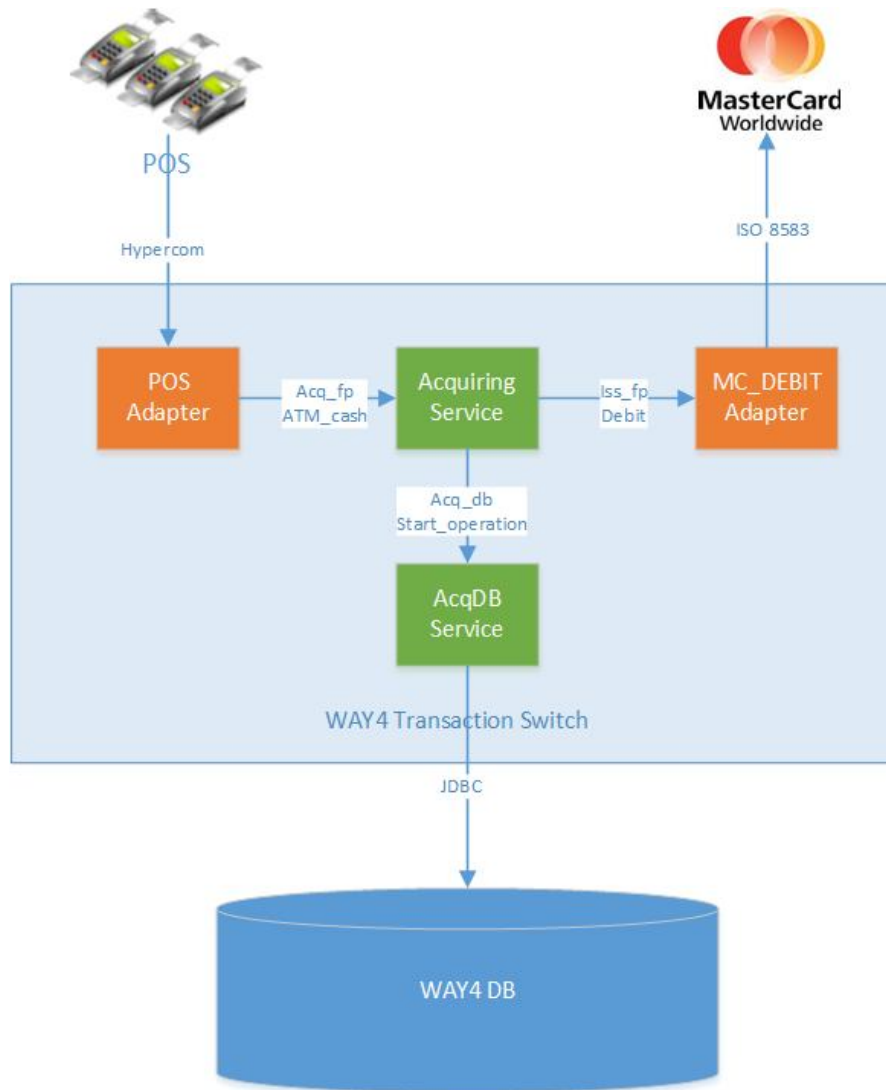
- *MasterCard on our POS*

WAY4 Transaction Switch - Example
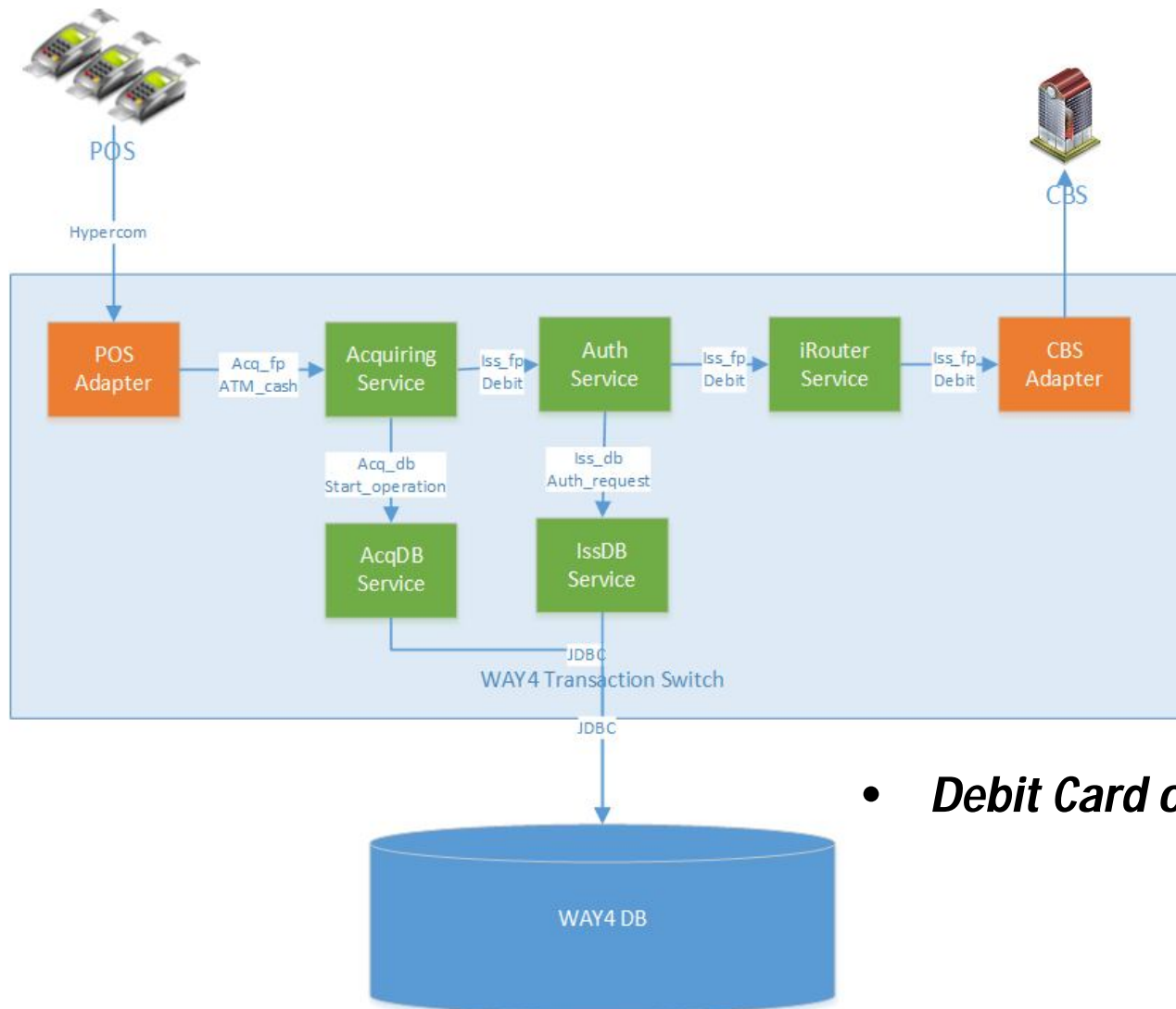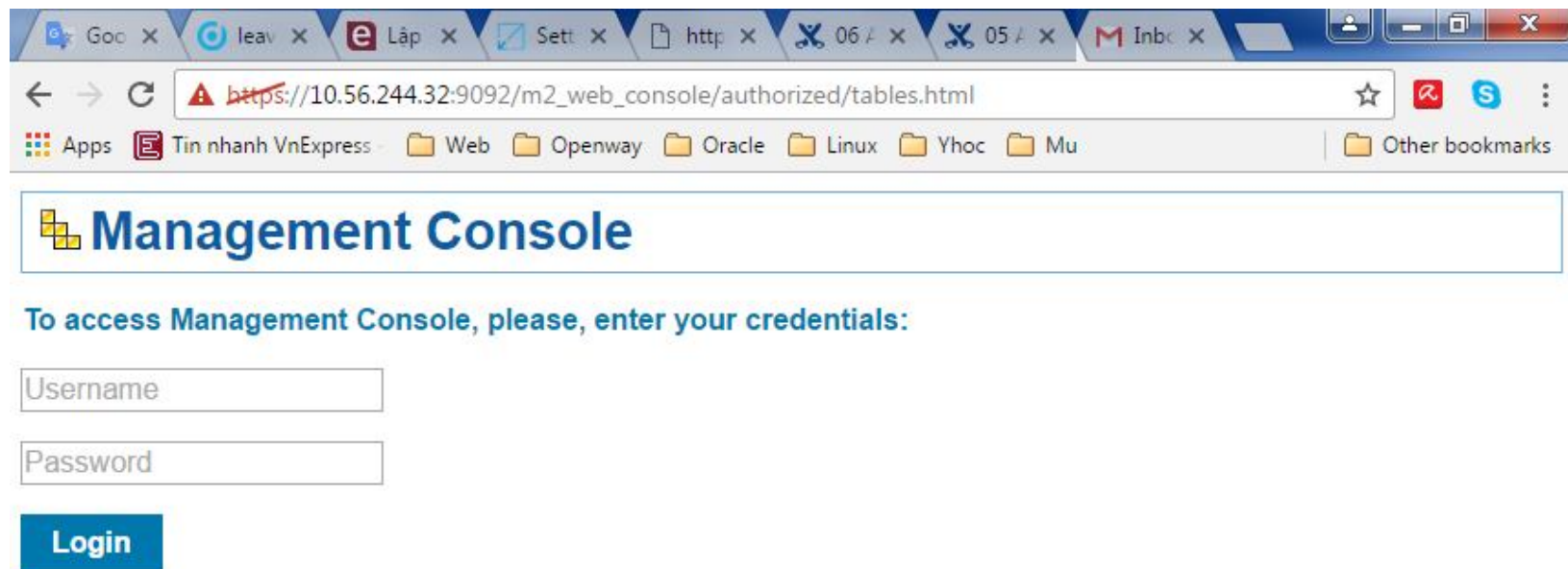
- *Debit Card on our POS*

WAY4 Transaction Switch - Monitoring

http://<server_ip>:9090/m2_web_console

https://<server_ip>:9092/m2_web_console

WAY4 Transaction Switch – Monitoring

Application   **Service**   **Configuration**   **Log**

WAY4 Net-Server

WAY4 Netserver - Architecture

NETSERVER

- watchdog
- jdaemon

IPC

- srvxface
  - monitor
  - hsmxface
  - intranet
  - own_auth
  - ...
  - atm_tcp

TCP/IP   SSL

WorkStation

- CONFIGURATOR
- CONSOLE
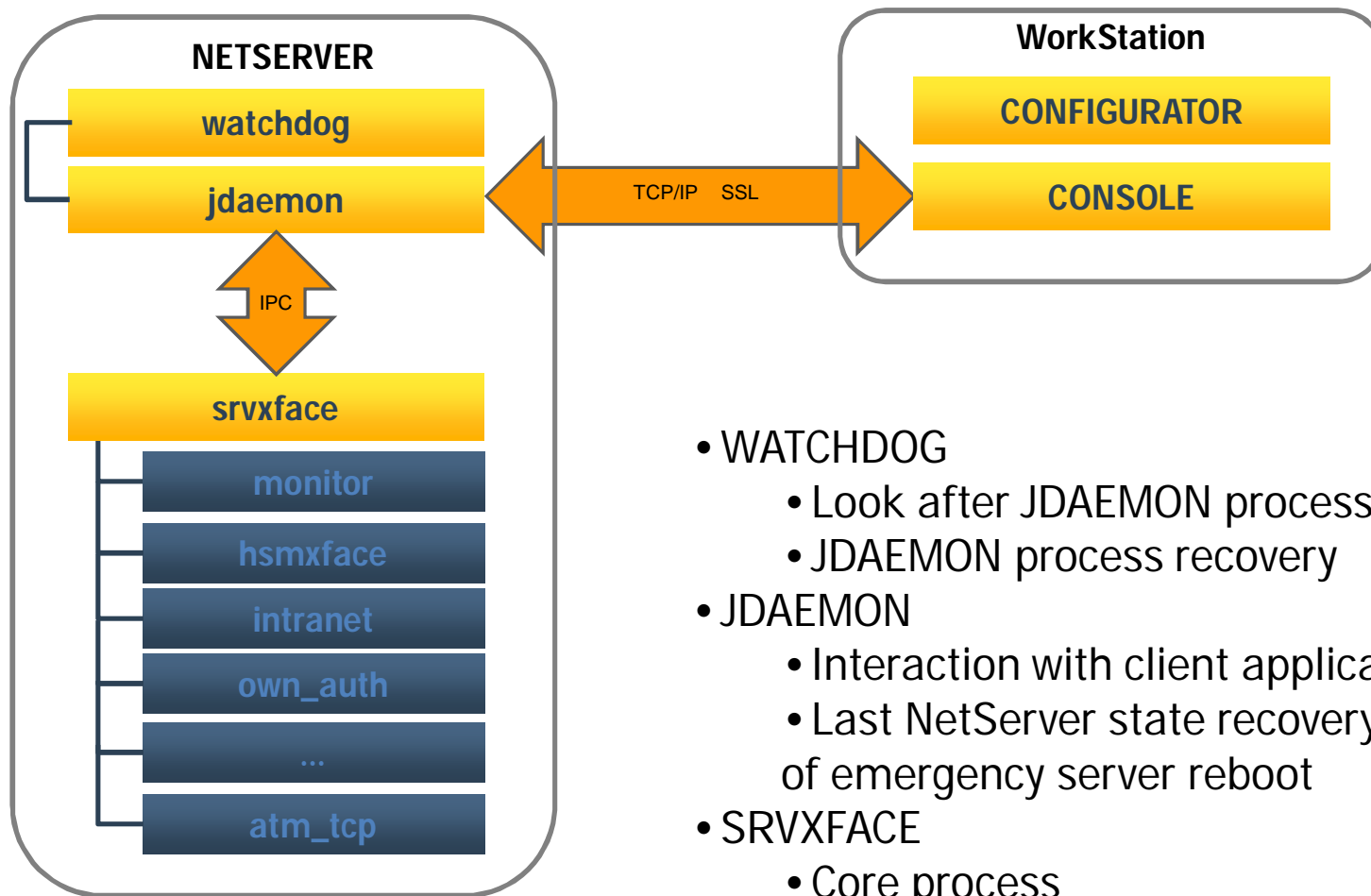
- WATCHDOG
  - Look after JDAEMON process
  - JDAEMON process recovery
- JDAEMON
  - Interaction with client applications
  - Last NetServer state recovery in case of emergency server reboot
- SRVXFACE
  - Core process
  - Control channel processes

WAY4 Netserver - Architecture

- interface with cryptographic module
- DB messaging interface
- Connect to transaction switch
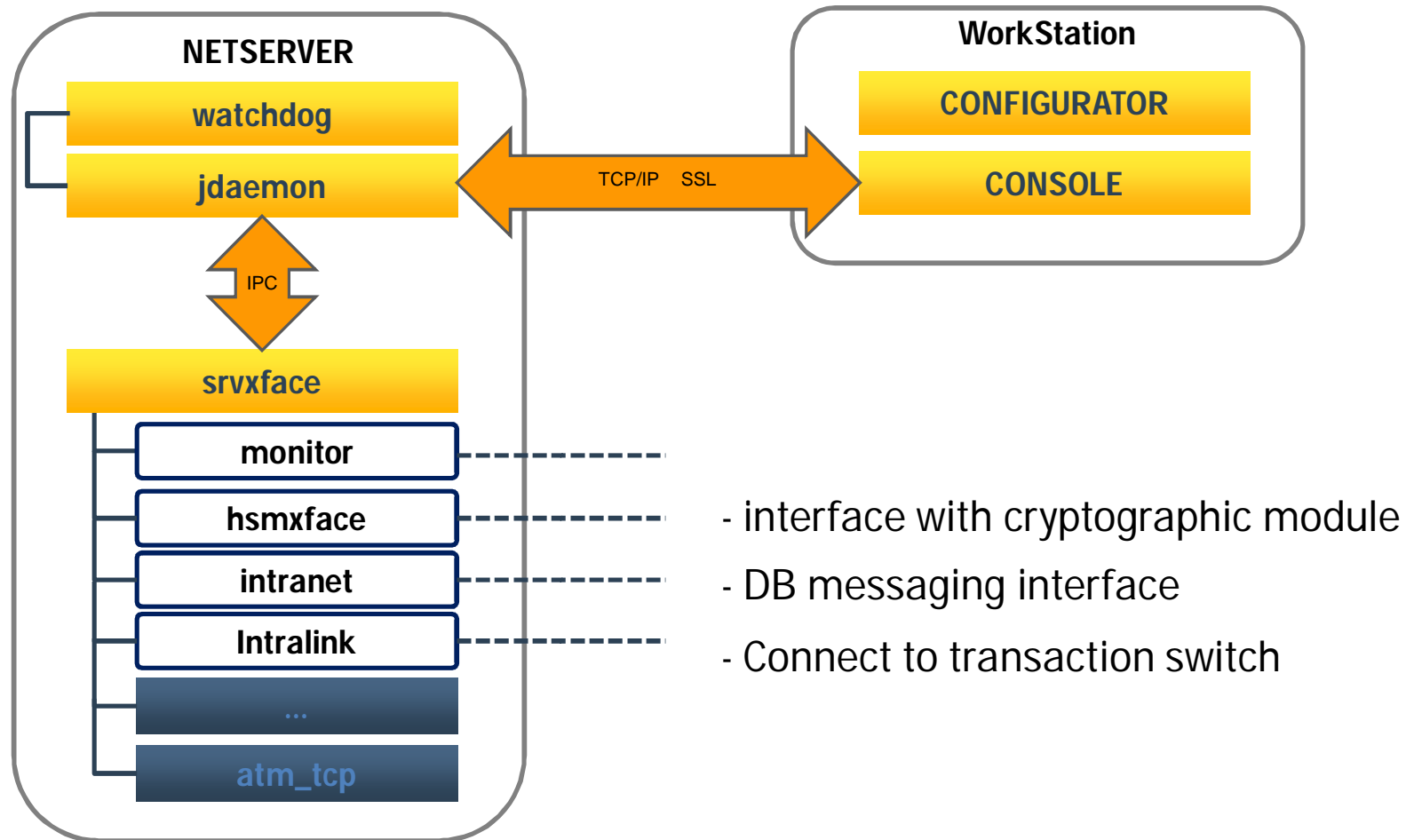
WAY4 Netserver - Example
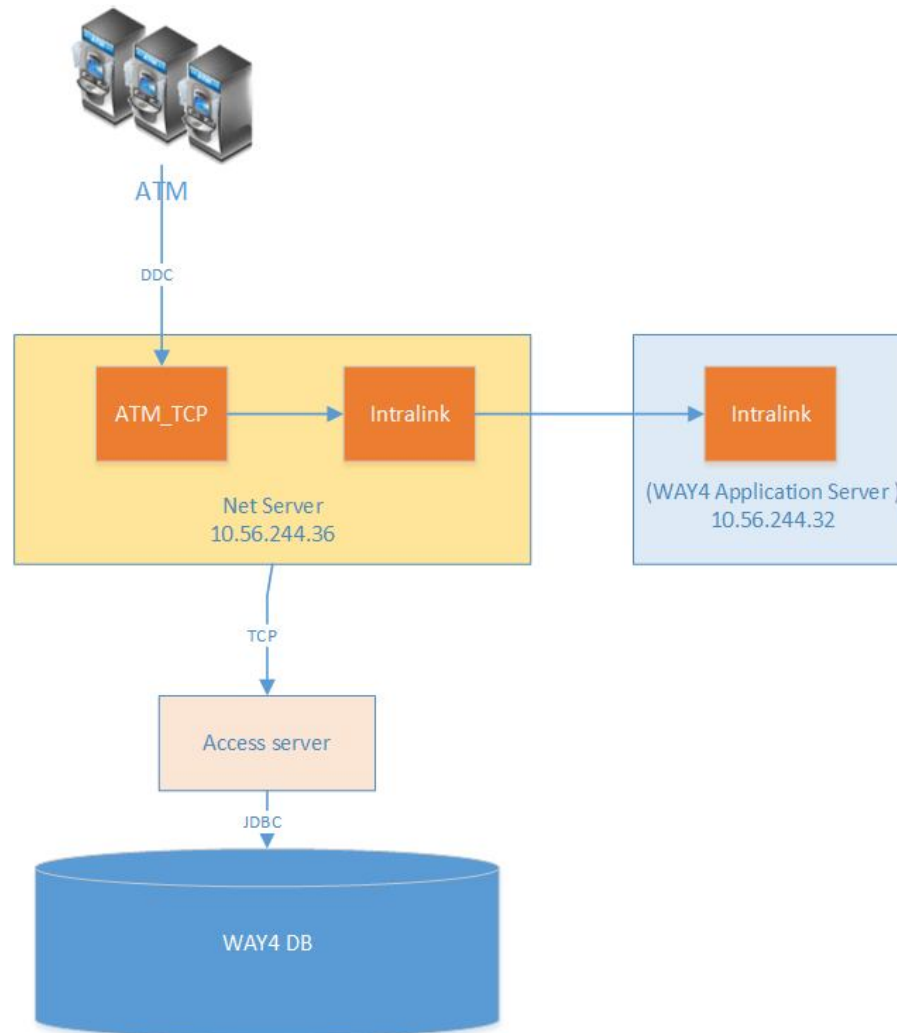
WAY4 Netserver - Monitoring

Log in   **Main**   **Configuration**   **Channel**   **Message**
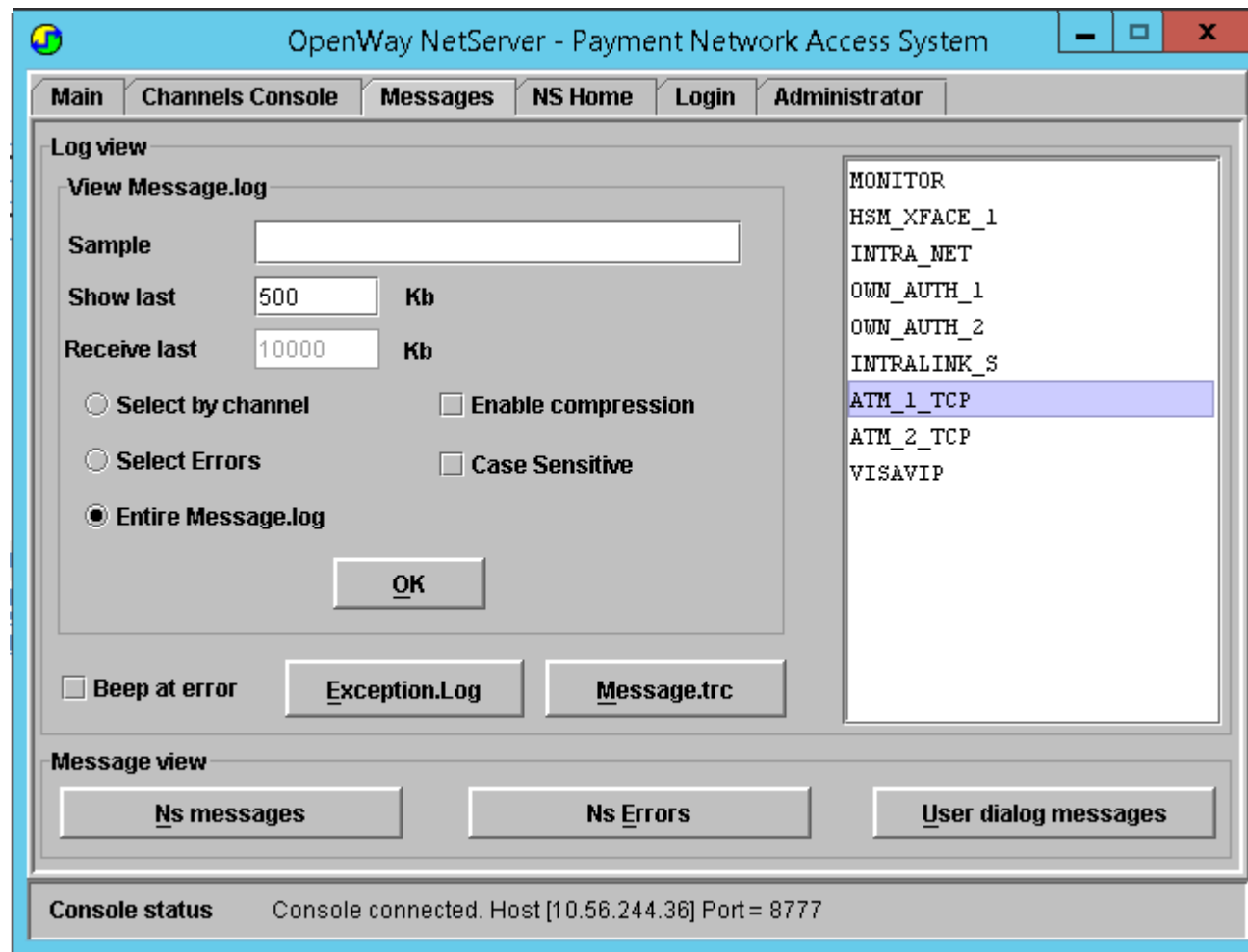
WAY4 Manager

WAY4 Manager – All doc

All doc   **Full Info**   **Error**

WAY4 Manager – Not safe Log

Internal key   **Log field**

WAY4 Manual

Net Server.pdf

Administering_WAY4_Application_Server.pdf

M2_Web_Console_Operation_manual.pdf

Transaction_Switch_Setup_2.pdf

Question

Thanks you for your attention

Do you have any question?