

## **Switching Server/Client for CHIP and PIN:**

ACK have introduced a new version of the Socket Server and Socket Client software for use with Windows EPOS systems. The new ECP Windows Socket Server (ECPWSS) has the ability to switch automatically to an alternative server should the primary server become unavailable.

### ***Switching Server/Client provides the following functions:***

1. Automatically switches from a primary server IP address to an alternative server IP address should the primary fail.
2. Switches sequentially to any number of alternative server IP addressees.
3. Full EFT functionality is replicated across any number of clients and servers – i.e. each client can be an alternative or stand-by server

### **Configuration:**

1. Each client is configured with a list of all alternative servers it can switch to in sequential order in the appropriate section of the ACKLTD.INI file. Where multiple primary servers are installed on one site, each client till must be configured with the desired primary server address followed by the alternative addresses.
2. All alternative servers are equipped with the full suite of ACK software and must be licensed to accommodate the total maximum of clients that could possibly connect to it. For example, where 30 client tills exist on one site and are grouped in clusters of 10 tills to three servers on the same site which are all required to act as alternative servers, each server must be licensed to support a total of 30 client tills. The TCP/IP port on which the EFT server will listen for incoming data from the EFT clients must be configured and must be different for each server on the network.
3. Each client till must use a unique till number (as passed in the API call) i.e. 1 to 30 – which will allow all clients to connect to a single server should that be necessary.

### **1. Method of operation:**

1. The EFT Servers should be started first, although in practice, they can be stopped and started at any time. The EFT Server program is called ECPWSS32.EXE. The client tills must use the EFT Client program which is called ECPWSC32.DLL.
2. Once all servers are active and operational, each client POS will be able to conduct the validation and authorisation process with the primary server.
3. Should the primary server fail to respond to a ValidateCard API call, the client will automatically switch to the first alternative IP address in the list and will attempt the ValidateCard API call again.
4. If the second server fails to respond too, the client will attempt to connect to the next alternative IP address until the list is exhausted, at which point the client will return an error message to the POS application that ValidateCard failed.
5. Where a client has successfully switched to an alternative IP address it is a latch switch i.e. the client will continue to use that IP address for all subsequent authorisation requests. This will continue until the client is restarted, in which case it will attempt to connect to the primary IP address.

**ACKMM - Alternate Servers settings:**

In the WinSock Server section, the following must be configured. Note that the port on which each server is listening must be unique, as in the following example the FirstServer will listen on port 12345, SecondServer will listen on port 23456 and ThirdServer will listen on port 34567.

The following example shows three servers each with a unique name/IP address and server port number:

```
ServerIPAddress=FirstServer  
ServerPort=12345
```

```
ServerIPAddress1=SecondServer  
ServerPort1=23456
```

```
ServerIPAddress2=ThirdServer  
ServerPort2=34567
```

Alternatively, IP addresses can be used:

```
ServerIPAddress=192.168.10.61  
ServerPort=12345
```

```
ServerIPAddress1=192.168.10.62  
ServerPort1=23456
```

```
ServerIPAddress2=192.168.10.63  
ServerPort2=34567
```