What is a Zero Client?

The ‘Zero Client’ question is one that plagues almost every thin client vendor.

The term ‘Zero Client’ was first introduced into the thin client world by Wyse (now Dell). The term was essentially conceived for marketing purposes and to show off its client powered by ARM, with its perceived lack of operating system and central configuration file, thereby differentiating it from all other thin client devices on offer.

This device, although appearing at first sight to be completely lacking an operating system, does indeed have one and cannot therefore be considered a ‘Zero Client’ device. The central System-on-Chip form of processor chip contains a flash storage segment hosting an operating system that powers the device and its cloud connectivity options. This has now been taken onto the later thin client models where an SoC has been used.

The ‘Zero’ functionality is driven and delivered by the ‘zero’ need to attend every desktop and configure it for connection to the cloud servers, even the use of a central management system is negated as a result of the central configuration file system.

So, what is the meaning of ‘Zero Client’?

A real zero client is one that has a processor and memory, but zero local storage (flash/SSD), and no local operating system. I do not believe there is such a device existing … perhaps the original Novell Network Boot stations, but they too had an ‘OS’ that did that within the network chip.

The closest that Lenovo have to such a device is the TERA series of Zero Clients using the Teradici display technology. These devices have a special processor that interprets commands sent to it from a central VMware server running the PCoIP protocol – but these too have a micro OS that needs updates occasionally.

So, do Lenovo have any devices that match this?

Lenovo have a complete range of thin clients, or cloud clients as they are more often referred to today. Amongst these devices are what we refer to as ‘TrueZero’ devices powered by the LeTOS operating system. These devices contain a Zero Configuration system that allows the administrator to configure a device’s configuration and hold that centrally as a configuration file. This configuration file can be distributed to devices from central or distributed FTP(S) or HTTP(S) servers.