Optimize your audio devices for thin clients
A thin client is a low powered computer that has been optimized for establishing a remote connection with a server-based computing environment. All processing activities are performed using cloud technologies, and centralized desktop resources on servers in data centers. This approach is in contrast to a thick client or a conventional personal computer which has considerable local processing power instead of being specifically optimized for a client–server model as a thin client is. Most thin client use cases include a desktop virtualization environment and are part of a Virtual Desktop Infrastructure (VDI) solution.

VDI is a technology that allows the process of running a user desktop inside a virtual machine created on a server in a data center, enabling a personalized desktop for each end user with the security and simplicity of centralized management. Together with a thin client solution, other components are part of a full VDI solution: the operating system (OS), the virtualization software and the UC and CC* components. For large organizations maintaining control and management of their IT systems together with accessories such as headsets and speakerphones is paramount and that’s when thin clients come into their own.

List of abbreviations
VDI Virtual Desktop Infrastructure
UC Unified Communications
CC Contact Center
OS Operating System

* UC and CC are part of the use cases of interest for this White Paper. Not all the VDI applications include UC and CC components.
Where and why are thin clients used?

For the most part, thin clients are used by large organizations that are dealing with sensitive data in sectors including: BFIS (Banking, Finance and Insurance Services), Healthcare, Government and Education. They enable the use of streamlined hardware, often sourced at a lower cost, and run specific programs for specific tasks. This simplification makes thin clients more secure and more manageable. Moreover, thin clients are less prone to cyber-attacks and viruses due to server restrictions and limits on what software can be downloaded. Mass company deployment often means simply plugging the machine in and configuring it remotely from a data center.

Simple, streamlined and easy to manage
All in all, it’s the simplicity of these machines that make them so appealing to large organizations where IT management can quickly become inefficient and time-consuming. In a world where sustainability is now top of the agenda, low powered thin clients require less processing power and storage capacity meaning reduced energy consumption. Thin clients therefore offer large corporates an opportunity to save energy and boost companywide sustainability.

Benefits
- Reduced IT costs (hardware and administration)
- Higher security
- Higher scalability
- Reduced energy footprint

**Thin Client benefits**

- **29%** Cut in operational costs
- **88%** Reduction in worker downtime
- **78%** Boost in overall worker productivity
- **40%** Savings in Software and Hardware costs

* IDC report "Global thin client market 2019"
A typical VDI solution

**Thin Client** This is the hardware endpoint of the VDI solution. Thin client models are differentiated by CPU, flash memory, RAM memory, FLASH storage, connectivity, 32 bit or 64 bit.

**IT virtualization infrastructure** The data center including the servers where the virtual machines will be created. This can be on premise or on cloud.

**Operating System** Operating systems (OS) used in VDI solutions can be Windows or Linux based OS or proprietary OS.

**The virtualization software** This acts as an intermediary between the user and the desktop resource residing in the dedicated virtual machine in the data center. The level of virtualization can vary from a whole virtualized desktop to a virtualized specific application (like for example Skype for Business).

**UC and CC applications** developed to run in virtualized setup are available for the likes of Zoom (Zoom VDI), Cisco (Cisco JVDI), Microsoft (Skype For Business, MS Teams) and Genesys (Genesys softphone VDI).

**Audio device** Certified audio devices can be used with the thin client to enable a premium communication experience while device management software is used to optimize and update audio devices throughout an organization.

A typical VDI solution includes the following components: thin client hardware, OS, virtualization software and the UC and CC components.

* The hardware component of a general VDI solution can be a thin client or a standard PC; however, for the specific purpose of this White Paper we will always refer to thin client as the hardware component of a VDI solution.
The future of thin clients

As more and more people use mobile devices in their working day via cloud-based services negating locally run programs, the future of thin clients in the workplace – wherever that may be located – looks set to increase. The growing interest in the adoption of Virtual Desktop Infrastructure supported by thin client computing as we have seen, starts with the lower total cost of ownership than traditional desktop computing. The lower footprint, the rising popularity of cloud storage and the minimal hardware requirements of today’s operating systems mean the thin client market is on the up. Recent reports suggest the market will be worth 1.32 USD billion by 2023*.

To keep up with this demand EPOS continues to develop its offering for thin client systems so that all our premium audio devices can work seamlessly and optimally with thin clients.

What is the EPOS offering for thin clients?

EPOS provides two interconnected audio device management solutions – EPOS Connect and EPOS Manager – these are both compatible with VDI solutions and enable organizations to optimize and update their audio devices.

EPOS Connect is a client application that can be installed on a thick client as well as on a thin client. It gives the end user access to the latest audio device firmware updates and personalized audio device settings.

EPOS Manager is a powerful IT management solution that enables IT managers to manage, update and configure settings for EPOS headsets and speakerphones within an organization from any location.

* www.prnewswire.com/news-releases
The dedicated version of EPOS Connect for thin clients is currently compatible with 3 thin client operating system vendors*: IGEL and Unicon Software.

**IGEL**
EPOS Connect is integrated into IGEL OS and once enabled via IGEL’s Universal Management Suite (UMS), IT managers can download and install EPOS Manager.

**Unicon Software**
EPOS Connect can be installed on thin clients running Unicon’s eLux via Scout Management Suite. IT managers can download and install EPOS Manager.

**Dell Technologies**
EPOS Connect can be installed on thin clients running Wyse ThinOS via Wyse Management Suite (WMS). IT managers can then download and install EPOS Manager and manage their EPOS audio devices.

**EPOS Manager – intuitive user Interface**
With EPOS Connect installed at the endpoints of a VDI environment, the following functionalities are enabled:

- Audio device management
- Configuration management
- Firmware updates

These features are all controlled through the user interface available on EPOS Manager. With EPOS Manager you can optimize your business across locations with secure, analytical audio device management freeware. It makes sure you get the latest firmware updates on your terms, boost company performance and minimizes the possibility of any downtime.

Explore our software solutions for thin clients further at: [eposaudio.com/partnerships](https://eposaudio.com/partnerships)

* More partnerships will follow in 2021.