

### Introduction

This document attempts to analyze the specific user station problem at educational organizations and the benefits obtained by adopting and implementing a desktop virtualization platform with UDS Enterprise.

### Education, in a complex environment

The educational environment is a complex environment on an IT level, very possibly more so than many critical business platforms.

An educational campus (high schools, universities, business schools, etc.) needs to deploy hundreds of applications and user stations to provide service to the faculty, the students and its own administrative staff.

Furthermore, it must have multi-disciplinary classrooms where different courses are taught, with completely different software that needs to be ready in a very short period of time.

Many of the tools used in education are of an open source character, which generally means that they will require the deployment of user stations under Linux O.S. in its different versions.

Likewise, there are tons of different platforms that the user must access within their training plan (laboratories, office environments, specific software for different courses, etc.).

With the high rotation of different users through the same station and, on the other hand, a single user for different stations, it is very complicated to guarantee the stability and operation of different systems.

Another characteristic of these types of environments is the heterogeneity of the authentication systems adopted by the different organizations.



### Facing these challenges with UDS Enterprise

Thanks to UDS Enterprise and its differentiating characteristics, it is possible to face all of these challenges in an effective, simple and economic manner:

#### *Native Windows and Linux Desktop Support* <sup>(1)</sup>

**Multi-hypervisor.** UDS is capable of managing and deploying from a single console, VDI platforms or IP services on different hypervisors. <sup>(1)</sup>

*(1) With these two functionalities, any educational organization can use different platforms for deploying virtual desktops, with students and professors accessing the different educational tools available on the university campus, and guaranteeing access to PCs in the administrative environment of working personnel. The use of different hypervisors permits optimization of hardware, administrative and economic resources.*

**Multi-authenticator.** UDS allows you to assign virtual desktops to users and user groups from various sources and with a practically unlimited number of configurations <sup>(2)</sup>

**Creation of users, groups and meta-groups.** The meta-groups are used to permit users who belong to several groups with the same name within the organization to connect to virtual desktops <sup>(2)</sup>



### Facing these challenges with UDS Enterprise (Cont.)

*Authentication system based on connection device.* UDS Enterprise permits the assignment of virtual desktops to specific connection devices depending on their IP address, MAC, etc... providing the system with great flexibility <sup>(2)</sup>

*(2) These three UDS Enterprise characteristics allow us to define different criteria for assigning virtual desktops, for example:*

- *By connecting classroom.*
- *By course.*
- *By user type (faculty, students, administrative staff).*
- *By educational organization. It is possible for an educational organization to permit students from other organizations to access virtual desktops without registering the student in its authentication system.*

*Multi-protocol,* UDS Enterprise permits connection to virtual desktops or physical resources by using practically any connection protocol. <sup>(3)</sup>

*(3) The multi-protocol will allow us, according to the characteristics of the virtual desktop assigned (applications, destination connection device, connection network characteristics), to specify which connection protocol we will use, with the consequent savings in resource usage, bandwidth usage, etc. It will also allow us to choose between licensed and non-licensed protocols, with the resulting cost savings.*

*WAN Security Access SSL.* UDS Enterprise makes secure connections to virtual desktops via a tunneler, without requiring a heavy client, third-party products or product modules with additional costs <sup>(4)</sup>

*User access from any web navigator and OS,* without requiring client software through connection plug-ins <sup>(4)</sup>

*User access from any web navigator and OS,* using RDP via HTML5 <sup>(4)</sup>

*(4) These UDS Enterprise characteristics guarantee the organization connection to the deployed desktops from any device and practically any location.*

*Practically unlimited configuration possibilities,* UDS Enterprise incorporates an additional module management system and the definition of configuration variables on two levels:

- *Definition of systematic configuration variables <sup>(5)</sup>*
- *Definition of independent module configuration variables <sup>(5)</sup>*

*Possibility of tool personalization* for each client via personalized development in a simple, quick and effective manner <sup>(5)</sup>

*Easy integration with third-party software <sup>(5)</sup>*

*(5) Thanks to these functionalities, UDS Enterprise can be easily integrated with different educational platforms, which will allow us to:*

- *Integrate with LMS (Learning Management System) platforms.*
- *Integrate with different connection devices.*
- *Plan the deployment of virtual desktops according to classrooms, temporary courses, etc.*
- *Reserve virtual desktops.*



# Universal Desktop Services

White Paper

[www.UDSEnterprise.com](http://www.UDSEnterprise.com)

## UDS Enterprise in educational environments

### Success stories

- Manuel Galán Lara, Computer Services Manager at the Universidad de Jaén: "The possibility of deploying Linux and Windows desktops and receiving support from a diverse variety of communications and authentication protocols (including those that are affiliated), make UDS Enterprise a product that meets all of the specifications of the University for supporting a VDI service."

- Juan Jesús Farfán Leiva, Assistant Director of Virtual Teaching and Technological Laboratories at the Universidad de Málaga: "With UDS Enterprise we've improved the management of our VDI infrastructure, offering virtual desktops with Windows and Linux, which are completely compatible with our authentication systems. Their SOA architecture allows us to create modules that can be integrated into our Virtual Learning Space (VLS)."

- Miguel Rueda, Computing and Communications Service Area Director at the Universidad de Sevilla: "We were looking for new, sustainable DaaS (Desktop as a Service) models with an open source base that could easily be integrated into our digital ecosystem. UDS allows us to do that, in addition to providing us with the possibility of developing and including any additional module, both in the present and in the future."

Virtual Cable sells UDS Enterprise through a subscription model, including product support and updates in segments based on number of users.

Additionally, Virtual Cable offers a broad portfolio of professional services in order to help our partners and clients with UDS Enterprise installation processes and configuration as well as virtualization processes with other platforms.

For more information, visit [www.udsenderprise.com](http://www.udsenderprise.com) or contact us directly via email at [sales@udsenderprise.com](mailto:sales@udsenderprise.com).

### Professional support and services