Xpress-MP and Virtualization

1. Xpress-MP and Virtualization: The Implications

Xpress-MP software supports the most common virtualization technologies. However, there are some implications for the method by which Xpress-MP is licensed.

Static licensing

Due to the abstraction layer between the Xpress-MP software and the hardware, Xpress-MP cannot be locked to the machine hardware. This means that static (Type_1 and Type_2) license can only be locked to a USB dongle.

Dongles are compatible with VMWare (see Section 2 for caveats) but are unsupported by Virtual PC and Virtual Server.

Distributed licensing

Distributed (Type_3 and Type_4) licensing is compatible with all common virtualization technologies. However, while the clients can be virtual guest operating systems, the license server itself must be executed on a non-virtual operating system.

Our recommendation

Virtualization is most commonly deployed in a server environment to consolidate resources. The limitations of dongles described in Section 2 make their use unsuitable for most server installations.

Dash recommends that distributed licensing be used with virtualization technologies. The license server can be installed as a service on a host operating system or another real machine, locked to the hardware. Virtual guest operating systems are then able to request licenses as necessary over the local network.
2. Guide to Xpress-MP Hardware Dongles with Virtual Machines

This section covers how to use USB dongle licenses for Xpress-MP from virtual machines. It is intended for those who have or are considering obtaining a dongle-locked license for Xpress-MP and want to use this from a virtual machine.

We cover the use of HASP USB dongles from

2.1 VMWare
2.2 Microsoft Virtual PC
2.3 Microsoft Virtual Server

2.1 Use of HASP dongles from VMWare

In order to use dongles from a virtual machine running under VMWare, first open your virtual machine’s settings and ensure the option “Automatically connect new USB devices to this virtual machine when it has the focus” is selected, as in the following example:

With this option activated, any USB device you plug in while the virtual machine has the focus will be connected to the virtual machine, rather than to the host operating system.

Now you can install Xpress-MP as normal; select to use hardware dongles as the licensing key when prompted by the installer. Click in the virtual machine window to ensure it has the focus, and if you now plug in your dongle it should connect to the operating system and be recognised when you run Xpress-MP.
Should you plug in your dongle when the virtual machine doesn’t have the focus, it will be connected to the host operating system instead. To disconnect it from the host and connect it to the virtual machine, bring up the VM menu from VMware, slide across Removable Devices and USB Devices and select Aladdin Knowledge Systems USB Device as shown:

You will be prompted that the dongle is being disconnected from the host and reattached to the virtual machine; click OK to this.

You will now be able to start Xpress-MP using your dongle license

2.2 Use of HASP dongles from Microsoft Virtual PC

Warning: Hardware dongles are not currently supported under Microsoft Virtual PC (including Microsoft Virtual PC 2007). In addition, it is important that you do not try to install the HASP dongle drivers on a virtual machine hosted by Virtual PC as it has been observed that this can damage the virtual machine, in extreme situations leading to it becoming unbootable. When the Xpress-MP installer prompts you whether to use hardware dongles for licensing, answer No.

2.3 Use of HASP dongles from Microsoft Virtual Server
At time of writing, Microsoft Virtual Server does not support any USB devices, including dongles, except for keyboards & mice. It is not possible to use Xpress-MP with a dongle license through Microsoft Virtual Server.

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