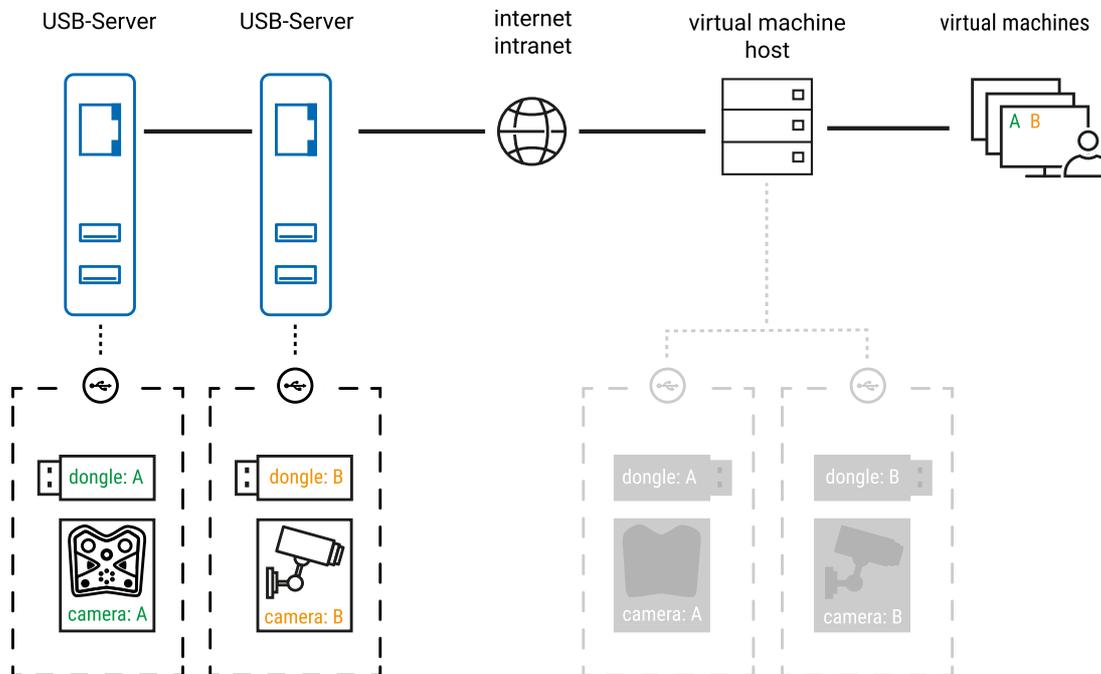


Application for USB-Server Industry:

USB devices in virtual systems

VMware / Windows Virtual PC / VirtualBox / HyperV



Definition of tasks

With the increasing use of visualization solutions, the need also grows for communication between virtual machines and USB peripherals of all kinds. Some examples include

- Dongles
- Barcode scanners
- Measuring devices, scales ...
- FAX modems
- ...

Connecting the guest systems to the network terminal of the base system is standard and generally implemented with sufficient robustness. On the other hand, passing local USB ports through to virtual guest systems is, due to the complex relationship between various driver instances, much more difficult and usually much less stable.

The solution

With the W&T USB Redirector any virtual machine (VMware, Windows Virtual PC, VirtualBox) gets its own, likewise virtual USB host controller which is independent of the base system. Its physical communication takes place using the proven, robust network link to a USB-Server in the field, to which the actual USB devices are connected.

The details

The W&T USB Redirector provides virtual machines with their own virtual USB host controller. This host controller behaves just like a local USB controller with respect to the operating system, whereby communication with the peripheral is tunneled through the network to the USB-Server and the USB devices connected there. In other words, the device-specific USB drivers and applications remain unchanged and there is no dependency on the USB resources of the main system. If desired, the virtual USB connection can be "permanently" configured, so that for example it is enabled as soon as the system is restarted. With the W&T USB Redirector implemented as a Windows kernel-mode driver, no user login is needed for this automatic reconnect function.

1. The USB-Server is connected to the network and receives its IP parameters via DHCP or using the WuTility management and inventorying tool.



2. The USB device(s) are connected to the USB-Server.



3. The W&T USB Redirector is installed and started on the virtual system.



4. The desired USB device is selected from the inventory list of the configuration tool and connected by mouse click. This action is analogous to plugging the device into a local USB port.



5. To enable the USB device for other users, the connection can be closed by mouse click.



Practical examples:

[Fax modem in a virtual system](#)

[Visualizing serial COM ports](#)

[Experience it live!](#)

[Go deeper
\(data sheet\)](#)



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