



Web-Engineering

Spider Cloud-Portal

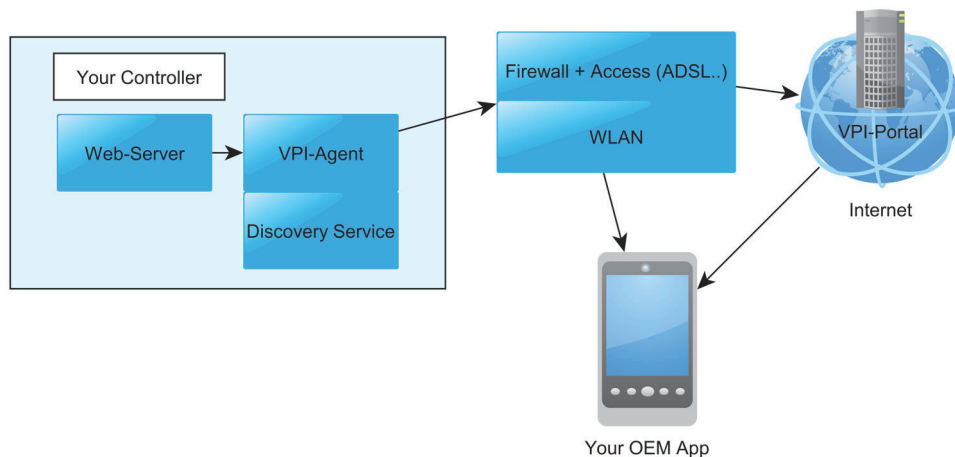
Secure Internet Connectivity!

SpiderControl™ VPI Internet Access is a patented concept for Internet access, which is hard to beat in terms of simplicity, installation and use. All operator pages and functions that can be used via HTTP protocol are made visible through a portal on the Internet, while maintaining high security standards.

The Spider Cloud-Portal offers enormous advantages:

- No additional hardware (such as a VPN router) is necessary, all components run on the PLC
- No public IP address required, the agent works with any Internet access infrastructure (prepaid GSM, public WLAN, etc.)
- No modifications to the firewall, it is sufficient to have HTTP access to the Internet
- Most simple installation, full encryption possible, etc.

PLAIN AND SIMPLE CODE WITH YOUR APP OR BROWSER



Connect embedded systems simply and securely to the cloud

If the embedded systems only send cyclical data to the cloud (one-way) it is simple: there are protocols like MQTT.

But if you want remote access for programming, configuration, support, operation and maintenance – it will be much more difficult.

Existing solutions with VPN tunnels are complex and expensive to install and operate. When dealing with many systems this becomes a huge cost factor. iniNet Solutions offers a technology that can be easily integrated into any system, offers high security and low costs.

Technical information

The VPI Agent can be integrated directly to your PLC or a device in the same network and needs only a few tens of kB code. The embedded VPI Agent is available for WinCE or embedded Linux and can also be ported to RTOS.

The agent is written in "C" and can also be operated directly on small controllers. Thus, an embedded system independently maintains a connection to the Internet, without the need for a fixed IP address or an IP address or another device. The problems arising with DynDns, with an IP address change, are also completely eliminated. The embedded agent also integrates a symmetrical encryption, which requires little performance even on small platforms. This solution provides the optimum in terms of hardware, running costs and security.

In contrast to a connection with DynDns, the PLC is not simply visible via an IP address in the Internet, but via virtual subdirectory of the portal server. This portal server is in a secure zone, communicates externally via encrypted connections, and manages users, passwords, access rights, and profiles in a central database. If necessary, certain functions can be specifically blocked in the portal. A log file of the user interactions (audit trail function) can also be implemented centrally.

Applications

This technology can be integrated into existing systems. On the embedded system, the VPI Agent is integrated (a few kbytes of code), which communicates with the VPI cloud. These connections can then be used transparently from any cloud applications of the customer. From this great transparency, especially OEM customers will benefit.