Virtual Machines, Physical USB License Dongles:
How One Estimating Firm Bridged the Divide and Ran Expensive, Dongle-Protected Software from the Cloud
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The Premises

A British Columbia start-up, ESP Estimating offers their clients (electrical contractors) across Canada a cloud-based, custom estimating database through a monthly subscription fee. Clients create their own estimates using the ESP custom database. ESP also provides estimating and consulting services when their clients are overloaded and can’t meet deadlines to submit estimating bids.

The Platform Pieces

In composing their estimates, the client uses a third-party software platform called Accubid. While Accubid’s platform includes a standard database of 10,000 per-built electrical assemblies, ESP’s custom Accubid database brings that number to 285,000. The electrical contractor client purchases software directly from Trimble, Accubid’s vendor, and pays ESP a monthly fee to run the custom Accubid database from ESP’s cloud platform.

Accubid is a specialized installed software, costing over $4000 per license, and is meant to be run on a single PC or a networked server. Proof of license is constantly confirmed by pinging a physical USB dongle inserted in the PC or server at each electrical contractor’s location. To run Accubid, the estimator is required to work from a physical PC with the USB licence plugged into it on the local network.

The Plot

ESP and its cloud provider, BC-based Welcome Networks, spent four weeks trying to find a way to „redirect” the dongle to grant access to Accubid on the estimators’ remote desktops. But the Sentinel dongles involved, made by Gemalto, wouldn’t work with pooled, session-based remote desktops. Requiring a one-to-one, PC-to-dongle connection, the Sentinels did, however, work with SEH Technology’s myUTN-800 dongle server and user-dedicated, virtual PCs.

Now, with up to 20 dongles plugged into the networked dongle server, an admin can assign a USB port to each virtual machine, using SEH’s own interface. Each virtual machine then makes the connection to the dongle server and presents the license to the Accubid software for verified access. Each of ESP’s clients sees only their own specific Accubid licenses that have been purchased, providing a completely secure isolated environment for each contractor.

The Problem

ESP requires a cloud environment and virtual machines to update, deliver, and maintain a seamless client experience running its custom database. But virtual machines don’t have USP ports. They can’t accept USP dongles. (A side issue, these small devices are frequently lost or stolen as they are passed around contractors’ offices.)
The Payback

The electrical contractor receives savings through efficiencies by using the ESP custom database and services. He or she can seamlessly access all purchased Accubid licenses across a geographically distributed and mobile workforce, including owners, estimators, and project managers. Once the user has finished using the Accubid software and the connection to the dongle is deactivated, the dongle is free to be used by another user. This principle is applied to any copy-protected software. It ensures that customers are always on the safe side with the SEH myUTN-800, because the software license regulations are never circumvented. Furthermore, by storing the dongles securely and centrally in the locked dongle server, they are safe from loss, damage, wear and tear, and theft.

The advantages

› 20 software license dongles via USB 2.0 Hi-Speed ports
› VLAN capable
› User authentication
› Easy dongle management
› 2 × power supply (redundant design)
› SD card interface for configuration backup
› Simple browser-based configuration, administration and maintenance
› VLAN capable (IEEE 802.1Q)
› Regular software updates & free worldwide technical support
› Telescopic slides (RMK 3) for server room installation

Case study company

ESP Estimating is an estimating and consulting company providing services to small to mid-size electrical contractors across Canada. The company is headquartered in Victoria B.C Canada with a diverse team of local and remote senior estimators and field production consultants. ESP offers their clients a cloud based custom estimating database through a monthly subscription fee. The client creates their own estimates using the ESP custom database. ESP also provides estimating and consulting services when their clients are overloaded and can’t meet deadlines to submit estimating bids or require project delivery improvements. Our senior estimators and consultants bring value by providing small/medium size electrical contractors:

• Estimates with increased efficiency and accuracy through our estimating cloud platform using remote desktop technology
• Training/Assisting estimators - Developing innovative estimating strategies to achieve the next level of growth
• Mentoring and consulting beyond the estimate to increase information transfer for enhanced project delivery through our field production consultants

SEH Technology

SEH Technology is a vendor of professional network solutions. With more than 20 years of experience in the field SEH is a competent solution provider for network printing and USB virtualization for all professional environments.

SEH Technology offers a broad product portfolio: the mobile printing solution primos, a broad range of internal and external print servers for all common networks (Ethernet, Gigabit, fiber, WiFi), hardware solutions for ThinPrint and personal printing solutions by Cortado, SEH myUTN device server for accessing, managing, and administrating USB devices via the network (USB-to-Network), and network solutions for efficient spooling management (ISD product series).

Headquartered in Germany, SEH operates across Europe, Asia, and North America via an extensive network of partners, distributors, and resellers. The U.S. headquarters is located in Phoenixville, PA.