◯ WOORI BANK

Intel® vPro® Technology for Woori FIS of Woori Financial Group

Overview

Banking customers can efficiently and quickly manage their PCs, including power control of remote PCs and processing most issues from a remote location, using the out-of-band feature of Intel® Active Management Technology (Intel® AMT), a key technology provided by the Intel vPro® PC.

This case study was conducted to confirm the management efficiency of financial work PCs through Intel® vPro® AMT in cooperation with Woori FIS of Woori Financial Group, a leading financial institution in Korea, Intel, and Dell Technologies.

Verification Function

1. Remote Configuration
2. Power Control of Remote PC
3. KVM(Keyboard Video Mouse) Remote Control
4. Hardware Asset Information
5. Event Log

Test Equipment

Dell 7080 vPro® Desktop, Dell R740XD Server

Test Software

Intel® Setup and Configuration Software,
Intel® Management Commander, Microsoft SCCM

Detailed Test Item

1. Remote Configuration

① Test description: BIOS (MEBx) for AMT must be set to use the Remote Configuration: AMT function. Remote Configuration allows for the automatic setting of each MEBx item of a remote vPro® PC in the network. For this remote configuration, the Virtual Machine (VM) where Microsoft SCCM and Intel® Setup and Configuration Software are installed and operated in the Windows server is configured.

② Test result: It is confirmed that the "Discover and Report" and "Remote Configuration" packages are sent to the vPro® PC. In addition, the profile created in SCS is automatically sent to the vPro® PC through Microsoft SCCM.Furthermore, after Remote Configuration, it is confirmed that the connection of the vPro® PC to the Intel Management Commander is normally performed.
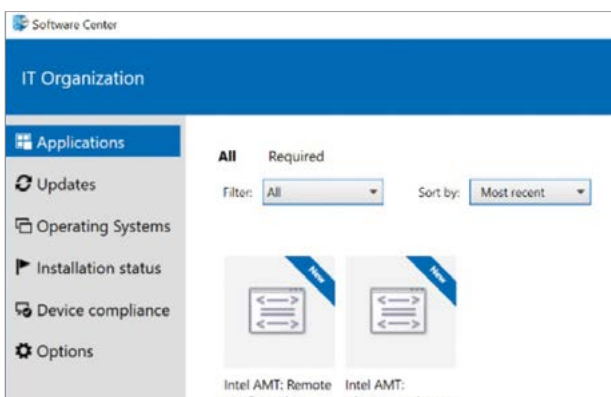
2. Power Control of Remote PC

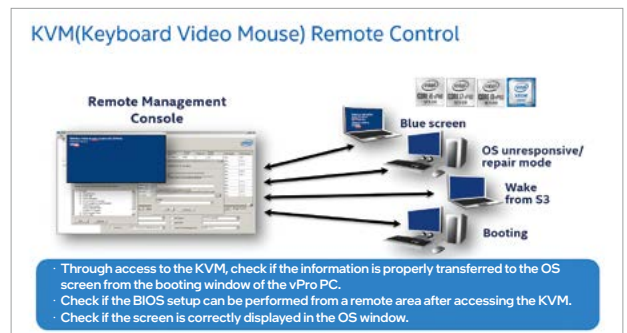③ Test description: Turn ON/OFF a vPro® PC from a manager PC.
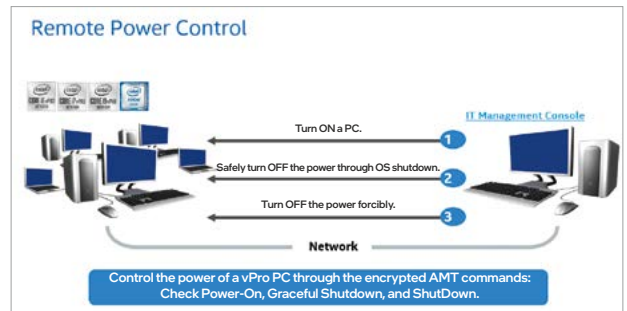
④ Test result: A vPro® PC is successfully turned ON/OFF from the manager PC. The ON/OFF (booting) screen can be displayed through the KVM.
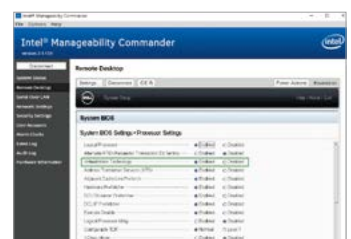

3. Keyboard Video Mouse (KVM) Remote Control

⑤ Test description: The vPro® PC screen is also displayed in the manager PC so that the remote PC can be controlled.
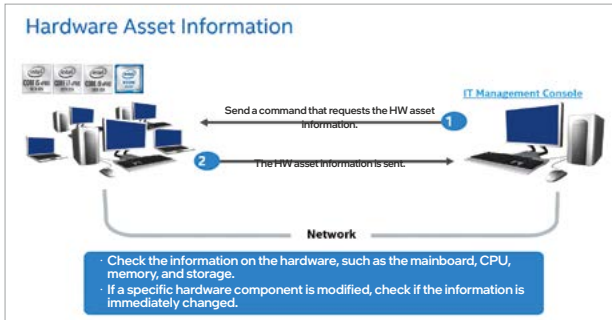

⑥ Test result: The KVM session is connected from the manager PC to the vPro® PC, and the configuration can be modified in the BIOS screen of the vPro® PC on the KVM.

4. Hardware Asset Information

⑦ Test description: From a remote area, check the detailed information on the hardware provided by AMT, such as the board, CPU, memory, and storage.
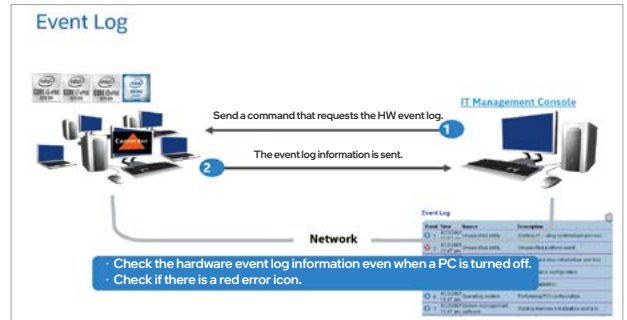

⑧ Test result: The detailed information on the vPro® PC BIOS, CPU, and memory is displayed. In the case of memory, even a linked bank number and part numbers are displayed. Thus, if a hardware component has a problem, an alternative component can be immediately checked from a remote area.
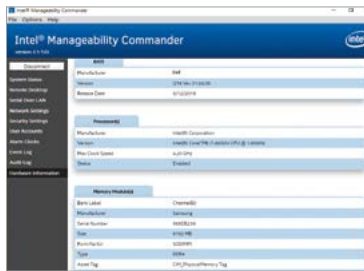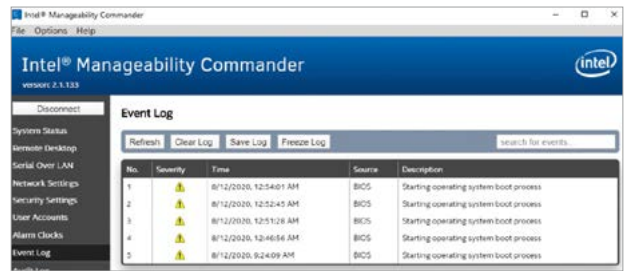

5. Event Log

⑨ Test description: Check the hardware event log provided by AMT.

⑩ Test result: Even though a PC is turned off, hardware log records generated from the vPro® PC can be checked. If a red error occurs, it is expected that a detailed check of the log can allow for preemptive management.

Woori's FIS IT manager said,

"With the hardware asset function provided by the Intel® vPro® technology, a manager can check information on PC assets, such as the mainboard, CPU, memory and disk model name, serial number, installation bank, and BIOS version, from a remote location in real time. In addition, when a hardware issue occurs, the faulty hardware component can be checked through event logs, and an alternative component can be prepared in advance. Thus, it can be applied to handle the issue of the remote PC. It is remarkable! In particular, I think this function is useful in contactless work processes, which is required amid the COVID-19 pandemic."

In addition, although there is no IT manager in the field, the following test result is shown.

"PC assets distributed in remote places such as branches and offices can be checked in real time, helping identify the current asset status of a system and replaced equipment. In addition, with the H/W-based security support and independent operation of the OS, the PC assets can be managed without any effects on the PC's S/W environment. With contactless communication between workers brought about by COVID-19, the primary remote fault processing can reduce the number of field visits and necessary costs." The vPro® technology provides benefits to financial institution customers.

Conclusion

Through the Intel® vPro® PoC case study of Woori FIS, a leading financial IT firm in Korea, it has been confirmed that AMT, a key function of vPro®, can provide an efficient PC management / problem solution to the financial IT environment. Financial institutions can monitor the PC assets of their remote branches through the Intel® vPro® technology, primarily diagnose issues generated remotely, and take actions against them to reduce field visits. In addition, it has been assessed that PC operating costs and time spent in dispatching service personnel can be reduced, and service personnel safety can be improved amid the COVID-19 pandemic.