



落馬洲管制站的香港海關人員偵破一宗走私案件。在一輛出境往內地的貨櫃車內，檢獲六部已拆散的私家車。（資料來源：香港海關年刊2005-2006）
C&ED officers of Lok Ma Chau Control Point detected a smuggling case in which six dismantled private cars were seized from a container truck departing for the Mainland. (Source: C&ED Departmental Review 2005-2006)

延續億元 X光系統的壽命

Life of Hundred Million Dollars X-ray System Extended

機電署人員利用虛擬機器技術，延長香港海關一個用以探測違禁品的重要系統的壽命，讓它繼續發揮功能。

香港海關自2003年起使用固定X光車輛檢查系統（X光系統）在落馬洲管制站堵截違禁品。落馬洲管制站是香港最繁忙的陸路邊境管制站，在2012年內，在該處過境的車輛數目超過900萬架次。

在投入服務近十年後，X光系統的電腦硬件已經過時，而控制軟件也只能在裝設該種硬件的舊版本電腦作業系統下運行。此外，製造商亦已停止支援該已過時的電腦硬件和軟件。一旦電腦發生故障，香港海關可能要暫停X光系統的運作，嚴重影響到落馬洲的邊境管制服務。

為支援X光系統繼續提供服務，機電署進行研究，利用虛擬機器技術在新的電腦硬件上模擬X光系統的舊有軟件作業環境。我們成功應用這項技術的同時，亦解決了過時電腦硬件和軟件日後的維修保養問題。

應用虛擬機器技術的費用為數十萬元，這不但延長了一個價值億元X光系統的使用年期，也讓香港海關有更多時間籌劃將來系統的更換。

The service life of a crucial system used by the Customs and Excise Department (C&ED) to detect contraband has been extended through the application of Virtual Machine Technology.

Since 2003 C&ED has been using the Fixed X-ray Vehicle Inspection System (X-ray System) to intercept contraband at the Lok Ma Chau Control Point, the busiest of Hong Kong's land boundary control points where over nine million vehicles were transited in 2012.

After nearly ten years of service, the computer hardware for the X-ray System has become obsolete and the control software can only be executed on the old version computer operating system installed with the hardware. Moreover, the manufacturer has discontinued support for the obsolete computer hardware and software. In case of computer failure, the operation of the X-ray System may be suspended causing serious impact to the border control services at Lok Ma Chau.

In order to support the continued service for the X-ray System, EMSD explored and applied the Virtual Machine (VM) technology to simulate the old software operating environment at the newly upgraded computer hardware for the X-ray system. The success of this application has also solved the future maintenance problem for the obsolete computer hardware and software.

This several hundred thousand dollars VM technology project has not only extended the service life of a hundred million dollars X-ray System, but has also allowed more time for C&ED to plan for future system replacement.



我們利用虛擬機器技術，成功延長了落馬洲管制站X光系統的壽命。
Our staff successfully applied the Virtual Machine technology to Lok Ma Chau Control Point Fixed X-ray System to extend its life span.