

Hong Kong University of Science and Technology

HIGHER EDUCATION

The Hong Kong University of Science and Technology (HKUST) has earned an international reputation for research since it was founded in 1991. In 2001, viruses and spam were becoming an increasing problem for its 10,000 email users and a hard-pressed IT department. The university found the ideal solution with PureMessage, which now protects students and faculty staff, while giving them individual control over spam filtering.



Business challenge

In just a decade, the Hong Kong University of Science and Technology (HKUST) has established its reputation as an international research university, specialising in science, engineering, business humanities and social science. Founded in 1991, it is the only institution of its kind in the region, and the only one with an all-PhD faculty. The university occupies a purpose-built 60-hectare campus in East Kowloon, about 30 minutes' drive from central Hong Kong.

With over 7,000 students and about 2,000 staff, HKUST has nearly 10,000 email users and processes up to 140,000 emails a day. In 2001, the mounting problems of viruses and spam presented the university's IT department with a seemingly uphill task to find a solution. "Our professor was getting annoyed with the virus problem and we had to solve it before it became too big for us to handle," says the director of the Information Technology Services Center at HKUST, Lawrence H Y Law.

Key facts

Organisation

Hong Kong University of Science and Technology

Headquarters

Kowloon, Hong Kong

No of users

10,000

Email traffic

100,000 plus per day

Servers

2 Pentium III, FreeBSD

Solution

PureMessage for UNIX

"We could not find the kind of filtering flexibility offered by PureMessage in any other anti-spam solution."

*Lawrence H Y Law,
Director, Information Technology
Services Center, HKUST*

He explains, "The spam problem continued to worsen. Many of our users complained of receiving too much garbage. At that time, close to 30% of emails received by individuals were spam." Law adds that most of the unsolicited email was offensive and that this would have adversely affected the university's reputation.

Technology solution

After an extensive search and consultation with other vendors, the IT department found that PureMessage was the only anti-virus and anti-spam solution that met its requirements.

One of the reasons why HKUST chose Sophos PureMessage was its ability to detect and differentiate particular types of spam. "Most products just determine what is spam and what is not. But as a university we need to have a system that will suit the needs of different users. Hence we wanted a solution that could help to calculate spam probabilities for individual users," explains Law.

PureMessage allows users to set their own spam defaults, based on the probability of messages being spam, at a level they feel comfortable with. For example, this could be set at the neutral level of 50% and modified after a period of testing for accuracy. Emails that are thought to be spam would be put into a spam folder. The user can access this to look for any legitimate emails, and change the level based on its accuracy.

According to Law, early tests found only one or two legitimate emails in the spam folder. "We really appreciate this aspect of PureMessage. It also adapts to the user's interests and can be fine tuned to distinguish legitimate emails from spam more accurately."



He continues, "Yet another PureMessage feature we like is the option to be included in or excluded from some marketing mailing lists, providing us with additional choice and flexibility. Furthermore, the spam filter can be set at either the server or client level."

HKUST installed PureMessage on its Sun ONE Messaging Server solution running FreeBSD, and the multi-threading capability of two Pentium III machines ensured excellent reliability.

The solution was initially offered to staff who wanted to test it, then to other members of staff who heard about the good reviews, and eventually to all users on the campus. Law says, "We were cautious about exposing our senior management staff to PureMessage, but when they heard about the product, they tested it and loved it."

Business results

By 2003, spam accounted for 50% of email received by HKUST. Since rolling out PureMessage to all users, the IT department has had a lot fewer complaints to handle, whether about spam or viruses. Law confirms that the virus protection offered by PureMessage is no less important. "During the recent outbreak of the Sobig-F virus, which created up to 180,000 emails a day, PureMessage was very effective. We were able to prevent the virus from entering our email gateway server and did not have any network problems, unlike other organisations," he says.

So satisfied is HKUST with PureMessage, the university has no plans to consider an alternative. "We are very happy and comfortable with the product. Its scalability means we won't have a problem with handling even more users or emails in the future," remarks Law. PureMessage has enabled the IT department to achieve its goals – and it can now focus resources on solving other IT problems.



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