# Overcome Obstacles When Deploying PKI
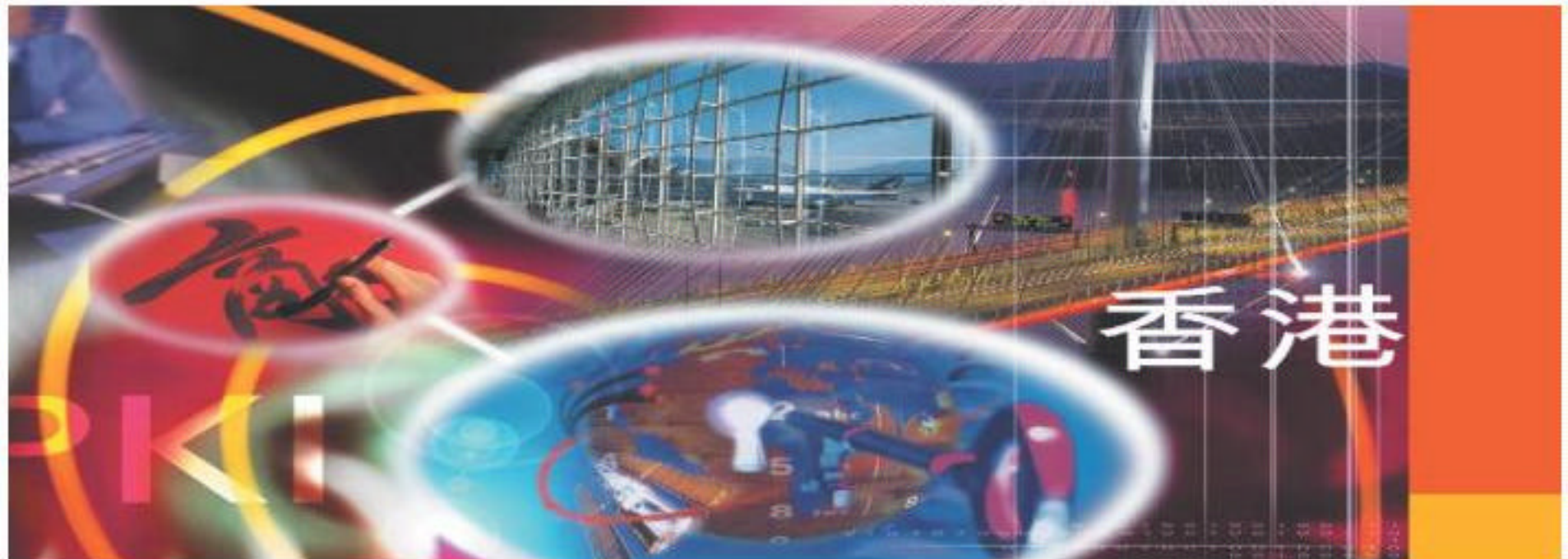
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# ASIA PKI Forum
## Overcome PKI Deployment Obstacles

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# Agenda

- **PKI technology and business benefits**

- **Deployment related obstacles**

- **Closer look of obstacles and ways to manage obstacles**

- **Area where Return of Investment can be gained**

- **Review of Key success factors**

- **Q & A**

# The Technology and Business Benefits

- **PKI is an Infrastructure rather than a specific technology**

- **Various components together provide the ability to deliver:  Authentication, Confidentiality, Integrity and Non repudiation**

- **Infrastructure is not valuable unless business processes are supported**

- **What are the business benefits ?**

# Deployment related Obstacles

- **Lack of Software Application**
- **Cost  too High**
- **Poorly Understood**
- **Lack of Interoperability**
- **Too Complex to build**
- **Difficult to use**
- **Lack of Management Support**
- **Too much Legal Work**

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# Closer Look at Obstacles

| Obstacles | How to Manage |
|---|---|
| Software applications | Over time, many applications become certificate aware. Vendor respond to business need |
| Cost Too High | Industry respond to streamlining the need for complex requirement and thus drive down the cost |
| Poorly Understood | Continued education at the senior management level. Emphasize on the business benefits rather than technology play |
| Poor Interoperability | Industry to standardize related protocols and ensure vendor are in sync |

# Closer Look at Obstacles

| Obstacles | How to Manage |
|---|---|
| Too Complex | Industry and vendor starting to address practicality and usability including Identrus |
| Difficult to use | Usability should be the number one concern (number of suggestions to share ) |
| Lack of Management Support | Explain benefits in business terms, Management support is absolutely a must |
| Too Much Legal Work | Only when external facing, Internal use can be simplified |

# Area Where PKI usage is most important in terms of ROI (2003 OASIS PKI TC Survey)

- **Document Signing**
- **Web Server Security**
- **Secure E-Mail**
- **Web Service Security**
- **Virtual Private Network**
- **E-Commerce**
- **Single Sign On**
- **Code Signing**

# ROI and Success Factor

**Document Signing**

- **Recognize that digital signature is truly stand up in the court of law**

- **Provide a hosted internal solution for those document require higher level of authorization can speed up the time to market**

- **Start with limited pilot prior to mass deployment**

# ROI & Success Factor - Cont.

**Secure Web Server**

- **SSL security is universal**

- **For internal facing Web Server, no reason to purchase commercial SSL certs , as a result save expenditures**

- **External facing Web Server, consider linking up to Well Known Root**

# ROI & Success Factors - Cont.

**Secure E-Mail**

- **Exchange confidential information internally and externally**

- **Make sure that it is easy and straight forward for the end-user**

- **Leverage Microsoft Exchange and 2000 infrastructure**

- **Make certificate part of the Exchange Global Address List**

# ROI & Success Factors - Cont.

**Web Service Security**

- **Many common used functions are migrating toward Web Services**

- **Mutual authentication is a must have in that environment**

- **Digital Certificate is the means to enable mutual authentication**

- **An area where usage will increase**

# ROI & Success Factors - Cont.

**Virtual Private Network**

- **Utilize digital certificates to establish VPN**

- **Many of the Remote Access Tool supports the usage of digital certificates**

- **Certificates can act as the strong authentication factor replacing high cost tokens**

# ROI & Success Factors - Cont.

**E- Commerce**

- **A universal Infrastructure allowing the exchange of information from enterprise to enterprise**

- **A set of process, procedures and common customer authentication and validation process which allows the exchange of transaction to take place**

- **PK Infrastructure is the vehicle to make E-Commerce a reality**

- **Consider Identrus**

# ROI & Success Factors - Cont.

**Single Sign-On**

- **Must have Strong Authentication**
- **One Credential which can be recognizes cross platforms**
- **Digital Certificates is one of the vehicles to make that a reality**
- **Start with the common few and expand**

# ROI & Success Factors - Cont

**Code Signing**

- **Microsoft 2000 require document/excel spreadsheet to be digitally signed**

- **Internally issued certificates can save money and time**

- **Custom wrapper such as renewal and distribution process can be of great assistance**

- **Communication and training are just as important**

# Q & A

- **Share Experience and lesson Learned**
- **Answer any question regarding the material**
- **Others**