

# RISK MANAGEMENT FOR REAL PKI

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## The Challenge

Legacy technology

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## The Challenge

New technology

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## The Challenge

Traditional business

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## The Challenge

e-business

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## The Challenge

**Value creation**

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## The Key

Trust Trust Trust!  
Trust Trust Trust  
Trust

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## Risk Audit

- Assess potential benefits of e-business
- Identity e-business risks
- What level of risk exposure is viable
- Manage risk:
  - understand existing business processes
  - what has worked in the 'real' world
  - can you duplicate these on the Net?

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## Managing Risk

- Authentication – proof of identity
- Authorisation – permission to do something
- Administration – rules, regulations & procedures
- Audit – control and monitor

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## Solution

- Security protocols (SSL, RSA, etc.)
- Digital certificates (few or many)
- Rules and processes

**Public Key Infrastructure (PKI)**

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## Areas of Responsibility

- Issuing Authority
- Registration Authority
- Certificate Authority

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## Issuing Authority (IA)

- The owner of the PKI
- The owner of the Root Key
- Creates the Issuing Policy
- Approves the Registration and Certificate Authority

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## Registration Authority (RA)

- Responsible for validating applicants in accordance with the rules issued by the Issuing Authority
- Forward authenticated applications to the Certificate Authority

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## Certification Authority (CA)

- Obey the rules imposed by Issuing Authority
- Receives applicant data ensuring authentication has been validated
- Creating end-user Digital Certificates
- Passing Digital Certificates to end user

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## Certification Authority (CA)

- Management of the CRL
- Management of the Certificate Registry
- Management of Certificate renewals
- Technical Support

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## Keep Control

- Rules and processes that enable trust
- Flexibility to change
- Brand

and subsequently...

- How you do business
- How you are seen to do business

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## Legislation

- Legislation
  - E-commerce Bill
  - EU legislation
- Self-regulation
- Country-specific regulations

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## The Auditors are Coming!

- Turnbull report – demands the implementation of systems that deal with risk
  - Code now part of Stock Exchange's listing requirements
- Internal and external auditors will check!
- Rules, regulations and processes must be in place before technical implementation

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## Choosing a PKI Partner

- Protects your control
- Ensures your flexibility
- Reduces your managerial and financial overheads
- Has established skills and experience (Internet and 'real' world)
- Will be around in the future

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## In Conclusion

- Understand the role of trust in risk management
  - Assess the level of risk that is appropriate to the business function
- Is a PKI a suitable solution?
  - If so, maintain control
- Implement rules and procedures prior to technical implementation
- Choose your PKI partner carefully

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the home of digital trust



**Security and trust are  
essential to your business**

**but how**

do you manage security and trust

**on the Internet?**

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