

## CACert and the Audit



# CAcert and the Audit



- To get CAcert Root into Browsers
  - => Audit is required
  - => which requires:
    - management
    - policies + practices
    - review of business & systems
  - => against policies and practices!

# CAcert and the Audit



CAcert has three major business areas:

- a) Assurance
- b) Systems
- c) Community

## c. Audit and Assurance



# Audit - Assurance

## a. Assurance

- Assurance Policy is in full POLICY status
  - It is **binding** on all Assurers
- The process of Assurance can be reviewed.

# Audit - Assurance

- a.i Three major processes for Audit:
  - CATS Assurer Challenge
  - ATE – Assurer Training Event.
  - Co-audit

# Audit - Assurance



## CATS Assurer Challenge

- CAcert Automated Testing System
- 25 multiple-choice questions, 80% to pass.
- You can do it as many times as you like
- Sets a minimum standard

# Audit - Assurance

## Assurer Training Event

- ATE is here today!
- 20 so far in Europe
  - Germany, Innsbruck, Belgium, Denmark, Paris, London, Prague, Budapest
- Tells you what you need to know
- Highly recommended



# Audit - Assurance

## Co-Audit

- You assure the Co-Auditor
- Collect Evidence of Assurance-to-policy
- verifies quality of assurance:

*“A.2.y The CP details how the CA verifies that*

*RAs operate in accord with the CA's policies.*

- (Also: lots of feedback)

# Audit - Assurance

- a.ii Detailed Changes to Assurance
  - Member statements
    - „Information is correct”*
    - „I agree to CCA”*
  - Assurer states:
    - „was conducted to Assurance Policy”*
  - CARS: CAcert Assurer Reliable Statement

# Audit - Assurance

## a.iii The review of Assurance

- ✓ 2009 February – June evidence gathered
- x Audit terminated for other reasons.
- Possibility of Assurance Review late 2010

## b. Audit and the Systems



# Audit - Systems

## b.i Systems Review required:

- secure hosting: Oct 2008.  
(Teams, Facility, Machines)
- Security Policy: March 2009 p20090327
- Software  
(CPS: July 2009 p20090706, Teams)

# Audit - Systems

## b.ii Systems now has

- Teams: critical sysadms, access engineers
- Security Policy in DRAFT status

*Binding on critical roles:*

*Sysadms, Access Engineers, Support, Software*

- Systems in secure facility: BIT Ede, NL.

# Audit - Systems



## b.iii Issues to resolve:

- Non-critical systems - underway
- Roots - planning
- Disaster Recovery - thinking
- Team size – need more capacity

# Audit - Systems

## b.iv Software

- Review at Innsbruck April 2009:
  - „Serious difficulties in maintaining, improving and securing.”
  - „Cannot form conclusion over software.”
- Track 1: New software development team, new design, new build: “BirdShack”
- Track 2: Old software in “maintenance mode”



## c. Audit and the Community



# Audit - Community



The audit criteria:

**DRC** for "David Ross Criteria".

- David is a retired quality engineer
- He started CAcert's Audit in 2005
- Was called to Grand Jury duty

# Audit - Community



DRC has a strong feature. It requires the

- **R**isks,
- **L**iabilities, and
- **O**bligations

to be clearly stated to everyone!

# Audit - Community



This raised several huge barriers for the CA:

- what exactly are the **R/L/O**?
- who do they apply to?
- are they reasonable?
- and, how do we deal with them?

# Audit - Community



The barrier of R/L/O is subtle:

- DRC doesn't ask them to be fair, but
- disclosure makes us consider them, and
- Cacert people want things to be fair!

which means *we have to deal with them!*

# Audit -Community



*One big result of this thinking process  
was that we required a:*

**CAcert Community Agreement**

*and.....*

# Audit - Community



The **CCA** had to do these things:

- a. make us into a mutually-binding Community.
- b. state the R/L/O
- c. limit the liabilities → 1000 Euros
- d. allocate the liabilities → back to the Members

# Audit - Community



How do we allocate the liabilities?

→ By making our own forum of dispute resolution

*„Arbitration”*

→ agreeing to be bound to that resolution,

*CAcert Community Agreement 3.2*

→ writing a Policy to control that process:

*Dispute Resolution Policy*



# Audit - Community



Summary: The original “Why” of Arbitration:

- Audit (DRC) forced *disclosure* of Liabilities
- simple fix: *limiting*
- complex fix: *allocation*
- the safe and cheap way to allocate is:

to use our own Arbitration

(Last section discusses „How“.)

## d. Back to the Audit



# Audit - Past

Audit went into high gear early 2009, but:

- Lack of capacity
- Overruns in time
- Lack of funding

Audit terminated July 2009

# Audit - Future

## What is Community doing next?

### → Rebuild Software

*as with: Assurance, Arbitration, Support, Systems, Management*

### → Push Audit Work to the Community

*Only the Community has the scale and capability*

### → Prepare for Review over Assurance

*Today, your chance: ATE!*

### → Funding!