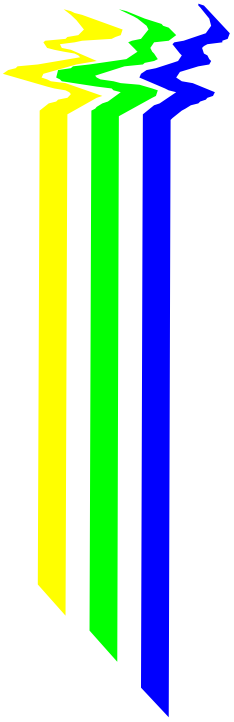
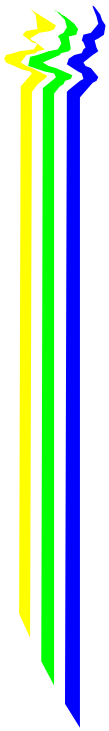


DFN-CERT GmbH

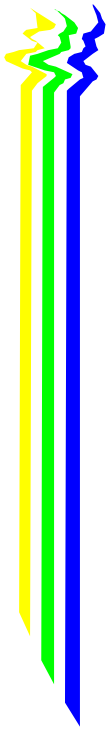
German Research Network

Computer Emergency Response Team



Agenda

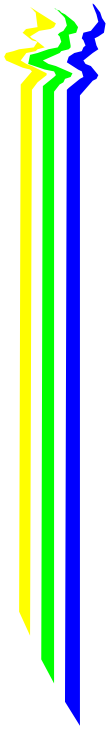
- Team history
- Portfolio
- Team structure
- Incident Handling at DFN-CERT
- Open issues



DFN-CERT History

In the beginning ...

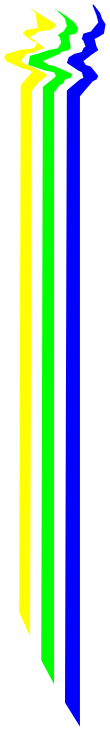
- 1993:
  - Start of DFN-CERT Project at
  - University of Hamburg, Dept. of Computerscience
  - 2 FTE
  - FIRST membership
- July 1994:
  - 3 FTE



DFN-CERT History

More work – more projects

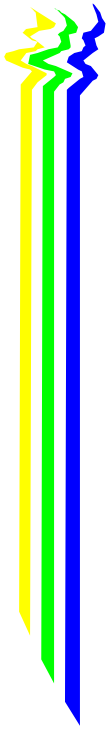
- 1995:
  - TERENA Task Force “CERTs in Europe”
- 1996:
  - DFN-PCA as additional project
- 1997:
  - DFN-FWL as additional project



DFN-CERT History

Now

- Jan. 1999:
  - Start of DFN-CERT GmbH
  - Non-profit
- End of 2000:
  - DFN-CERT: 3 FTE
  - DFN-PCA: 1 FTE
  - DFN-FWL: 1 FTE



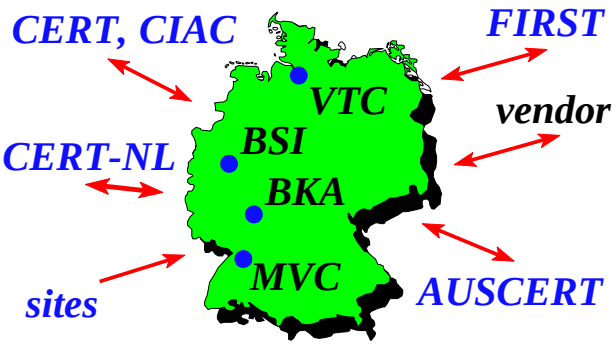
The Constituency

Members of the German Research Network

- Deutsches Forschungsnetz - DFN / German Research Network
  - ATM network (B-WiN) migrating to
  - IP over SDH network (G-WiN)
- More than 400 members
  - Universities, libraries, schools, ...
  - Research institutions like GMD, Max-Planck, Fraunhofer, DLR
  - Public funded agencies
  - Industry (research only)

Coordination in Germany

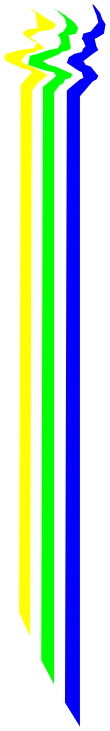
Central role of DFN-CERT



Basic services

of DFN-CERT GmbH

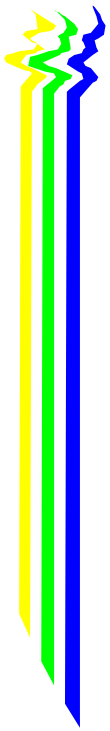
- Information
  - Councelling
  - Public information services
  - Advisories, security bulletins, . . .
- Emergency response
  - Support
  - Information and coordination
- Events
  - Workshops and Tutorials
  - Classes for students at Univerity of Hamburg



Optional Services

of DFN-CERT GmbH

- Individual chargeable services
  - Risk analysis
  - Security concepts
  - Product evaluation
  - Individual employee training
  - Expertise
  - On-Site support
  - Help in establishing and operating of ERTs
  - Individual help in establishing and operating certification authorities (DFN-PCA)

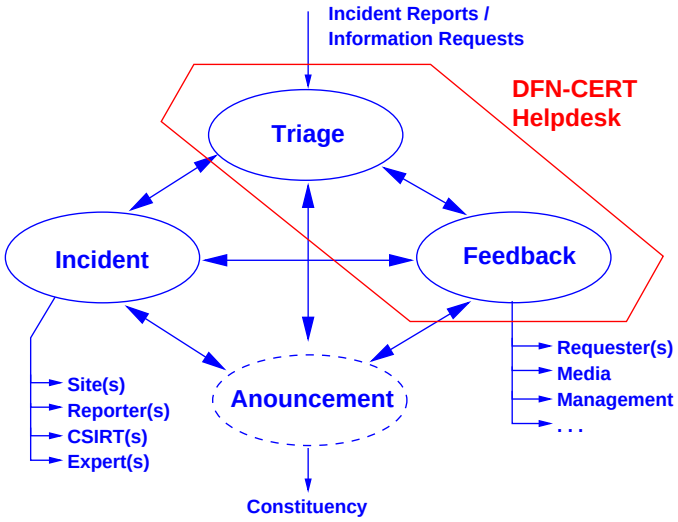


Internal Structure

- DFN-PCA, DFN-FWL, DFN-CERT
  - Autonomous teams
  - Common infrastructure (network, servers)
- Common Helpdesk for DFN-CERT and DFN-PCA
  - ONE defined point of contact to constituency
  - Similar tasks supported by one tool

Internal Structure

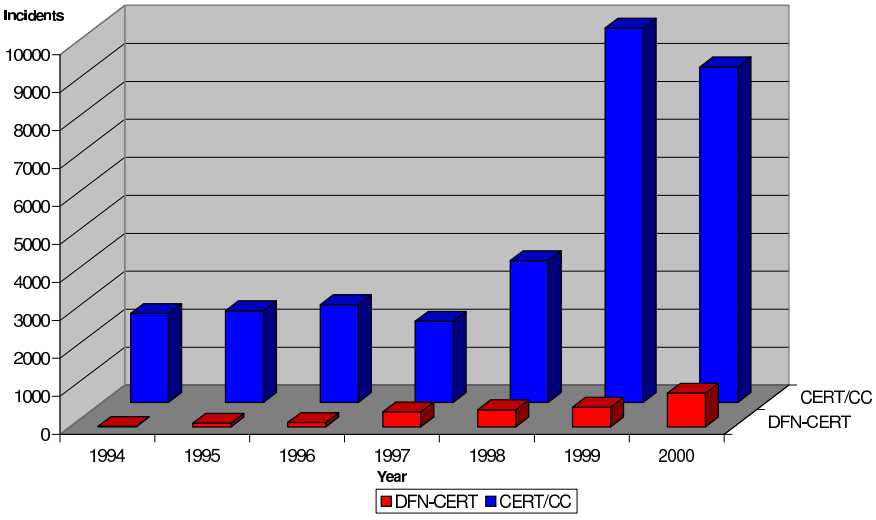
Putting it all together

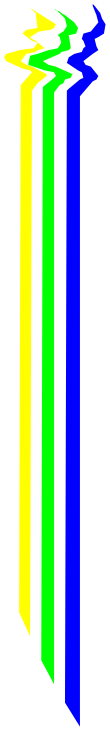


from: CMU/SEI-98-HB-001

Incidents

Statistic

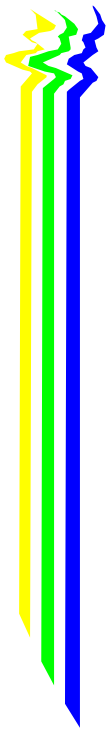




Incidents

Classification

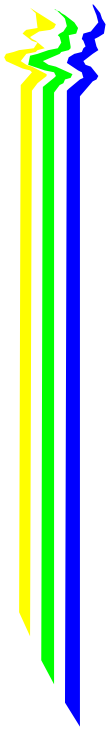
- Incidents by operating system
  - 95 % Unix
  - 5 % Windows (and rising)
  - almost nothing else
- Incidents by report medium
  - 80 % reported by e-mail
  - 19 % reported by phone
  - 1 % Fax, walkin, postal mail



Incidents

Classification (2)

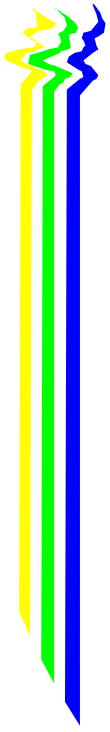
- Incidents by priority
  - Classification by severity
  - Simple numbering scheme
- Severity
  - Peoples health and lifes
  - Potential damage of attack
    - Rights gained by attacker
    - Number of hosts affected



Incidents

Classification (3)

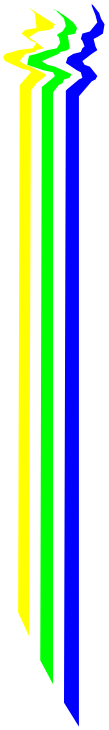
- Incidents by type
  - For statistics
  - For correlation
  - Basis for priority classification
  - Work in progress



Incidents

Workflow

- First contact with: Helpdesk
- Weekly shifts for triage
  - Classifies incident
  - Handles incident or
  - Assigns incident to coordinator
- Final resolution of incident outside weekly shift



Problems

to be solved

- Legislation
  - Privacy issues
  - Anti-Crypto laws
- Common reference framework
- Databases
  - Trust
  - Completeness