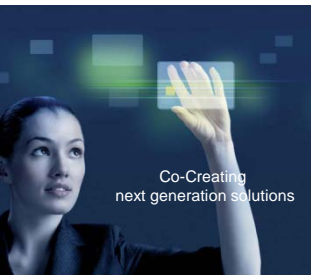


SnT Partnership Day

May 10th , 2012

Manuel Fischer



Co-Creating
next generation solutions



Cetrel a Leading Bank Card Processor in Luxembourg

- CETREL offers comprehensive solutions for cashless payment transactions for card issuers and card acceptance
- CETREL growths geography is in- and outside of Luxembourg
- CETREL figures:
 - 2009: 50% of CETREL is owned by SIX Group AG
 - 2011: 200 employees, turnover more than 60 mio EUR, more than 2.5 mio payment cards, over 70 mio/year payment transactions

CETREL is partnering with SnT in a research program
« **Security in Cashless Payment Transactions** »



Software Testing: Reduction of Time To Market

Objectives to reach:

- Very best availability and reliability for our customers
- Shorten drastically the Time To Market
- Cope with fast changing software development cycles
- Cope with iterative software development methodologies

Research approach:

- Implementation of sophisticated statistical models to reduce number of tests
- Automating the test case development using verbal functional specifications as input
- Running the test cases with generated test data for batch and real time transactions
- Automated test defect analysis



Network Security: Assurance of Resilient Network Services

Objectives to reach:

- Protecting CETREL's systems with leading edge approaches from malicious attack
- Protecting CETREL's systems with strong analytical techniques from intrusion
- Identification of potential threats at the earliest stage

Research approach:

- Developing of proactive technologies which scans for new patterns of attack
- Developing of automatically generated and applied counter strategies
- Identification and capturing of attackers behavior, tools and malware through 'self learning' data analysis techniques



Card Risk Management: Assurance of Safe & Secure Transactions

Objectives to reach:

- Leading edge levels of trust in e-payment solutions
- Automated process through multi-dimensional data analysis techniques to identify when transactions are outside the normal pattern
- Improvement of the level of risk management and reduction of the related costs

Research approach:

- Implementation of sophisticated statistical models to identify risk pattern
- Automatically generated and applied fraud prevention strategies
- Identification and capturing of fraudulent behavior through 'self learning' data analysis techniques

