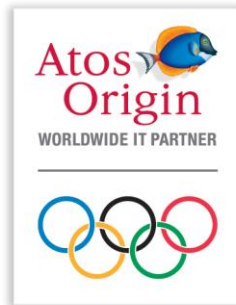


- » BOOST PERFORMANCE
- » REDUCE COST
- » INCREASE AGILITY
- » ENHANCE CRM
- » SHORTEN TIME TO MARKET
- » DRIVE INNOVATION
- » IMPROVE EFFICIENCY
- » INCREASE ADAPTIVITY
- » ENABLE BUSINESS TRANSPARENCY
- » ENSURE REGULATORY COMPLIANCE



Information Security at the Olympics

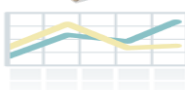
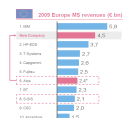
Chris Van Den Abbeeel
Solution Manager ISRM

LSEC, June 6th

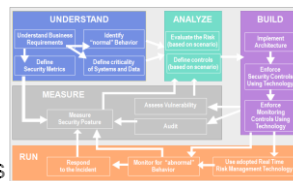
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Agenda



- Atos Origin and SIS
- The Olympics environment
- The IT Project
- Information Security at the Olympics
 - Objectives
 - Methodology
 - Security Operations
- The trend in Information Security at the Olympics



Atos Origin and Siemens IT Solutions and Services



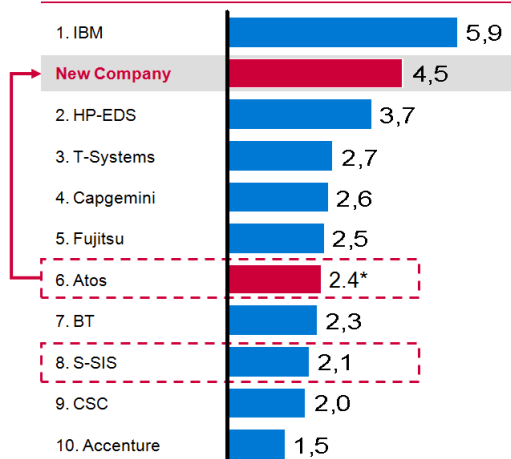
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Creation of a European IT leader



 2009 Europe MS revenues (€ bn)



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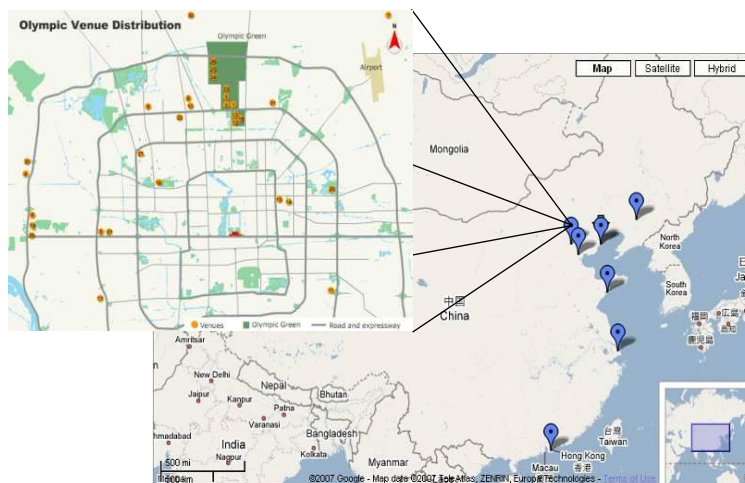
The Olympics environment



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The Olympics environment (Beijing)



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The Olympics environment



230.000 accreditations (Beijing)



40 Venues / 70+ Competition venues (Beijing)



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The Olympics environment



Outdoor



Low temp



High Humidity



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The IT Project



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The IT Project



- Highly visible and critical, no second chances
- Complex project management
 - Leading a consortium of partners and suppliers
 - Company integration with no hierarchical control

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Partnership Management



(Beijing 2008)

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The IT Project



- Highly visible and critical, no second chances
- Complex project management
 - Leading a consortium of partners and suppliers
 - Company integration with no hierarchical control
 - Integration of cultures, ways of working
 - Understand -> Measure/Analyze -> Design -> Build / **Test** -> Run / Analyze
 - Change control – change management
- Complex systems → Massive testing program

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The IT Project



- A robust Information Security strategy
- Huge deployment task in a short period of time

- PC Factory
- Software Distribution

A complex mix of technology, processes and people

A risk-management driven project

- High level of dependency on volunteers
 - Recruiting
 - Training
- Knowledge capture, management and transfer

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The Scale of IT



Sports Events	301	302
Venues / Comp V.	26 / 36	40 / 70+
IT Team	3,400	4,000
PC Workstations	10,500	10,000
Servers	850	1,000
Printers	4,000	2,000
Accreditations	200,000	230,000
Network devices	2,500	1,000

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Information Security



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Objectives



Protect the Games IT infrastructure from any undesired and/or uncontrolled phenomena which can impact any parts of the result chain and associated services

Timing and Scoring Systems



Real time applications (Scoreboard)

**Availability
Integrity**

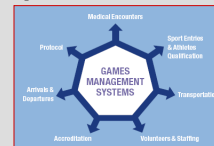
Information Diffusion Systems



Near real time
Feed to the Press & Broadcasters
Remote Services

**Availability
Integrity**

Games Management Systems



Olympics Resource Planning Applications

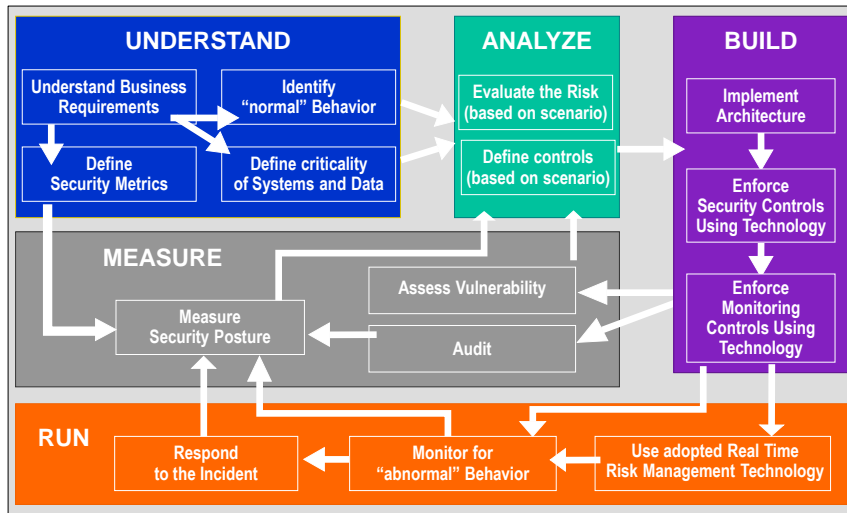
**Confidentiality
Integrity**

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Methodology

End-to-end Information Security



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Risk Modeling



Scenarios: “What – How – What for”

- **What:** describes the threat
- **How:** defines which vulnerability is exploited to break into the target
- **What for:** describes the purpose of the attack

Example of scenario:

A worm is released in the CIS VLAN through OS vulnerability to disturb the commentators



Validation of the scenarios:

- Penetration Testing (TR1 & TR2)
- Security Reviews (Internal AO project team)

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Risk Mitigation Strategy



Qualitative risk measurement

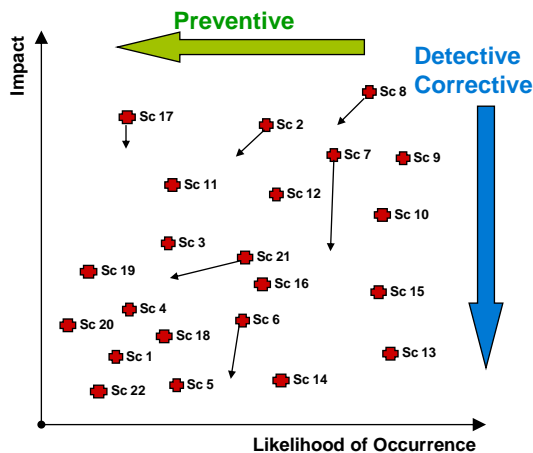
Top down (scenarios) and bottom up approach (from IT)

Consider the following controls for each scenario:

- preventive
- detective
- corrective

These controls become the building blocks for:

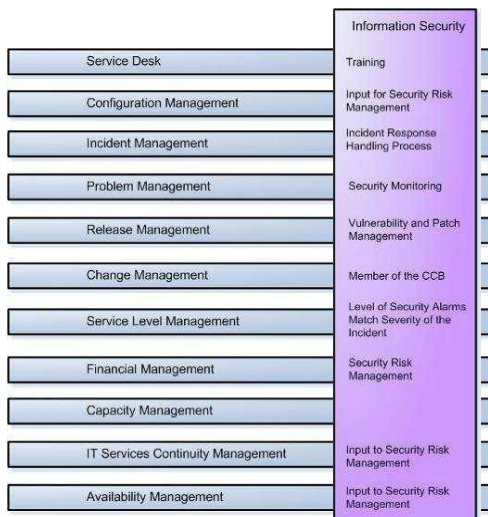
- security policies
- procedures
- architecture
- monitoring



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Integrated Security



- Information Security is not an extra domain
- Information Security is a transversal activity
- Information Security is **integrated** (embedded) with the rest of IT Operations

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Testing and Training



- Applications go through exhaustive integration testing programs.
- Systems undergo technical tests where performance, load and fault performance are tested to their limit.
- Teams are trained following comprehensive programs to be ready to operate the systems and react to different scenarios according to the defined policies and procedures.



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Operations

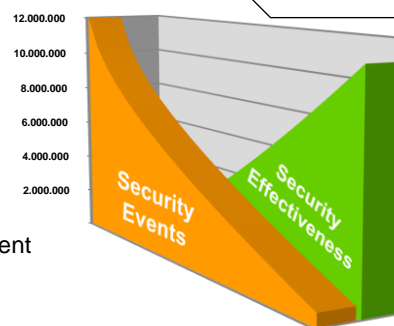


- How to understand over 20,000 security event types?
- How to recognize real threats in **12,000,000 security events / day?**

The solution:

Real Time Security Risk Management

- Implement a Security Information and Event Management (SIEM) solution
- Perform Intelligent Event Processing
 - Active Filtering
 - Aggregation & Correlation
 - Prioritization
 - Real Time Auditing
 - Predefined Incident Management Process

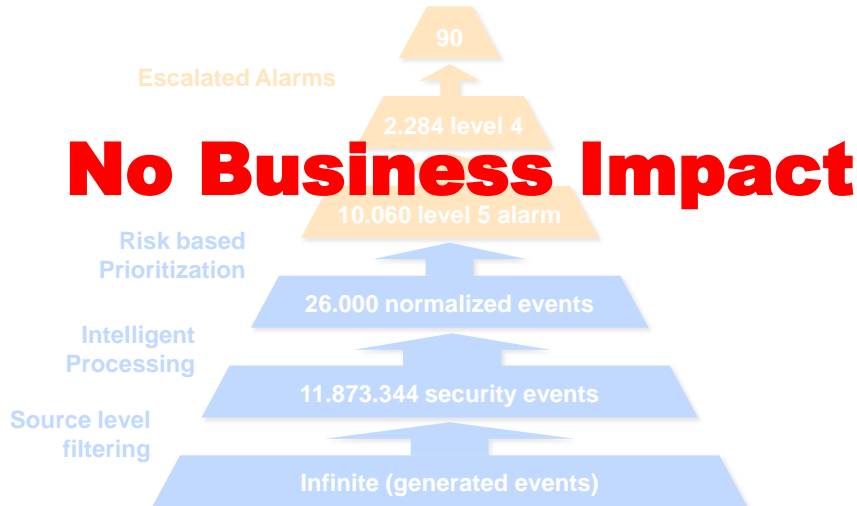


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Results

Security information reduction (daily)



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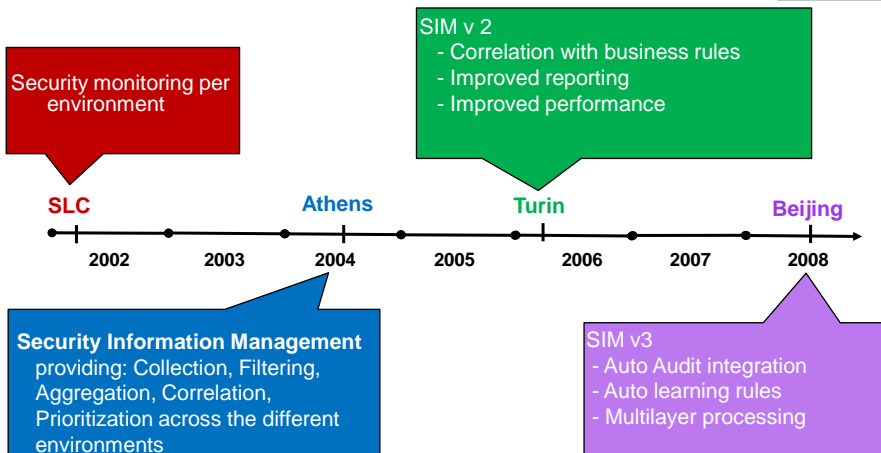
The trend in Information Security at the Olympics



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Security Monitoring

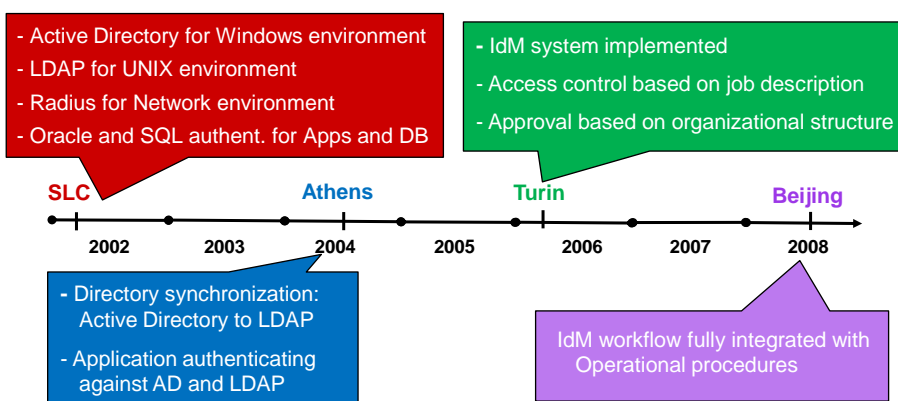


- **Speed: As close as possible to real-time: from minutes to seconds**
- **Relevance: from 3 million events logged to 3 attempts prevented**

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Identity Management

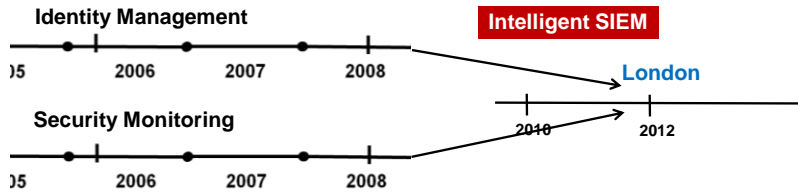


- **Increase consistency: from environment based to job description based**
- **Decrease account creation time: from days to hours**

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Future plans: "Intelligent SIEM"



Security Event information in real time enriched with "intelligence" from *Identity Management*



When we send a Security Guard to investigate, they are no longer looking for an IP address, they are looking for a face

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If we can do it for the Olympic Games, imagine what we can do for you!



Innovation is about 'turning new ideas into real business value'

Download our briefing pack from:

http://lookout.atosconsulting.com/static/downloads/ate_10-10315_lookout2010_v2.pdf

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