THOMAS LIONEL SMETS

CURRENT OCCUPATION

BNP Paribas Fortis

July 2015 - to date

- Senior Security Consultant

Member of the team in charge of monitoring the Quality & Security of applications developed (internally):

- Technical coordination for all the WAVA's on software developed internally (Web application & Mobile android, iOS, WinMobile).
- From managing the planning & scopes with the Security Coordinators to coordinating improvement process but also the day to day operational follow up of the Pen tests.
- In close collaboration with Global Security, set up practical way to meet all the Security the requirements, while not being a blocking factor.
- Ensure the Company's policies & the best benchmarks are used throughout the process.
- Manage the rules used by different tools under our control (sonar, CAST, Fortify)
- Second or third line support for some investigation (Splunk or fraud, ...).

<u>Tools</u>: Fortify, Sonar, Jenkins, SVN, CAST, Archer, Xpolog, Splunk, Nexus, Cast, Sonar, Fortify, Quality Center.

Others:

Preparing training for EGILIA:

• The ISC² "Certified Secured Software Lifecycle Professional" (CSSLP).

May 2014 – July 2015

I was in charge of all the aspect of the release management of all the PC Banking for Business applications and more specifically the Multi-signature, multi-channel component.

Code review of code produce by off-shore team.

Suggestion of process improvement for higher coding standards.

Several integration works for BNP:

- Provided technical guidelines, technical documentation on installing Group Assets.
- Created installation instruction, technical planning, change management & day-to-day follow up of the advancement of the work completed.
- Member of the team doing the interface between development & operation, working under "Software Architecture & Security".

Technology used:, JDK 1.4 & 1.6, BTT, PKI / SSL-MA, Strong Authentication, WebSeal, Mainframe, Oracle, MQ-series.

• <u>Tools :</u>, Harvest CA, SVN, Maven, Oracle, Websphere (version 6, 7 & 8.5.5), IDOL 7.6, ...

Formatech provides to a few mid-size companies the possibility to do all salary calculation activities by themselves. The complexity of the application comes from numerous technical decision that were not consistent over time: hybrid technologies, highly specific market, lack on long term vision, ...

Technology used:, JDK 1.7, various JPA models, Windows services, OS Virtualization, PKI.

Tools:, Git, Maven, Oracle, Tomcat, Atlasian Development suite, Liquibase, ...

Libraries: Struts 2.x, Hibernate, Hibernate, Custom made ORM, ...

Security focus:

- Inventory of the top-3 issues in our code (based on the OWASP)
- Demo to the management a simple hacking
- Wrote recommendation on proper logging

<undisclosed>

- Senior Consultant for Secured Development Feb. 2013 – Sept. 2013

I built an Identity Federation Portal allowing Service Provider (SP) to retrieve the Identity of the users based on services provided by some Trusted Service Providers. To ensure Customer could thoroughly evaluate the solution several Mock implementation were provided.

Provided support for trainings on Secured Development.

Technology used:, JDK 1.7, EJB 3.1, JEE6 (Weld 1.0), JPA, SSL & Cookie encryption, SOAP, SAML.

Tools:, SVN, Maven, Oracle, GlassFish 3.1.2.2., Apache mod_security, JMeter

<u>Libraries</u>: Struts 2.15.1, OpenSAML 2.6.x, Apache HTTP client, javax security for the XML encryption

Varia

- Developer & Self Study

Sept. 2012 to Feb. 2013

Developing some Java Software for SAP auditing (Identity Management and reconciliation).

Technology used: Python, Django, JDK 1.6

Tools: Wingware, SVN, Maven, pip/virtual env. Spring, MS-SQL, Brew, VMWare, ...

CISSP study @ Net-Security-Training in London & certification (385434)

Certified Ethical Hacking Training @ Net-Security-Training in London

Learning from the books: NMAP, Metasploit, WireShark, ...

<u>Tools</u>: VMWare, Metasploit, NMAP, Black Track, ZAP...

OS: Linux, Win 2012 / W7 / W8 / Win2008, Mac (ML)...

De Post

Sept. 2010 to Sept. 2012

- Senior Project Manager

Managing the day-to-day of 15 applications (6 active, 3 to 4 teams for a total of 15 to 22 people) for small enhancements, incidents, problem management,

evolutive maintenance & collaboration with the projects impacting the applications.

<u>Yearly budget</u>: 2.000 - 4.000 md with (10 - 20 people with 3 - 4 near-shores). Main tasks include:

- Coordinate the delivery of new features in time & budget
- Ensure development capacity is allocate to project or maintenance according to priorities
- Solving incidents within SLA
- Plan maintenance budget identifying technical or functional improvements, impediments, ...
- Plan & implement to release the small enhancements & technical upgrades.

<u>Strength</u>: Adapt my managing style to the expectations of the Business, the criticality of the application & the Team. Continuously try to improve the entire landscape of the applications (security, system, architecture, Functional & non-functional monitoring...). Ensure ITIL principles are implemented in all parts of the applications.

Security Focus:

- Upon my arrival there was no technical application landscape for my portfolio of applications.
- As some of the applications are open to the public we manage to have them reviewed by the security team & placed behind the WAF.
- Preparatory work to introduce an XML firewall & move some functionalities from applications to the ESB.
- Set up a core task team to reduce the possibility of SQL-injection (OWASP #1 issue) on our applications.
- Introduced on most applications technical & functional monitoring. Business monitoring was only introduced after proper accounts were created
- Discussions with the Infrastructure Architecture team over the consistent use of LB, Reverse proxies, WAF, ... to avoid security leaks & ensuring consistent infrastructure changes on the long run.
- One particular application required very special deployment relying on Custom deployment architecture, Custom scripts, ... making them very much error prone. Tuning those script was an extremely large effort to ensure full inventory, consistent environment & password usage.

Crala Feb. 2010 to Sept. 2010

- Developer

A small start up want to improve the Tools they are using at customer's site to audit the Users / Roles / Privileges in the SAP systems. The tool reads directly in SAP the data and saves them in a DB. There clean up procedure are made available before they are imported in IDM.

Some other tools are also in construction using IronPython to audit Windows systems. Typically looking at the Permissions & Groups all files were referring too.

<u>Technology used</u>: Java, JDK1.5 / 1.6, Spring & Hibernate, SAP Netweaver & BAPI calls, ECMA scripting / javascript, Python / IronPython, SAML.

<u>Tools</u>: Eclipse & SAP Netweaver development, Linux (Suse), SQL-server & Oracle, Subversion, VMWare, Hudson, Identity Management from SAP.

Security Focus

- The core of the software development was related to Identity Management & Identity reconciliation by retrieving the SAP-roles from various
- ECMAS scripts to propagate roles in SAP

De Past

June 2007 to Dec 2009

Technical coordination of Release for the integration of Taxipost flow within BPost existing applications. From a technology perspective this required over 40 applications (with a significant number classed as business critical) to be radically modified simultaneously within a 12-month period.

I am personally responsible (release coordinator) for ensuring that 12 of those applications are properly managed during the life cycle of this project. This goes from day-to-day operational activities to the introduction of technical & process improvements in each release (standardization, parameterization & virtualization of environments).

Deploying a new JBoss installation on 400 servers in Post offices with consistent Configuration Management through automated scripts (±60 vbsscripts called by BPost install engine).

Technology used: Java, Spring, JBoss, JDK1.4 / 1.5, MQ, python, J2EE, XSLT, ANT.

Tools: Eclipse & MyEclipse, Apache, Linux, Oracle 8 / 9 / 10 / 11, Jira, Subversion, Ghosting, Ant, Maven, Ivy, shell-scripting, VBS ZAP.

Methodology: This project was partially conducted as an Agile project, during its second phase.

Security focus:

- All queue managers were protected by passwords & removed unnecessary one's from the Landscape
- Split between external & internal Queue managers for traffic coming from external applications
- No more default passwords in the 400 JBoss deployed in the Post offices
- Completed a full inventory of the Server in the Post Office (CMDB brought fully up to date so no more manual installations/configurations were required)
- Reshaped the application deployment to reduce the number of deployed specific package

De Post May 2006 to June 2007

- Senior Developer / Release Coordinator

> The BPG is developing all applications internally based on a standardized framework. eHR is a project foreseen to replace all papers for day to day management of RH in the Post Offices & central services.

> The application contains a few modules: Absences / Trainings / Personal data / Time management.

- Developed part of a module for the time & day management.
- Operational management of the Releases / hot-fixes / data fixes / Branching / ...
- Configuration & release management for the projects associated with eHR (Cleaning, Time registration, eGOV, Dimona, 144+, ...)
- Technical migrations
 - Migrate the code from Tomcat to JBoss (created all the configurations for the pushing system mechanism for the 7 environments of each application).
 - Migrate the whole from version 3.x of the internal framework to the version 4.x (spring & struts based)
 - Moved all the projects from PVCS to SVN

Technology used: Java, Spring, Struts, Tomcat / JBoss, JDK 1.3 / 1.4 / 1.5,

Tools: Eclipse & MyEclipse, Apache, Linux, Oracle 8 / 9 / 10, PVCS & Subversion

Security focus:

- Introduce standardize procedures for application deployment across environments
- Standardized the structure of the environments
- Upgrade / configured some of the libraries so passwords were not shown in the logs anymore
- Investigated some potential leaks with Paros
- Evaluated the various possible encryption for the DB holding the HR special files (psychological follow up of people after traumatic event).

Alcatel 09.2004 to 05.2006

- Senior Developer

In the scope of a very large project for "bandwidth on demand" at the UK-level, the system needs to feed external applications for accounting, billing, ...

Many files needs to be generated with very specific requirements (frequency, format, DB from which the results have to be retrieved, ...).

My role was for a part to develop the implementation of some extraction job & write korn-shell script to accomplish the deployment.

Technology used: Java, AOP, Spring, SNMP, shell-scripting.

Tools: Eclipse & MyEclipse, Clearcase, XFB.

CapGemini

- Senior Developer

07.2004 to 09.2004

Integration of a development with a Document management application.

Provide senior support to a migration process for Insurance company.

Technology used:

JavaBean's, JSP's on Websphere 5.0 with Struts, JavaBean's, JSP's, ...

JavaBean's, JSP's on Weblogic 8.0 with Struts & StrutsCX, EJB 1.1 & EJB 2.0 $\,$

Tools: Eclipse, MyEclipse, PVCS

European Parlement

- Java Architect

01.2004 to 06.2004

Documented the previous version of the Legal Observatory.

Provided a thorough set of Use Cases for the new version.

Implemented the UseCases.

<u>Technology used</u>: JavaBean's, JSP's, ... on Weblogic 7.0 with Struts, JSLT 1.0,

Oracle 8i & 9i, Solaris.

Tools: Eclipse & Weblogic, Oracle, Solaris / Linux / Win2000, CVS.

Belgacom

- Java Architect

05.2002 to 12.2003

Developed a Network Inventory application. The idea behind the application was to have one central repository for any hardwares, any configurations, ...

<u>Technology used</u>: J2EE (EJB's, JSP's, ...) on Websphere 4.0 & 5.0, JNDI, Unit Testing, RUP-UML, XML (XSLT's, XSD's), Struts, Oracle 8i & 9i, Solaris, TAM, Networking ...

<u>Tools</u>: Websphere & JBoss, Oracle, Solaris / Linux / Win2000, Loadrunner, TestDirector, Rationnal Rose, ClearCase, CVS

(at some point we also worked with Versant for a **P**roove **O**f

Concept)

Sydney-tristar (1999 - 2001)

Consultant in various companies: AXA, Telenet, Securex + internal development

DEXIA (1996 - 1999)

Analyst for the Agencies software division

Egilia (2012 - to date)

3 or 4 times a year, Egilia requires me to provide CISSP training (currently in France & Belgium).

PROFESSIONAL EDUCATION & CERTIFICATIONS

CQHN, Charleroi

- "Certified Data Protection Officer", July. 2017 (PECB Certified Provisional Data Protection Officer).
- Introduction to ISO 27001 (1 day training), CQHN (Octobre 2017)
- Introduction to ISO 27002 (1 day training), CQHN (Octobre 2017)

DEVOTEAM, Luxembourg

Training on ISO-27034, May 2017 (PECB Certified ISO 27 034 Lead Implementer)

CQHN, Charleroi

 "Seminar on: Nouveau Règlement Européen pour renforcer la Protection des Données personnelles", Feb. 2017

Proximus ICT Academy, Evere

■ PKI, February 2016.

EGILIA, Brussels

- CNNE I, June 2015.
- *CNNE II, July 2015.*

Net Security Training, London

- Managing Robust PKI, 2014.
- CISSP fast track, July 2012.
- CEH training, Nov. 2012.

BSG, London, 2008

■ JBoss 4 —administration.

Seminars of EECOP, Darmstadt - Germany, 2004

- Starting Software Product Lines (I) -Systematic Product Line Planning and Adoption
- Starting Software Product Lines (II) -Product Line Analysis and Modeling
- Automatic Derivation and Verification of Synchronization Aspects in Object Oriented Systems
- Aspect-Oriented and Meta-Programming with Aspect]

Ilog (within Belgacom premices), 2002

■ JRules 4.5

IBM, Zaventem – Belgium, 2002

■ Websphere 5.0 Administration course (under Linux)

Highlander PLC, London, 2001

■ Weblogic 7.0 Administration

Post Graduate in Telecom & Management, 1998 U.L.B., Brussels, Belgium

Graduate in Physics, 1995

F.u.N.D.P, Belgium

Final assignment : "Psychological pathologies recognition with Artificial Neural Network"

OTHERS

- References available on request
- CISSP certified (385434)
- Certified ISO 27034 Lead Implementer (Certification PECB, May 2017)
- Certified Provisionnal Data Protection Officer (Certification PECB, June 2017)
- NATO Security Clearance
- CACert insurer
- Firewalls : pfsense & OpnSense.
- Currently daily review of
 - o SANS news letter on Security
 - o krebs on Security
 - o ThreadPost, SecureList, Rapid7
- Member of
 - o OWASP
- Sports : Rugby Coach (U-12)

LANGUAGES

• French: mother language

English: Spoken, read & written flluently

Dutch : Spoken & read