

Security Audit and Compliance

***IBM's SIEM solution:
Tivoli Security Information and Event Management***

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Security Compliance & Audit Solutions



Agenda

Présentation de l'Offre Tivoli Security

Les Challenges de l'Audit et de la Conformité

SEM versus SIM

La solution: IBM Tivoli's SIEM

Architecture

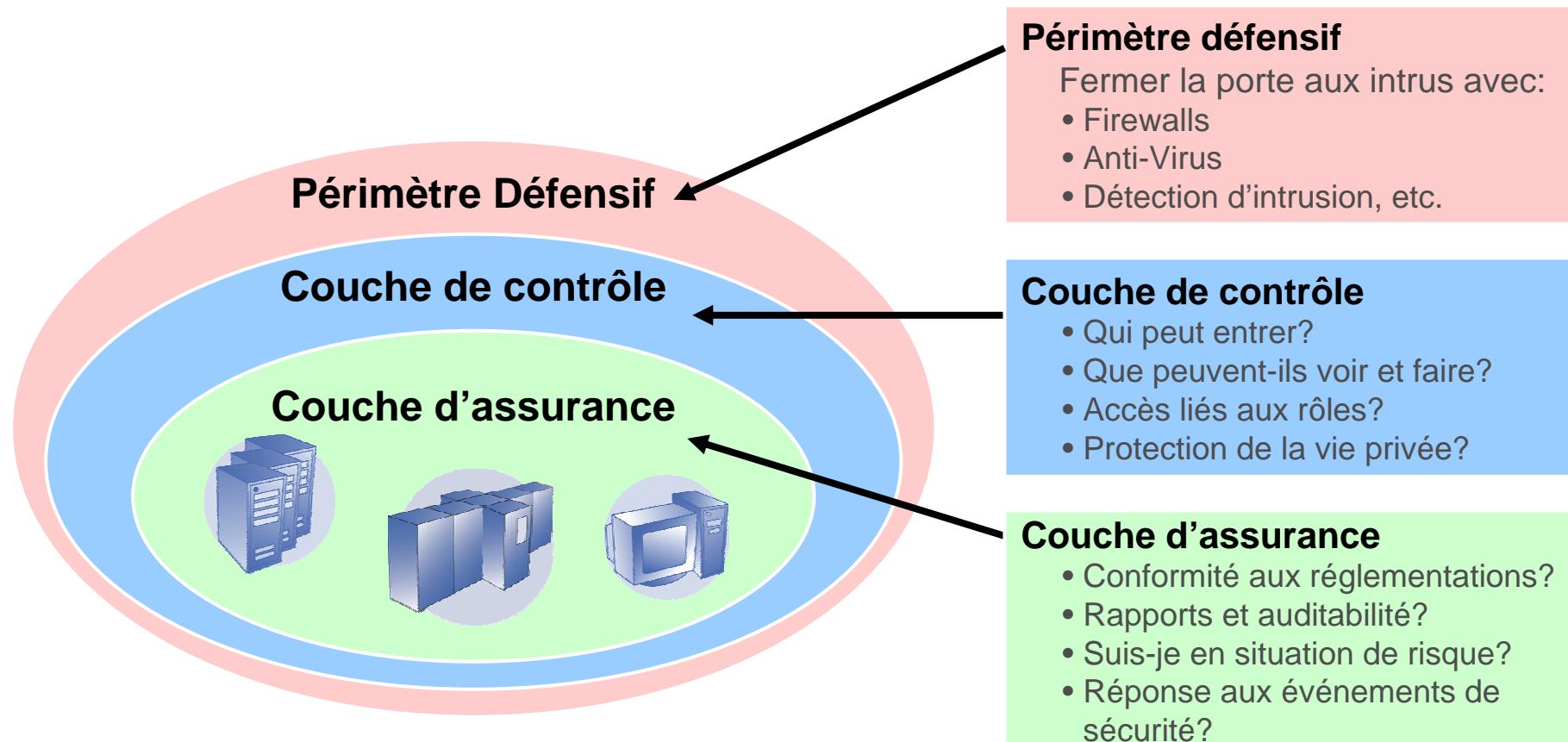
IBM Value Proposition

Proven Results

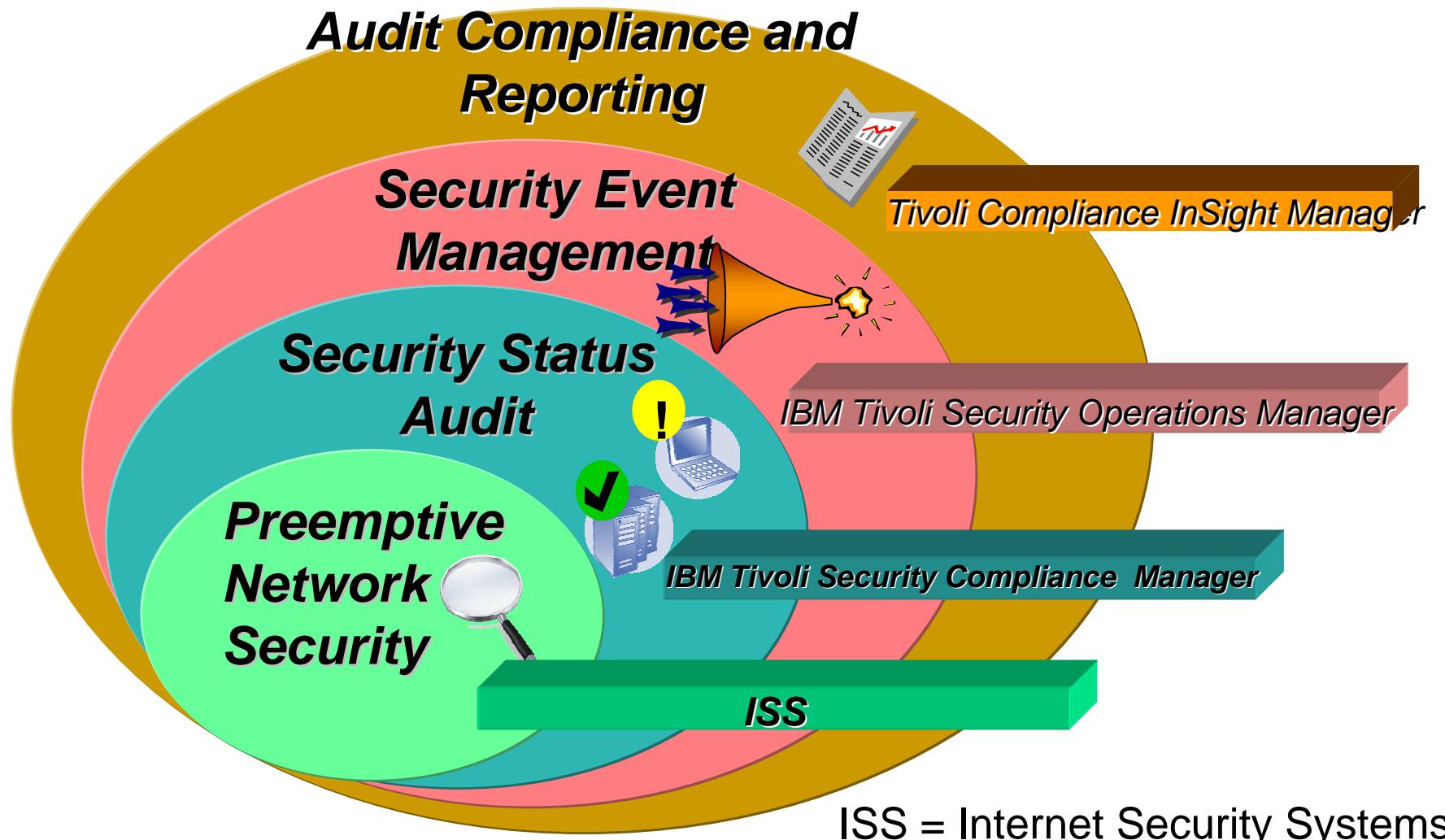
Questions



IBM et Tivoli sécurité : assurer la sécurité à tous les niveaux



Sécurité et Conformité à tous les niveaux



Sécurité et Conformité à tous les niveaux



Problématiques adressées

- Corrélation d'évenements réseau temps réel
- Attaques perpetrées de l'intérieur – comprendre et gérer ce que les utilisateurs internes font
- Satisfaction de l'auditeur et corrélation vers des régulations spécifiques (SOX, Bâle II, ISO, PCI, . . .)

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Les Challenges de Sécurité et de Conformité

- **Besoins de conformité croissants**
 - Initiatives de conformité toujours plus nombreuses
 - Nouveaux besoins de conformité dans de nombreux secteurs industriels
 - Surveillance et contrôles fiables sont nécessaires pour gérer les risques et éviter des pénalités ou la perte de business
- **Complexité croissante**
 - Les technologies et les infrastructures disparates fragmentent et alourdissent les efforts de supervision, de corrélation, d'analyse, et d'audit de conformité
 - Lier la conformité de l'infrastructure à celle du business est souhaitable, mais difficile
- **Coût croissant**
 - Peu de prédictibilité et de visibilité sur des infrastructures complexes conduit à une inflation rapide des coûts
 - Ne pas atteindre la conformité ou ne pas prévenir des menaces peu imposer des coûts énormes



43% of CFOs think that improving governance, controls and risk management is their top challenge.

*CFO Survey: Current state & future direction,
IBM Business Consulting Services*



Quel impact d'une faille sécurité exploitée?



La sécurité s'applique à l'ensemble de l'entreprise.

Un point faible dans un seul domaine et c'est l'ensemble du métier qui est mis en péril.



- Rupture des fonctions clés de l'entreprise;
- Impact direct sur le chiffre d'affaires;
- Perte de confiance des clients et des partenaires;
- Atteinte à l'image de marque;
- Perte de clients ;
- Vol d'informations confidentielles;
- Risque quant à la conformité avec les régulations en vigueur;
- Responsabilité des dirigeants de l'entreprise;



Coût moyen résultant de l'exploitation d'une faille sérieuse, exploitée:
\$1.8 million¹

1. Bear Stearns and Co: Internet Security, June 2002



Ferez-vous la prochaine “Une” des journaux?

InformationWeek

BUSINESS INNOVATION POWERED BY TECHNOLOGY

Massive Insider Breach At DuPont

A research chemist who worked for DuPont for 10 years before accepting a job with a competitor downloaded 22,000 sensitive documents and viewed 16,706

The Delaware U.S. attorney on Thursday revealed a massive insider data breach at chemicals company DuPont where a former scientist late last year pleaded guilty to trying to steal \$400 million worth of company trade secrets. He now faces up to a decade in prison, a fine of \$250,000, and restitution when sentenced in March.

“Pour les sociétés, le meilleur moyen de prévenir les incidents internes est de superviser les activités anormales lors d'accès au réseau et aux bases de données et de déterminer un niveau d'utilisation acceptable pour différents types d'utilisateurs”

Source: InformationWeek, Feb. 15, 2007



Ce qui s'est passé:

- Employé partant chez un compétiteur
- Accède aux bases de données
- Transfère des documents sur son nouvel ordinateur portable

Commentaires du Carnegie Mellon CERT:

- “75% des ... vols d'informations confidentielles étudiés... ont été perpétrés par des employés actifs”
- “45% d'entre eux avaient déjà accepté un nouvel emploi ailleurs”

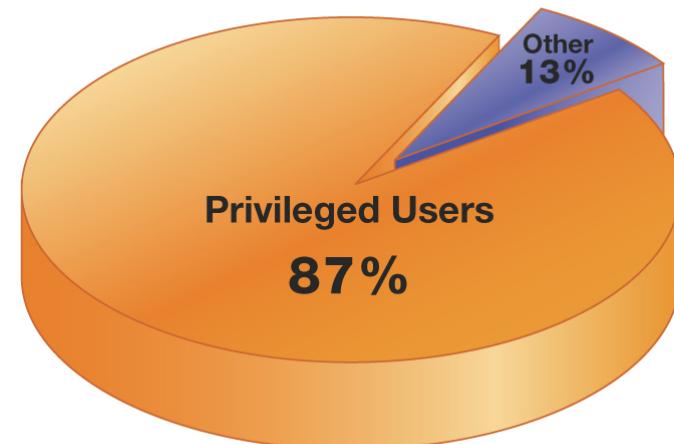
Commentaires de la CIA:

- “...les concepteurs et les scientifiques ont tendance à considérer le capital intellectuel de leur entreprise comme le leur... et souhaitent le garder en partant”

Surveiller les utilisateurs privilégiés n'est plus une option

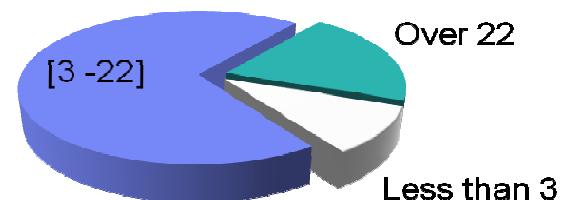
- 87% des incidents internes sont causés par des utilisateurs privilégiés
- La plupart sont des **incidents non intentionnels** causés par la violation:
 - Des processus de gestion des changement
 - Des politiques d'utilisation acceptables
- D'autres sont **délivrés**, les motifs étant:
 - Revanche (84%)
 - "Événements négatifs" (92%)
- Quelle que soit leur raison, ces incidents coûtent trop cher et ne peuvent être ignorés:
 - Les attaques internes représentent 6% du chiffre d'affaire annuel
 - Aux USA, ceci représente un coût de 400 milliards de dollars

Who Causes Internal Incidents?



Source: USSS/CERT Insider Threat Survey 2005

Annual Sensitive Data Breaches



Source: "Taking Action to Protect Sensitive Data," IT Policy Compliance Group, March 2007

Sources: Forrester research, IdM Trends 2006; USSS/CERT Insider Threat Survey 2005; CSI/FBI Survey, 2005; National Fraud Survey; CERT, various documents.



Le questionnaire “Security Audit and Compliance”

Questions de la Direction Informatique et du Métier:

- Pouvez vous surveiller si quelqu'un a touché ou modifié des données sensibles de manière inappropriée?
- Pouvez-vous vérifier si nos outsourcers gèrent vos systèmes et données de manière responsable?
- Disposez-vous de rapports sur les changements non autorisés sur notre environnement d'opérations?
- La séparation des tâches fonctionne-t-elle?
- Avez-vous les moyens d'investiguer des incidents sans délais?

Questions de vos auditeurs:

- Les journaux des vos application, databases, OS et dispositifs réseaux sont-ils archivés et analysés?
- Les activités de vos administrateurs et opérateurs système sont-ils enregistrés et analysés régulièrement?
- Archivez-vous tous les accès aux données sensibles – incluant les accès root/administrateur et DBA?
- Avez-vous des outils automatisés pour analyser les enregistrements d'audit?
- Les incidents de sécurité et les activités suspectes sont-ils analysés, investigués? Et les actions de remédiations sont-elles prises?





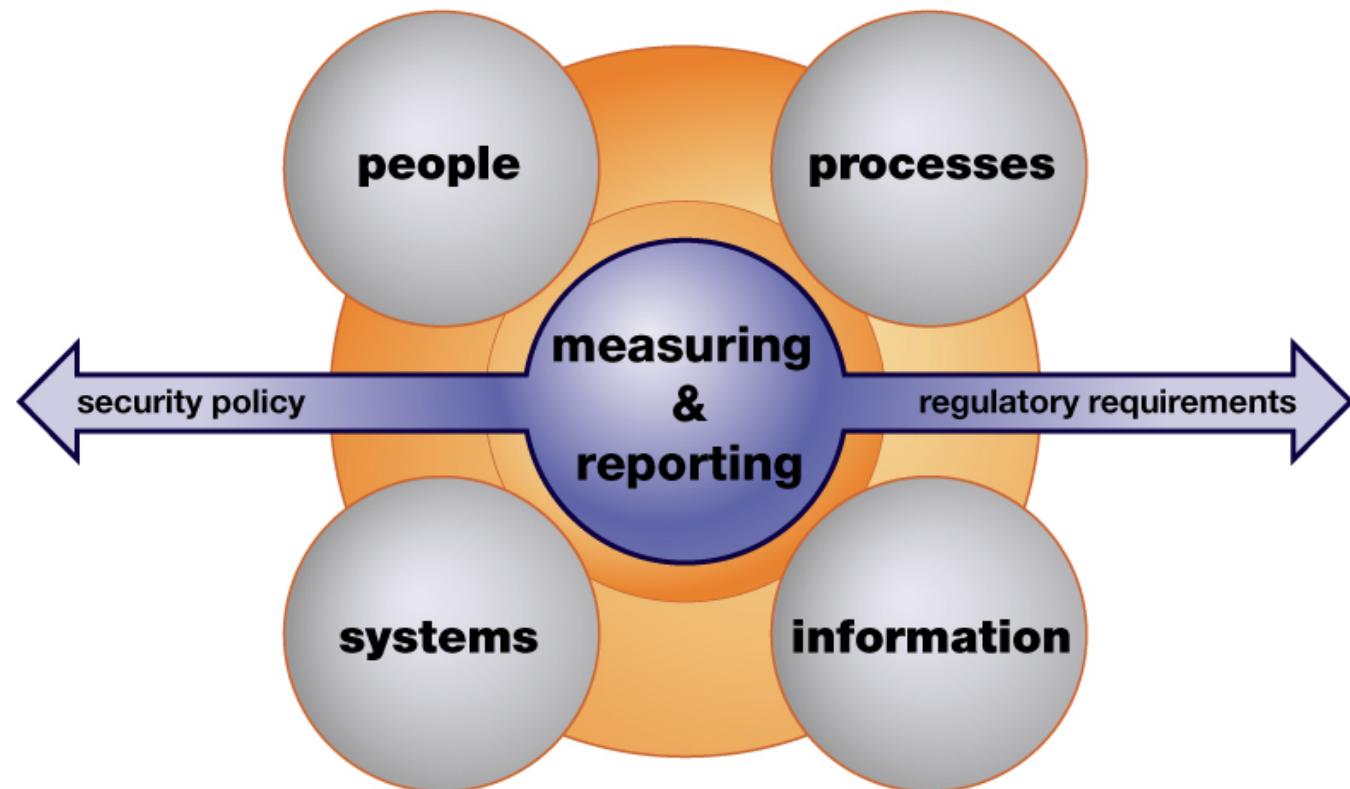
Régulateurs & Auditeurs créent l'urgence

[ISO17799:2005]
10.10.1 Audit logging

Audit logs recording
user activities,
exceptions, and
information security
events should be
produced and kept
for an agreed period
to assist in future
investigations and
access control
monitoring.

Mais l'utilité tactique est évidente

Le Challenge de l'Audit et de la Conformité



Le Challenge consiste à mesurer et rapporter sur le comportement de personnes et de systèmes à travers l'entreprise sans inhiber ou dégrader la performance du métier.



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La solution: IBM Tivoli's SIEM

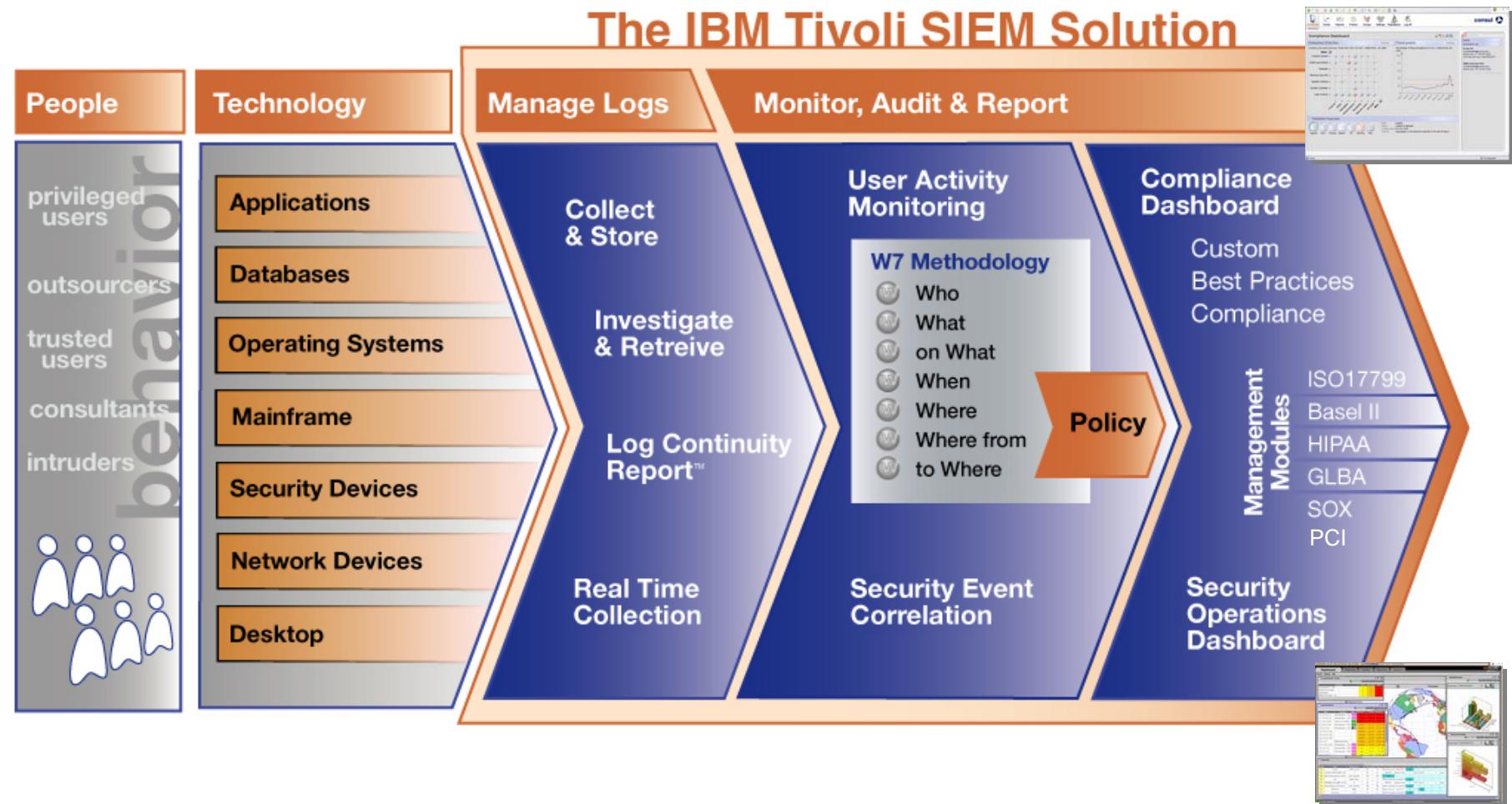
Architecture proposée pour CA-SA

IBM Value Proposition

Proven Results

Questions





What is Security Information & Event Management (SIEM)?

■ SEM – Security Event Management

- Collecting & Manipulating Security Events to address **real-time Security Operation Requirements**
- Expected Characteristics
 - Collect from a large & diverse range of devices & systems, **especially network devices**
 - Strong correlation & normalization technology
 - Efficient Interface to please Security Operators
 - Operate essentially in Real-Time

■ SIM – Security Information Management

- Transform security log events into Information
- Basic objects are **User's activities, Who touches What data**
- Expected Characteristics
 - Collect from **systems, middleware & applications**
 - Present information in a format for managers, auditors
 - Address regulations & standard compliances



Tivoli Security Information & Event Management TSSEM

Personnes utilisatrices

Opérations IT & sécurité



Problème:

- Attaques & alertes réseau,
- Trop de données de sécurité
- Pondération des incidents

Audit interne Sécurité IT



Solution:

Gestion des Incidents

Security Event Mgmt (SEM)

Security Operations Manager

- Sécurité concernant les comportements
- Audit des utilisateurs privilégiés
- Reporting et conformité

Audit et surveillance des activités des utilisateurs

Security Info Mgmt (SIM)

Compliance Manager

Produit:



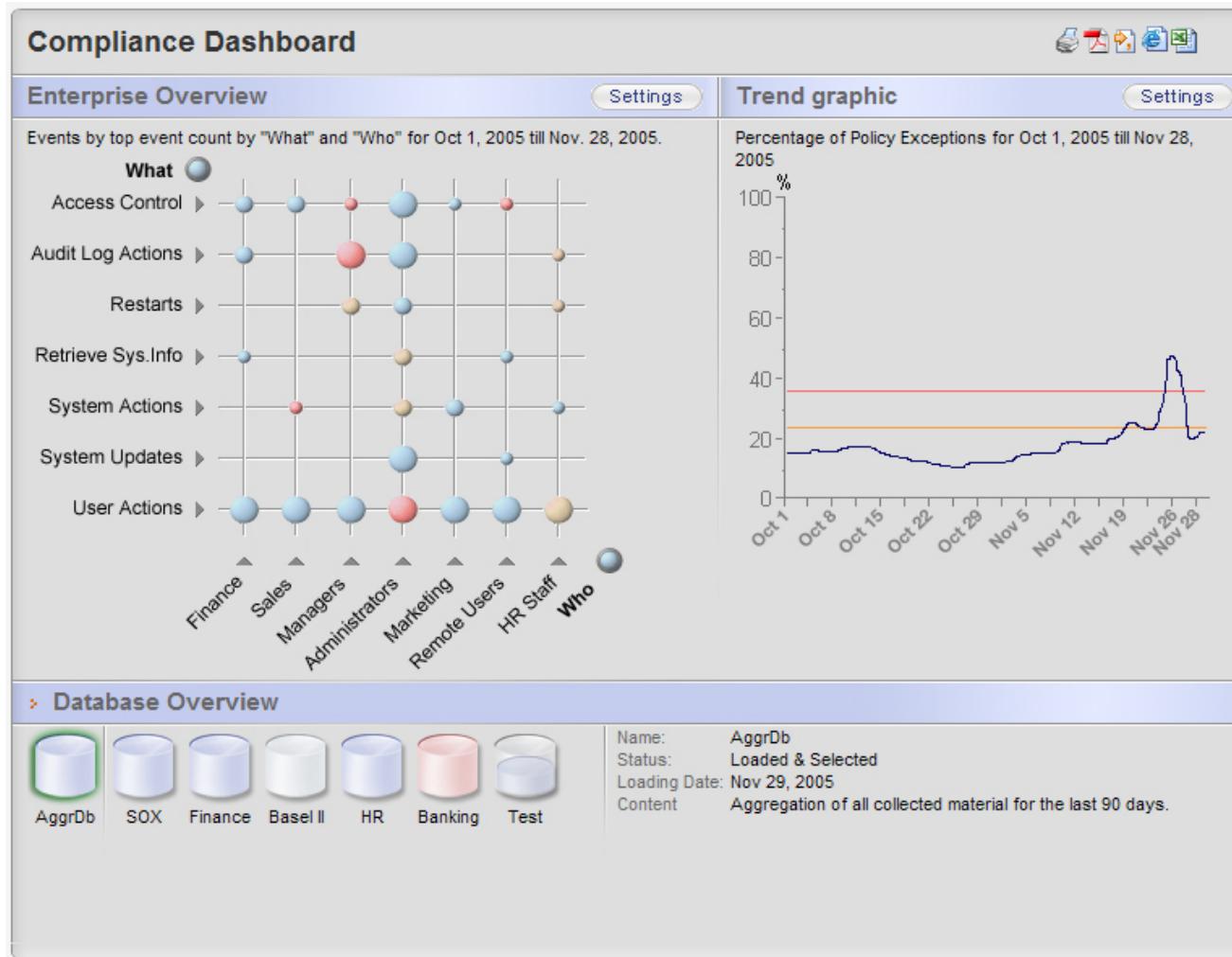


Gestion des Incidents temps-réel (SEM)

The screenshot displays a complex security monitoring interface with several panels:

- Dashboard:** Shows a table of "Security Domain Threats" with columns for Domain, Low, Medium, and High threat levels. Data includes Headquarters - ATL, Finance.Accounting, unassigned, and EMEA Operations - UK.
- Top Destinations:** A table listing hosts and their threat levels. Key entries include 172.16.201.21, 172.16.201.20, and various entries from the "Finance.Accounting" domain.
- PowerGrid:** A table showing event processing details, including counts for Permit, LOGON/LOGOFF_AUDIT_SUC, Meta:(Unauthorized Perimeter), drop, PRIVILEGE_USE_AUDIT_SUCCE, Meta:(Dangerous Perimeter), PORTSCAN, and authcrypt events.
- Orthographic Map:** A world map showing geographical regions color-coded by threat level. A specific route or path is highlighted with a black line connecting several locations.
- Watch! (Tivoli Security Operations Manager):** Two 3D bar charts showing "Event Class Activity". The top chart shows "Frequency" across domains like unassigned, xHost - Level 1 Attack (Weak Scan), Int Net - Internal, Int Net - Perimeter, and Sanbanes Oxley. The bottom chart shows "Event Class" activity across categories such as new.earn, user, traffic.reject, traffic.c.accept, app.smtp, policy.violation, and risk.compromise.

Tableau de bord de conformité (SIM)



Agenda “Gestion des menaces et de la sécurité”

Gestion des logs et audits avec Compliance Insight Manager

1. Capturer – Gestion des logs de l'entreprise
2. Comprendre – Interprétation sophistiquée des logs
3. Communiquer – Reporting et audit de conformité Architecture de la solution

Corrélation d'évenements avec Security Operations Manager

1. Pre-filtrage et agrégation des évenements de sécurité
2. Corrélation d'événements
3. Investigations, gestion d'incidents et alertes, reporting





Consul Risk Management

Consul Risk Management, founded in 1986, was a privately owned company based in Delft, Netherlands, with a principal office in Herndon, Virginia. IBM acquired Consul in January 2007.

Consul Risk Management's Business Focus

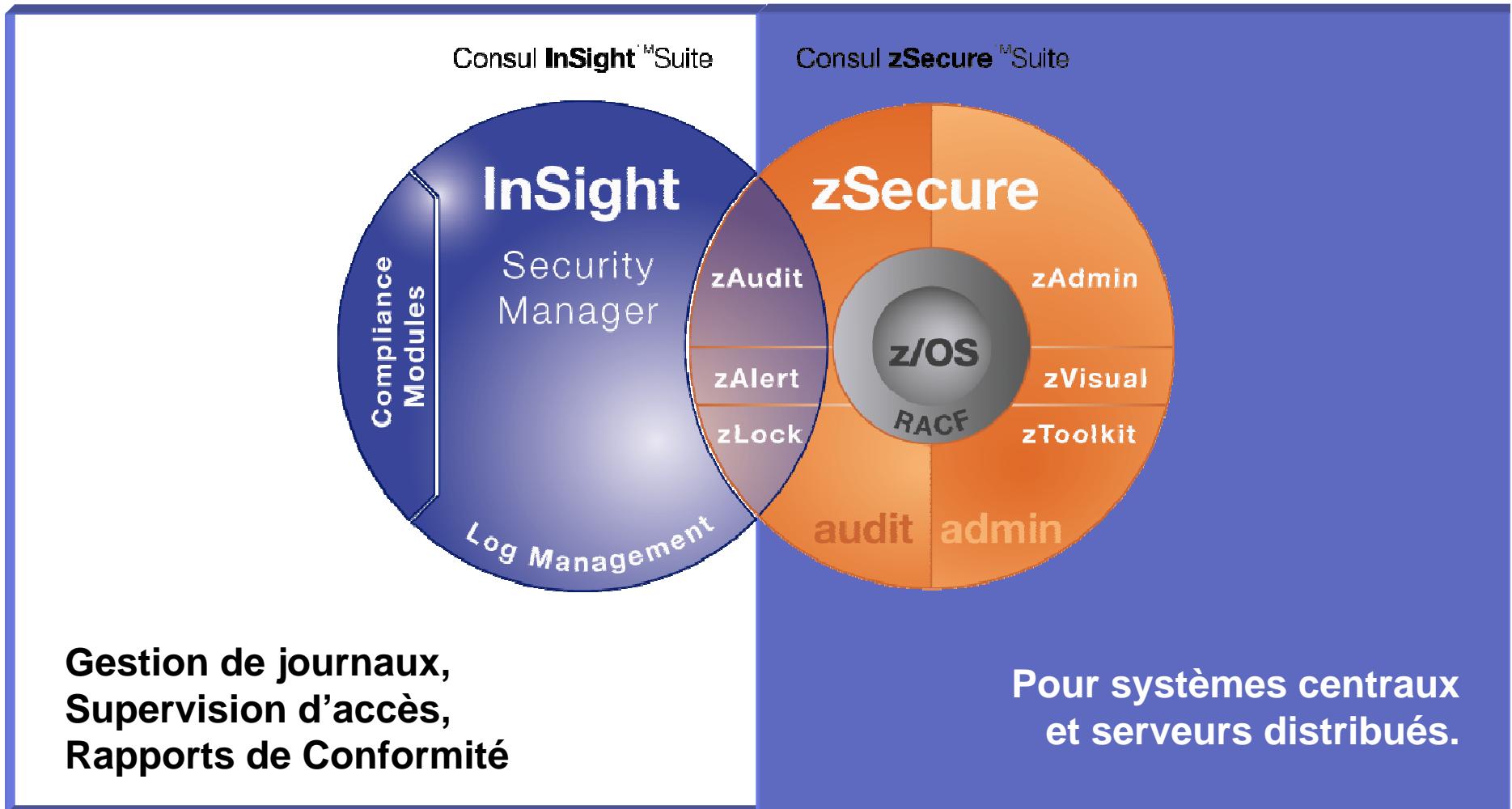
- Providing compliance and audit management software that speeds the delivery and lowers the cost of tracking, investigating and reporting on non-compliant usage of information technology (IT) applications and systems, such as unauthorized access by privileged users.

Consul Risk Management Reputation

- Two decades of experience in security audit and compliance, mainframe roots
- Leader in automated log collection, user monitoring and compliance reporting
- Products installed and used in 100's of customers from 30 countries worldwide
- Partnerships and resellers established around the world

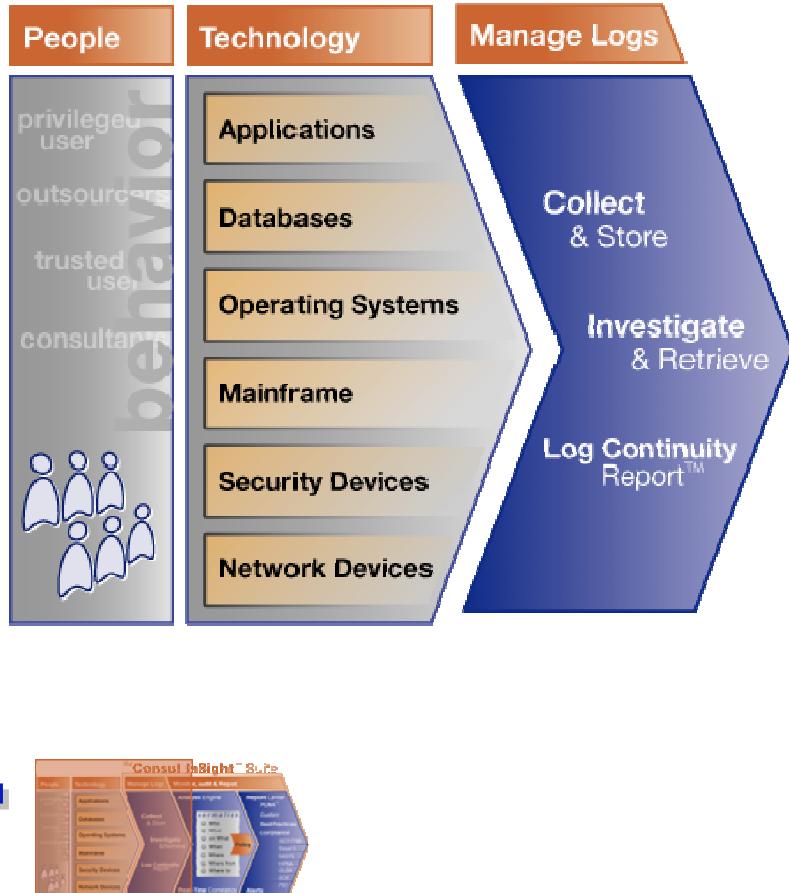


La spécialité de Consul: Supervision et Conformité



Gestion des Logs de toutes les plate-formes

Capturer



Fonctionnalités:

- Collecte sécurisée et fiable depuis n'importe quelle plate-forme
- Support complet de collecte de logs natifs (Syslogs, audit trails, SNMP, LDAP, Active Directory, etc.)
- Archivage dans un dépôt efficace et compressé
- Accéder aux informations à la demande
- Recherche à travers tous les logs
- Rapports prouvant la continuité de la collecte

Avantages:

- Réduction de coûts par l'automatisation et la centralisation de la collecte et de l'archivage
- Réduire la longueur des audits internes ou externes.

Implementation: plug and play.

Rapport de Continuité des Logs
 Preuve immédiate pour auditeurs et institutions de Conformité que votre gestion des logs est complète et continue.

Log Continuity Report

Graph

Actions

- Export to PDF
- Export to Excel
- Retrieve selected Logfiles
- Regenerate Report
- Adjust Schedule

View

- Hide Timezone (GMT +1)
- By Audited Timezone
- By Browser Timezone
- By Other Timezone

Filters

Sorting

Legend

- Continuity Logfile
- Missing Logfile
- Missing Sub Logfile
- Failed collect, not collected yet
- Delayed collect, possible lost
- Archived Logfile
- Corrupt Logfile

List of Logfiles

| # | Size | Start Date | Time | End Date | End Time | Eventsource Type | Eventsource Name | Machine |
|---|--------|---------------|-------|---------------|----------------|------------------|-------------------------|---------|
| 3 | 33 kb | June 25, 2005 | 10:00 | June 25, 2005 | 12:00 (GMT +1) | IIS | Public website | CRM007 |
| 5 | 21 kb | June 25, 2005 | 11:00 | June 25, 2005 | 12:00 (GMT +1) | Windows Server | Web Server Public | CRM007 |
| 2 | 1.3 Mb | June 25, 2005 | 12:00 | June 25, 2005 | 13:00 (GMT +1) | SAP | Internet Banking Public | CRM007 |
| 3 | 5 kb | June 25, 2005 | 13:00 | June 25, 2005 | 13:17 (GMT +1) | Windows Server | Private Banking Server | CRM013 |
| 3 | 213 kb | June 25, 2005 | 14:00 | June 25, 2005 | 16:30 (GMT +1) | IIS | Private Banking Website | CRM013 |
| 1 | 94 kb | June 25, 2005 | 15:00 | June 25, 2005 | 19:00 (GMT +1) | Windows Server | HR Data Server | CRM014 |

Report information

Done **My Computer**

A standard Windows-style taskbar with icons for back, forward, search, and file operations.

A toolbar with icons for Dashboard, History, Continuity, Activity, Investigate (highlighted in orange), and Retrieval.

Outil d'Investigation du Dépôt
Information au bout de vos doigts,
avec recherche facile

Depot Investigation Tool

Query builder

Step 1. Time period

from: month April day 1 year 2001 till: month April day 21 year 2006

Step 2. Event Source

| | | | | |
|---|---------------------------------------|--|--|--|
| InSight server all server-01 server-05 | Point of presence all SERVER-05 | Audited machine name all SERVER-05 STYX | Event source type all InSight Server Activit InSight Web Applica Internet Information S Microsoft Windows Oracle | Event source name all InSight Server Activit Internet Information S Oracle |
|---|---------------------------------------|--|--|--|

Step 3. Select Fieldnames

You changed your selection in the eventsources, this may cause missing fields in this list. Refresh the list to see all relevant fieldnames

Refresh Fieldname list
 Select All Fields

| | | |
|--|--|---|
| <input checked="" type="checkbox"/> date | <input type="checkbox"/> s_port | <input type="checkbox"/> service |
| <input checked="" type="checkbox"/> dst | <input checked="" type="checkbox"/> number | <input type="checkbox"/> action |
| <input checked="" type="checkbox"/> type | <input type="checkbox"/> granularity | <input checked="" type="checkbox"/> scr |
| <input type="checkbox"/> eventclass | <input type="checkbox"/> resource | <input type="checkbox"/> sublogtype |

Step 4. Content Search

clearlog*

Start Search Stop Search

Done Internet

Help

Actions

Refresh Fieldname List
Start Search
Stop Search
Retrieve selected Logfiles
Restore default settings

View

Show Timezone (GMT)
By Browser Timezone
By Other Timezone

Search information

Status: 0%
Creation Time: 0
Logfiles 0
Events 0

Support

Comprendre

Comment comprendre tous ces différents formats et informations ?

The figure displays three GVIM windows side-by-side, each showing a log file and its corresponding audit record.

- Left Window:** Shows a log file with several entries. Red boxes highlight specific fields: 'xyzz.bananajunior.com' in the log file and 'MQM' in the audit record.
- Middle Window:** Shows an audit record for a 'Batch process login' event on 'CYGNUS'. Red boxes highlight 'MQM' as the process owner and 'xyzz.bananajunior.com' as the remote node full name.
- Right Window:** Shows another audit record for a 'Batch process login' event on 'CYGNUS'. Red boxes highlight 'MQM' as the process owner and 'xyzz.bananajunior.com' as the remote node full name.

Log File Content (Left Window):

```

Apr 5 17:20:38 syslog su(pam_unix)[18429]: authentication failure; logname=
    tty= ruser=acrystal rhost= user=MQM
Apr 5 17:22:03 syslog sshd(pam_unix)[10351]: session closed for user acristal
Apr 5 18:01:01 syslog crond(pam_unix)[10436]: session closed for user MQM
Apr 5 19:01:01 syslog crond(pam_unix)[10438]: session closed for user MQM
Apr 5 20:01:01 syslog crond(pam_unix)[10440]: session closed for user MQM
Apr 5 21:01:01 syslog crond(pam_unix)[10442]: session closed for user MQM
Apr 5 22:01:01 syslog crond(pam_unix)[10444]: session closed for user MQM
Apr 5 23:01:01 syslog crond(pam_unix)[10446]: session closed for user MQM
Apr 6 00:01:01 syslog crond(pam_unix)[10448]: session closed for user MQM
Apr 6 01:01:01 syslog crond(pam_unix)[10450]: session closed for user MQM
Apr 6 02:01:01 syslog crond(pam_unix)[10452]: session closed for user MQM
Apr 6 03:01:01 syslog crond(pam_unix)[10477]: session closed for user MQM
Apr 6 03:33:29 syslog crond(pam_unix)[10479]: session closed for user MQM
Apr 6 04:01:02 syslog crond(pam_unix)[10509]: session closed for user MQM
Apr 6 04:03:46 syslog crond(pam_unix)[10511]: session closed for user MQM
Apr 6 04:30:02 syslog crond(pam_unix)[11012]: session closed for user MQM
Apr 6 05:01:01 syslog crond(pam_unix)[11031]: session closed for user MQM
Apr 6 06:01:01 syslog crond(pam_unix)[11033]: session closed for user MQM
Apr 6 07:01:01 syslog crond(pam_unix)[11035]: session closed for user MQM
Apr 6 08:01:01 syslog crond(pam_unix)[11037]: session closed for user MQM
Apr 6 08:42:11 syslog sshd(pam_unix)[11041]: session opened for user ebarrios by (uid=0)
Apr 6 08:42:43 syslog sshd(pam_unix)[11071]: authentication failure; logname= uid=0 euid=0 tty=ssh
ruser= rhost=10.101.1.154 user=ebarrios
Apr 6 08:42:49 syslog sshd(pam_unix)[11077]: session opened for user ebarrios by (uid=0)

```

Audit Record 1 (Middle Window):

```

Security audit (SECURITY) on APPLES, system id: 2074
Auditable event: Batch process login
Event time: 1-MAR-2005 00:02:09.84
PID: 20402844
Process name: BATCH_440
Username: SYSTEM
Process owner: [SYSTEM]
Image name: DSA0:[SYS1.SYSCOMMON.][SYSEXEC]LOGINOUT.EXE
Posix UID: -2
Posix GID: -2 (%FFFFFFFE)

```

Audit Record 2 (Right Window):

```

Security audit (SECURITY) on CYGNUS, system id: 2073
Auditable event: Network login
Event time: 1-MAR-2005 00:02:16.11
PID: 2021A46D
Process name: MQMTIC_P2_BG164
Username: MQM
Process owner: [MQS_SERVER]
Image name: DSA0:[SYS0.SYSCOMMON.][SYSEXEC]LOGINOUT.EXE
Remote node id: 241059504
Remote node full name: xyzz.bananajunior.com
Remote username: MQM
Posix UID: -2
Posix GID: -2 (%FFFFFFFE)

```

Audit Record 3 (Bottom Right Window):

```

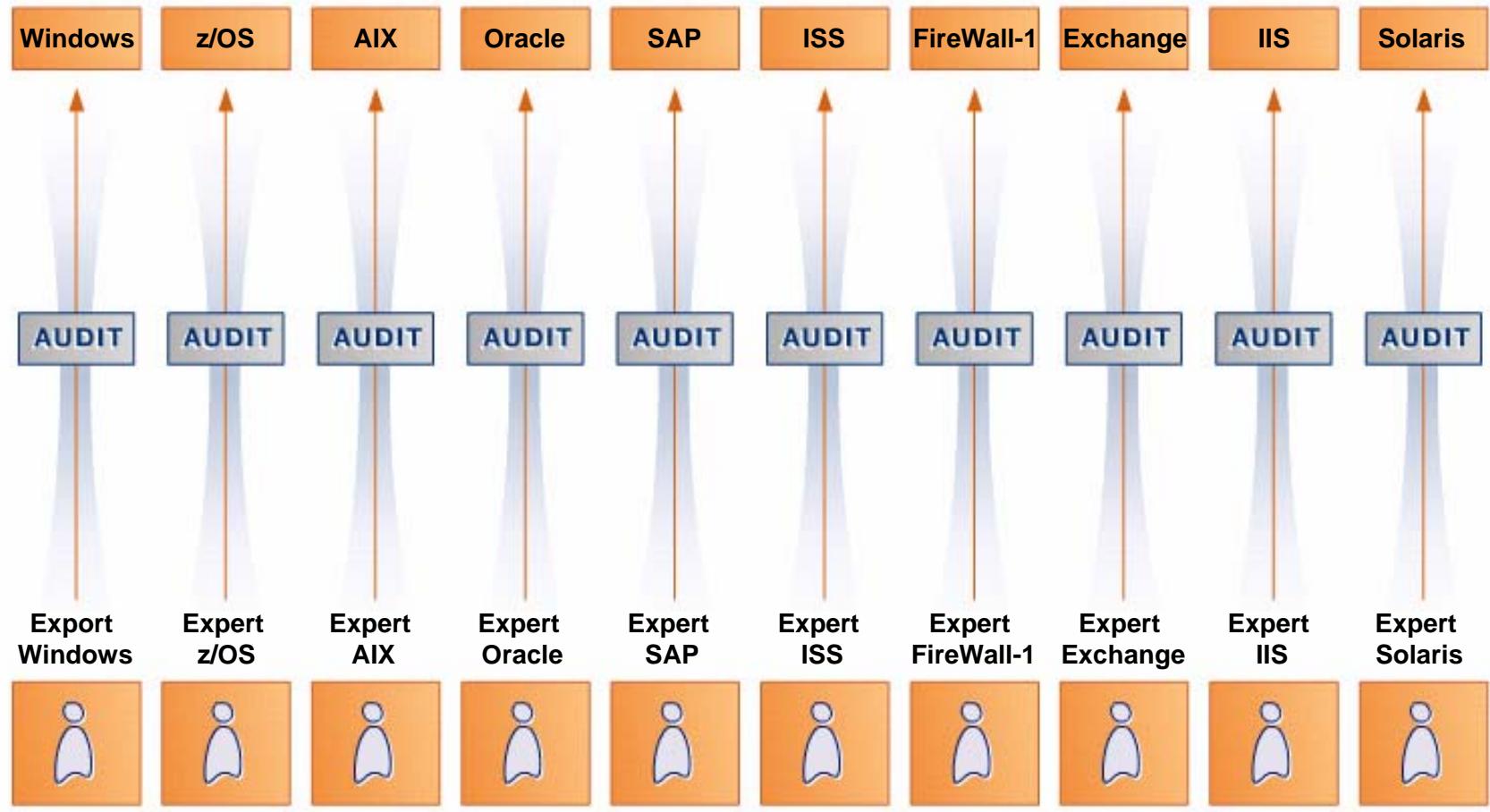
Security audit (SECURITY) on CYGNUS, system id: 2073
Auditable event: Batch process login
Event time: 1-MAR-2005 00:02:32.61
PID: 20219477
Process name: BATCH_443
Username: SYSTEM
Process owner: [SYSTEM]

```

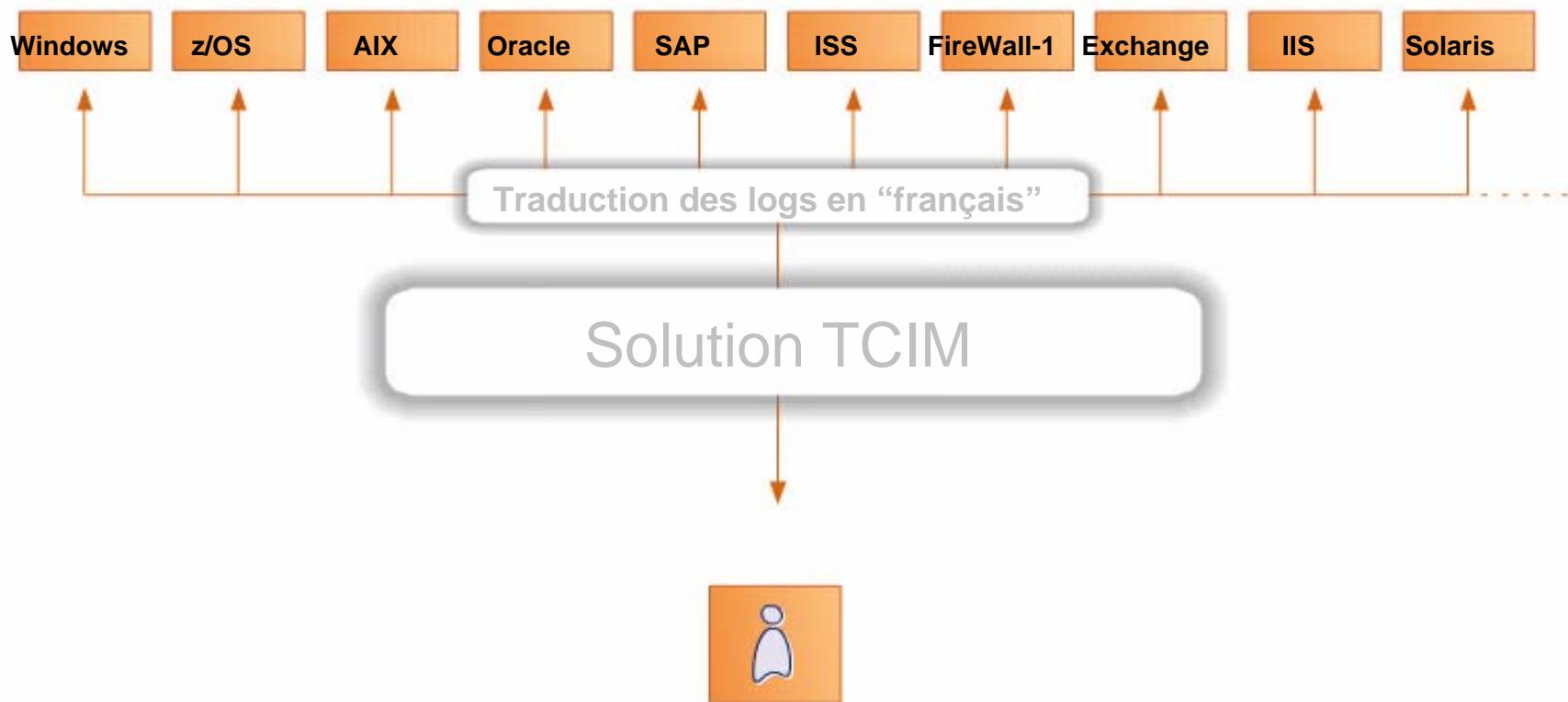


Plutôt que de recourir à de nombreux experts...

Comprendre



Comprendre



InSight épargne temps et argent à l'équipe de sécurité de l'information et de conformité en automatisant la supervision à travers toute l'entreprise.



Traduire les journaux dans un langage compréhensible la méthodologie W7

- 1. Who** did
- 2. What** type of action
- 3. on What** file/data
- 4. When** did he do it and
- 5. Where**
- 6. from Where**
- 7. Where to**

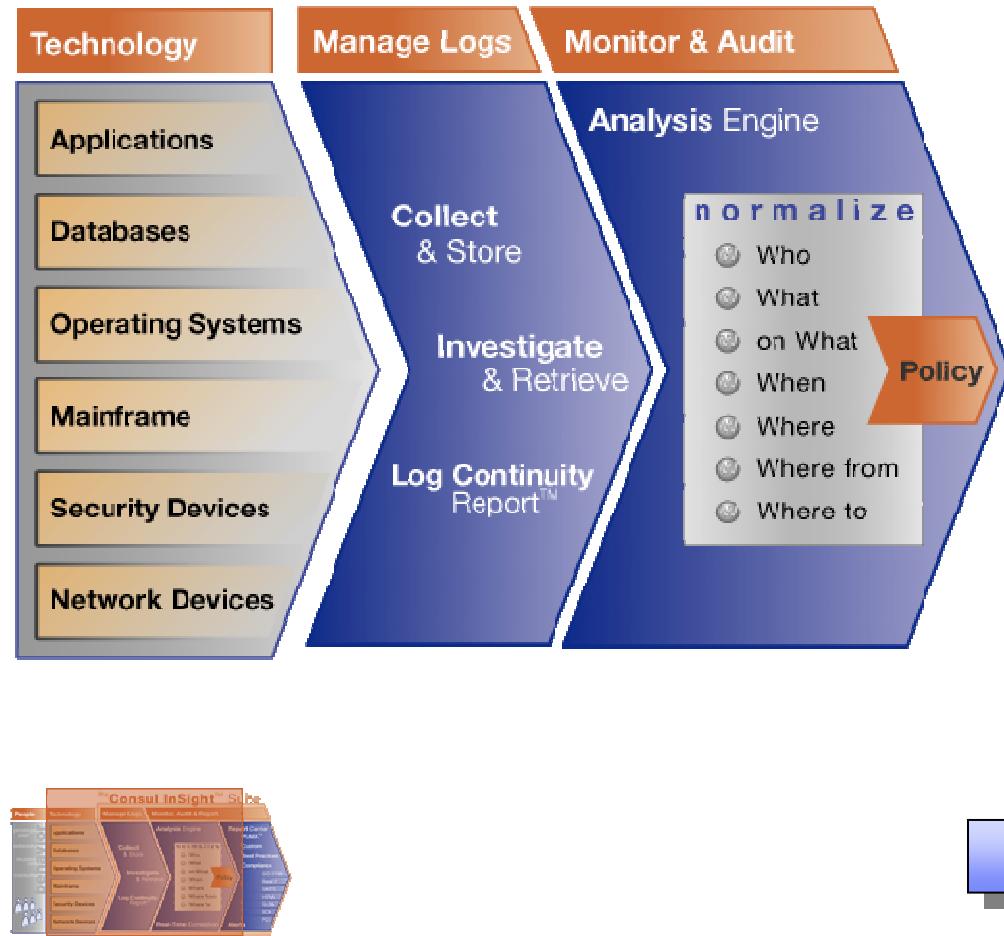
Comprendre



Nous faisons le travail de traduction,
à votre place!

Comprendre

Interpretation et Corrélation sophistiquée



Fonctionnalités:

- W7 : normalisation
- Interprétation de n'importe quel log ou format
- Comparaison de milliards d'événements avec les politiques et règles permises

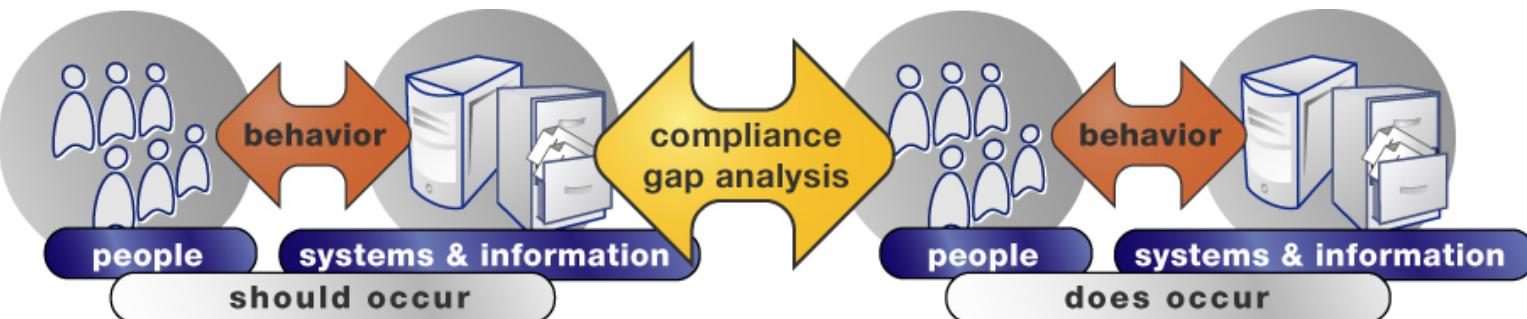
Avantages:

- Interpréter and superviser tous les logs avec moins de ressources manuelles et chères
- Déetecter et résoudre les problèmes de sécurité rapidement.

Normalisation out-of-the-box

Que font les utilisateurs sur mes systèmes et données sensibles?

Comprendre



87% des incidents internes sont causés par des utilisateurs privilégiés.



Tableau de Bord de Conformité
Des milliards de journaux résumés
dans un graphique de vision générale,
en language W7

Enterprise Overview

Database AGGRDB on Server CEA45 by "on What" / "Who" for Jan 22, 2004 till Mar 11, 2004

on What

Finance data ►

HR data ►

System data ►

Customer data ►

System Test ►

Other data ►

Finance Administrator Division Managers Sales IT HR Marketing Users Other Who

Trend graph

Where do you want to go:

- View SOX Compliance report
- Adjust SOX Policy
- Adjust SOX Classification
- View SOX list of Reports
- View SOX Archived Logfiles
- Adjust your personal settings

Resources

- Whitepaper Consul InSight and GLBA
- Whitepaper Consul InSight and ISO17799
- Official Regulations of GLBA
- Official Regulations of ISO17799
- Official Regulations of Sarbanes-Oxley
- Implementation by FIECC

Websites

- The Consul Website
- Consul InSight Security Manager
- Sarbanes-Oxley
- ISO 17799: Official site
- ISO 17799: the Webnewsletter
- ISO 17799: British Standard

Database Overview

| AggrDb | DNB | GEMS | GEM1 | GEM2 | GEM3 | GEM4 |
|--------------|----------------|---------------|----------|------|------|------|
| Name: AggrDb | Status: loaded | Loading date: | Content: | | | |

Trusted sites



ital > Dashboard > Reports > Database Top 10 Reports > Direct Database Access

Liste des événements
Note: Mike Bonfire, un DBA,
lit le fichier Payroll

Direct Database Access Report



Time period setup

Month Day Year Hour Min.

Start time September 3 2006 1 0

End time September 7 2006 16 0

Execute

Reset

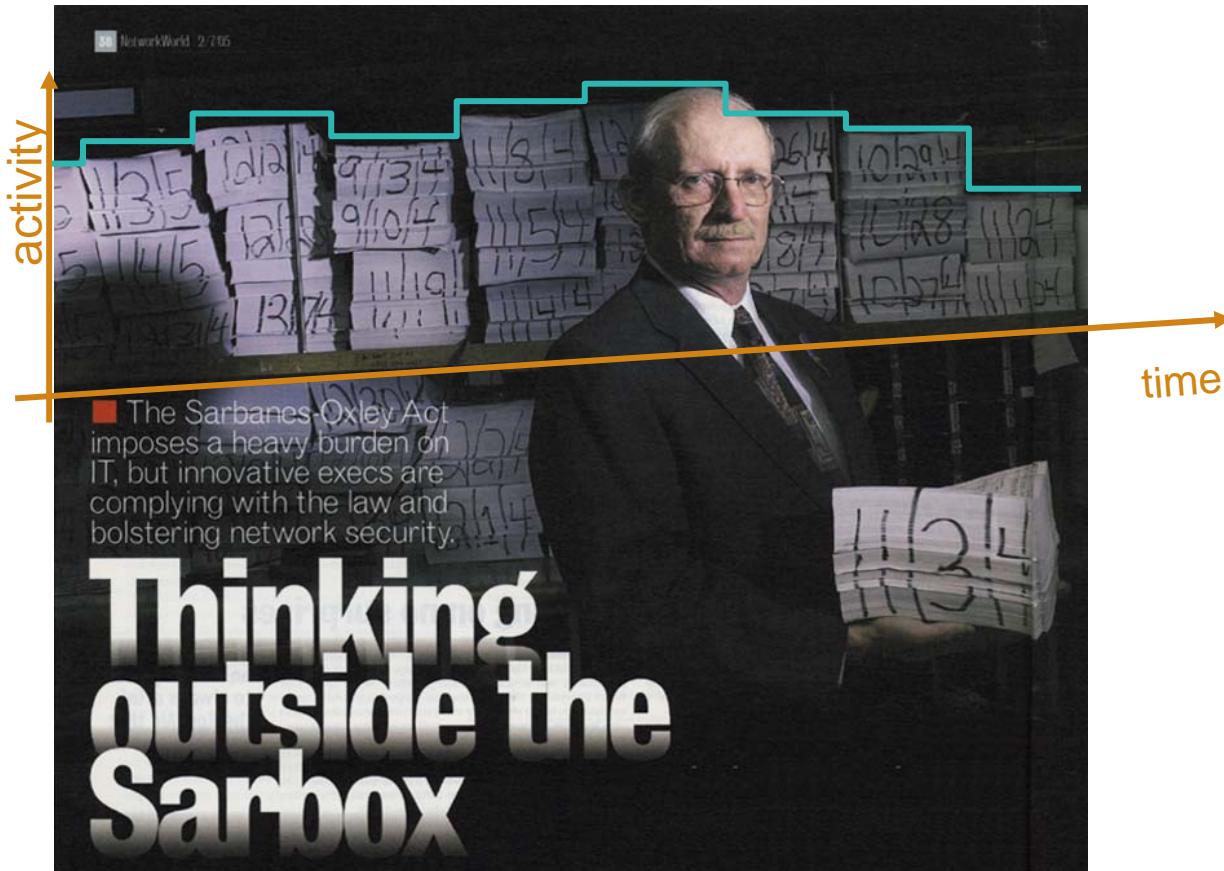
time zone Event time zone

Event List

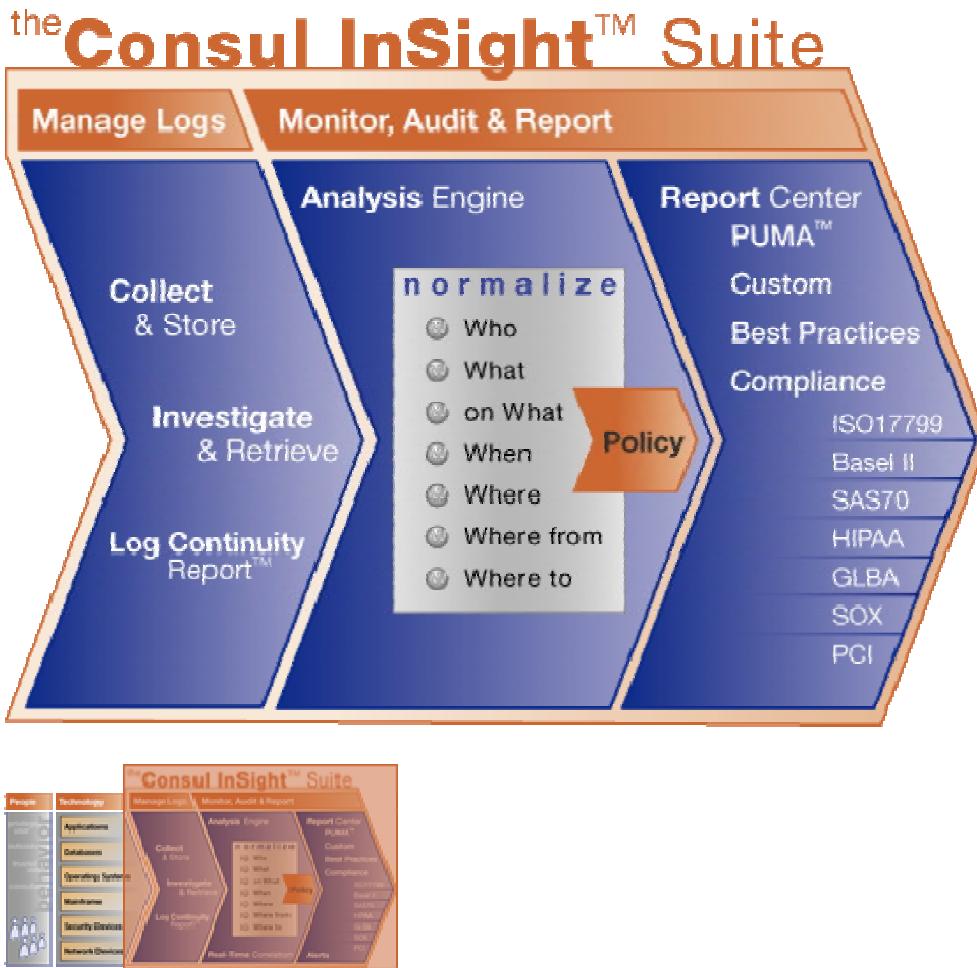
| Severity | When | # | What | Where | Who | from Where | on What | Where to |
|----------|------------------------------------|---|-----------------------------|----------------|--------------|----------------|----------------------------------|----------------|
| INFO | Sun Sep 03 2006 09:00:02 GMT-05:00 | 1 | Logon : User / Success | MS SQL Server | Joe Security | MS SQL Server | DATABASE : - / Unavailable | MS SQL Server |
| INFO | Sun Sep 03 2006 09:00:03 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Mike Bonfire | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |
| INFO | Sun Sep 03 2006 09:00:03 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Jim Hofferma | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |
| INFO | Sun Sep 03 2006 09:00:06 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Jim Hofferma | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |
| INFO | Sun Sep 03 2006 09:00:06 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Max Doane | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |
| INFO | Sun Sep 03 2006 09:00:06 GMT-05:00 | 1 | Logon : User / Success | Oracle Finance | Max Doane | Oracle Finance | DATABASE : - / Unavailable | Oracle Finance |
| INFO | Sun Sep 03 2006 09:20:00 GMT-05:00 | 1 | Logon : User / Success | MS SQL Server | Max Doane | MS SQL Server | DATABASE : - / Unavailable | Oracle Finance |
| INFO | Sun Sep 03 2006 09:20:00 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Max Doane | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |
| INFO | Sun Sep 03 2006 09:20:00 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Max Doane | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |
| INFO | Sun Sep 03 2006 09:20:01 GMT-05:00 | 1 | Logon : User / Success | DB2 Server | Jim Hofferma | DB2 Server | DATABASE : - / Unavailable | DB2 Server |
| INFO | Sun Sep 03 2006 09:20:01 GMT-05:00 | 1 | Access : Dbobject / Success | DB2 Server | Jim Hofferma | DB2 Server | DBOBJECT : Finance/fn_op / Fn_op | DB2 Server |
| INFO | Sun Sep 03 2006 09:20:01 GMT-05:00 | 1 | Access : Dbobject / Success | MS SQL Server | Joe Security | MS SQL Server | DATABASE : - / Unavailable | DB2 Server |
| INFO | Sun Sep 03 2006 09:40:00 GMT-05:00 | 1 | Logoff : User / Success | DB2 Server | Mike Bonfire | DB2 Server | DATABASE : - / Unavailable | DB2 Server |
| INFO | Sun Sep 03 2006 09:40:00 GMT-05:00 | 1 | Access : Dbobject / Success | MS SQL Server | Mike Bonfire | MS SQL Server | DBOBJECT : Finance/fn_lg / Fn_lg | Oracle Finance |
| INFO | Sun Sep 03 2006 09:40:00 GMT-05:00 | 1 | Logoff : User / Success | MS SQL Server | Joe Security | MS SQL Server | DATABASE : - / Unavailable | Oracle Finance |
| INFO | Sun Sep 03 2006 09:40:00 GMT-05:00 | 1 | Logoff : User / Success | Oracle Finance | Max Doane | Oracle Finance | DATABASE : - / Unavailable | Oracle Finance |
| INFO | Sun Sep 03 2006 09:40:00 GMT-05:00 | 1 | Access : Dbobject / Success | Oracle Finance | Mike Bonfire | Oracle Finance | DBOBJECT : Finance/fn_pr / Fn_pr | Oracle Finance |

Communiquer

Des rapports, tout prêts, pour communiquer...



Communicate



Rapports d'Audit et de Conformité

Fonctionnalités:

- Centaine de rapports prédéfinis
- Modules de Conformité
- Alertes “Special Attention”
- Rapports personnalisés

Avantages:

- Réduire le temps et l'effort de réponse aux audits
- Rapports instantanés, sans perte de temps
- Réduire le risque de menace interne:
 - Protection de l'information
 - contrôle du changement
 - User management

Dashboard Summary Reports Policies Groups Settings Regulations Log off

Dashboard > Regulations

Compliance Modules

- Basel II**
 - Introduction
 - Classification Template
 - Policy Template
 - Reports
 - Documentation
- Gramm-Leach-Bliley Act (GLBA)**
- Health Insurance Portability and Accountability Act (HIPAA)**
- ISO 17799**
 - Introduction
 - Classification Template
 - Policy Template
 - Reports
 - Documentation
- Sarbanes Oxley (SOX)**
 - Introduction
 - Classification Template
 - Policy Template
 - Reports
 - Documentation

Classification Template

Download this template to use in the management Console.

Who

| | |
|--------------------|--|
| Alert - High | Alert generated by system devices resources - High |
| Alert - Low | Alert generated by system devices resources - Low |
| Alert - Medium | Alert generated by system devices resources - Medium |
| Exposure - High | Description of Exposure - High |
| Exposure - Low | Description of Exposure - Low |
| Exposure - Medium | Description of Exposure - Medium |
| Intrusion - High | Description of Intrusion - High |
| Intrusion - Low | Description of Intrusion - Low |
| Intrusion - Medium | Description of Intrusion - Medium |
| Intrusions | Intrusions reported by CS devices |

What

| | |
|---------------------|--------------------------------|
| Office Hours | Normal working hours for staff |
| Out of Office Hours | Out of normal working hours |
| Weekend | Non-working days |

Where

Policy Template

Download this template to use in the management Console.

Policy Rules

| Who group | What group | Where group | WhatIf group | FromWhoTo Group ID | Severity | Description |
|----------------|----------------------|------------------------------|--------------|--------------------|----------|------------------------------|
| HR | Intrusion - Medium | Customer Information Systems | | | 30 | Review |
| Administrators | Financial - Medium | | | | 40 | Requires attention |
| Administrators | Financial - Medium | Access | medium | | 50 | Requires attention |
| Administrators | Customer Data - High | Access | medium | | 60 | Requires attention |
| Administrators | Financial - Low | Access | high | | 70 | Requires immediate attention |
| IT | Sensitive | Access | low | | 20 | Review |
| Unknown | Customer | Access | low | | 25 | Review |

Attention Rules

Sarbanes Oxley Regulation Reports

Please login into the Consul Insight Suite. This will give you access to all the products available with the specific username.

If you forgot your username and/or password please contact your administrator:

Contact us

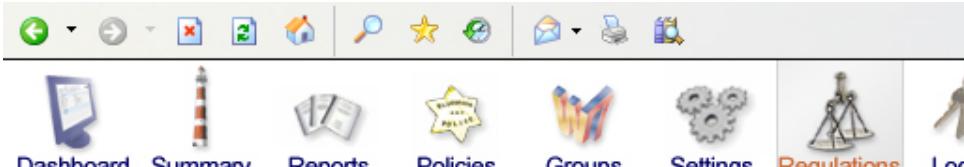
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Direct Line: +91 11 261 3333

Extra Information

@consul.com
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consul



Des modules pour Réglementations
spécifiques, avec des rapports taillés sur mesure pour accélérer vos efforts de conformité – réduisant votre investissement en temps, ressources et coûts

Sarbanes Oxley Regulation Reports

| Title | Description |
|---|--|
| Sarbanes Oxley (FFIEC 1.1.1.4) Security Policy report | No description given |
| Sarbanes Oxley (FFIEC 1.3.1.1) Classification report | No description supplied |
| Sarbanes Oxley (6.3, 8.1.3) Security alert | Alerts sent in response to policy exceptions or special attention exceptions. |
| Sarbanes Oxley (8.1.2) Operational change control | Changes to the operating environment such as system updates, DBA activity etc. |
| Sarbanes Oxley (8.1.6) External contractors | Exceptions and failures caused by External Contractors. |
| Sarbanes Oxley (8.3) Malicious attacks | Exceptions and failures due to Malicious attacks. |
| Sarbanes Oxley (8.4.2) Operator log | Actions performed by the IT Admin staff. |
| Sarbanes Oxley (8.5) Network management | Actions and events caused by users on Network Services. |
| Sarbanes Oxley (8.7.4.1) Mail server | Exceptions and failures for the Mail Server assets. |
| Sarbanes Oxley (8.7.6) Publicly available systems | Actions and exceptions on Publicly Published Data. |
| Sarbanes Oxley (9.2.4, 9.7) Review of user access rights | Actions performed by administrators on users. |
| Sarbanes Oxley (9.2.4.c, 9.7) System access and use | Successes and failures against key assets |
| Sarbanes Oxley (9.3) User responsibilities and password use | Logon failures and successes either locally or remotely. |
| Sarbanes Oxley (9.4) Network access control | Actions performed on and events and exceptions generated by Network or Router. |
| Sarbanes Oxley (9.4.4) Node authentication | Authentication of connections to remote computer systems |
| Sarbanes Oxley (9.4.5) Remote diagnostic port access | Detection of accesses to the diagnostic ports on servers. |
| Sarbanes Oxley (9.5.3) User identification and authentication | Logon/Logoff successes and failures. |
| Sarbanes Oxley (9.5.5) System utilities | Usage of system utilities |
| Sarbanes Oxley (9.6) Application access control | Actions, Exceptions and events on HR Data, Sensitive Data, User Sensitive Data, System, Financial Data, Proprietary Data and General Data. |
| Sarbanes Oxley (9.6.1) Information access restrictions | Who accessed sensitive or private data successfully or unsuccessfully. |
| Sarbanes Oxley (9.6.2) Sensitive system isolation | Exceptions and failures against sensitive systems data in asset groups User, HR Data, Source Code, and Financial Data |
| Sarbanes Oxley (9.7.2.3) Logging and reviewing events | Exceptions and failures recorded by the InSight system. |
| Sarbanes Oxley (9.8.1) Mobile worker | Exceptions and failures for mobile workers. |

This will give you access to all the products available with this specific username.

If you forgot your username and/or password please contact your administrator.

Contact us

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Direct Line: +31 15 251 3333

Dashboard Summary Reports Policy Groups Settings Regulations

Dashboard > Regulations > Sarbanes Oxley Regulation Reports > Operational Change Control

Operational Change Control

Un résumé de tous les changements opérationnels effectués par les différents groupes d'utilisateurs.

Time period setup

| | Month | Day | Year | Hour | Min. |
|------------|----------|-----|------|------|------|
| Start time | October | 1 | 2006 | 0 | 40 |
| End time | November | 1 | 2006 | 0 | 40 |

Execute **Reset**

Time zone: GMT-05:00 New_York, Nipigon, Pangnirtung

Summary report

| Who group | What group | On What group | Where to group | #Events | #Pol.Excp. | #Spec.Att | #Fail. |
|----------------|-----------------------|----------------|----------------|---------|------------|-----------|--------|
| Administrators | System Administration | General Data | Finance Server | 1256 | 15 | 145 | 12 |
| Administrators | System Operations | Sensitive Data | Finance Server | 1352 | 89 | 156 | 0 |
| Administrators | System Updates | Financial Data | Finance Server | 1543 | 154 | 456 | 45 |
| FinAdmin Staff | System Updates | Sensitive Data | Finance Server | 5644 | 16 | 165 | 0 |
| IT | System Actions | Financial Data | Finance Server | 5466 | 126 | 14 | 0 |
| IT | System Operations | Sensitive Data | Mainframe FIN | 8836 | 91 | 4 | 0 |
| IT | System Updates | General Data | Mainframe FIN | 4875 | 4 | 46 | 2 |
| IT Admin | Authorization Objects | Financial Data | Finance Server | 56 | 88 | 16 | 23 |
| IT Admin | System Operations | Sensitive Data | Mainframe FIN | 546 | 189 | 16 | 0 |
| IT Admin | System Updates | General Data | Mainframe FIN | 5165 | 48 | 54 | 0 |
| Sales | System Actions | Financial Data | Finance Server | 78 | 78 | 78 | 0 |
| System | System Actions | Financial Data | Finance Server | 15654 | 6 | 15 | 0 |
| System | System Administration | Sensitive Data | Finance Server | 546 | 15 | 45 | 0 |

|◀ ▶ 1 ▶▶|

The system update report shows changes to key system components. This report when used with the incident tracking report allows changes to be monitored and recorded and tracked via an external incident tracking system.

Regulation

Paragraph 8.1.2

Data Selection

This report is based on the following groups:

- What DBA Actions,
- System Actions,
- System Administration,
- System Operations,
- System Updates

Contact us

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 Toll Free (US only): 800 258 5077

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 contactsales@consul.com
 Direct Line: +31 15 251 3333

Dashboard Summary Reports Policy Groups Settings Regulations Portal

Portal > Dashboard > Regulations > Sarbanes Oxley > Operational Change Report > Eventlist

Eventlist of IT Admin doing Authorization Objects on Financial Data on the Finance Server

Time period setup

Event List

| Severity | When | # | What | Where | Who | | | |
|----------|------------------------------------|---|-----------------------------|----------------------|--------------|----------------------|--------------------------------------|----------------------|
| 2 | Tue Oct 24 2006 14:32:44 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | WS_03442 (Windows) | USER : David088 / David088 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 24 2006 16:09:39 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | WS_03442 (Windows) | USER : David088 / David088 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 24 2006 16:20:49 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Jim Hofferma | WS_03442 (Windows) | USER : Administrator / Administrator | SRV_DC_034 (Windows) |
| 2 | Tue Oct 24 2006 16:20:52 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Jim Hofferma | WS_03442 (Windows) | USER : Administrator / Administrator | SRV_DC_034 (Windows) |
| 2 | Sat Oct 28 2006 11:21:26 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Jim Hofferma | SRV_DC_034 (Windows) | USER : Administrator / Administrator | SRV_DC_034 (Windows) |
| 2 | Sat Oct 28 2006 11:21:49 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | SRV_DC_034 (Windows) | USER : Unavailable / Unavailable | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:03:02 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Max Doane | SRV_DC_034 (Windows) | USER : Richard019 / Richard019 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:03:02 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Max Doane | SRV_DC_034 (Windows) | USER : Richard019 / Richard019 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:05:01 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Jim Hofferma | SRV_DC_034 (Windows) | USER : Chin055 / Chin055 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:05:01 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Jim Hofferma | SRV_DC_034 (Windows) | USER : Chin055 / Chin055 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:05:01 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Joe Security | SRV_DC_034 (Windows) | USER : Sean031 / Sean031 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:05:01 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Joe Security | SRV_DC_034 (Windows) | USER : Sean031 / Sean031 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:10:00 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | SRV_DC_034 (Windows) | USER : Rick053 / Rick053 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:10:00 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | SRV_DC_034 (Windows) | USER : Rick053 / Rick053 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:30:00 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | SRV_DC_034 (Windows) | USER : Ralph037 / Ralph037 | SRV_DC_034 (Windows) |
| 2 | Tue Oct 31 2006 08:30:00 GMT+02:00 | 1 | Grant : Privilege / Success | SRV_DC_034 (Windows) | Mike Bonfire | SRV_DC_034 | USER : Ralph037 / Ralph037 | SRV_DC_034 |

Liste des évènements
Zoomer dans chaque action que l'administrateur a effectué sur un système financier et voir la création du compte utilisateur Chin055

Agenda “Gestion des menaces et de la sécurité”

Gestion des logs et audits avec Tivoli Compliance Insight Manager

1. Capturer – Gestion des logs de l'entreprise
2. Comprendre – Interprétation sophistiquée des logs
3. Communiquer – Reporting et audit de conformité Architecture de la solution

Corrélation d'évenements avec Tivoli Security Operations Manager

1. Pre-filtrage et agrégation des évenements de sécurité
2. Corrélation d'évenements
3. Investigations, gestion d'incidents et alertes, reporting



Les tentatives de protection des biens de l'entreprise ont engendré un pilotage complexe de la sécurité



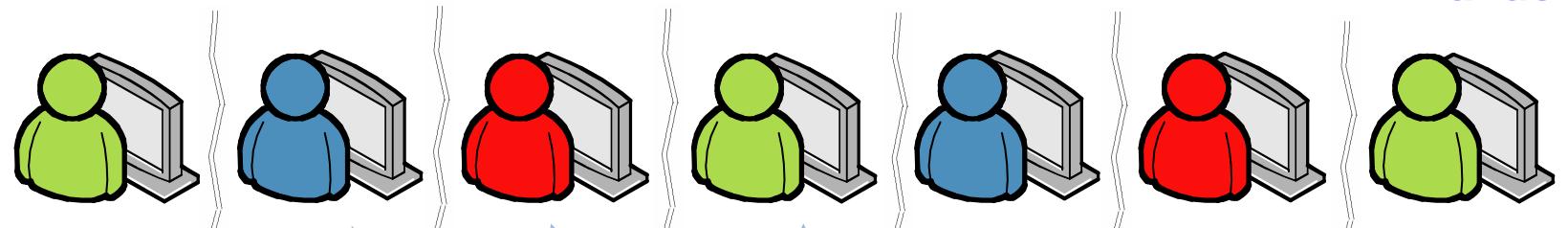
Le déploiement d'outils et d'équipements de sécurité multiples implique:

- ➊ Un pilotage complexe de la sécurité;
- ➋ Aucune vue consolidée de la sécurité du SI;
- ➌ Difficulté à isoler les véritables menaces;
- ➍ De multiples alarmes et alertes redondantes avec faux positifs
- ➎ Difficulté à gérer les priorités et les escalades
- ➏ Une perception erronée du niveau réel de sécurité
- ➐ **Mauvaise compréhension de l'exposition réelle de l'entreprise**

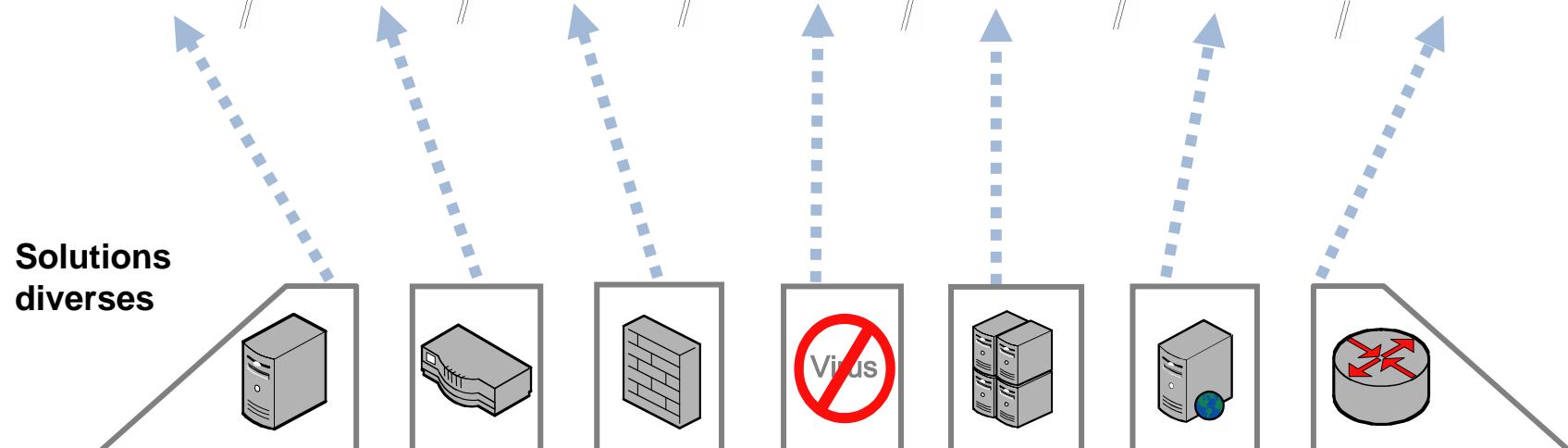


La problématique : Sources et Environnements multiples

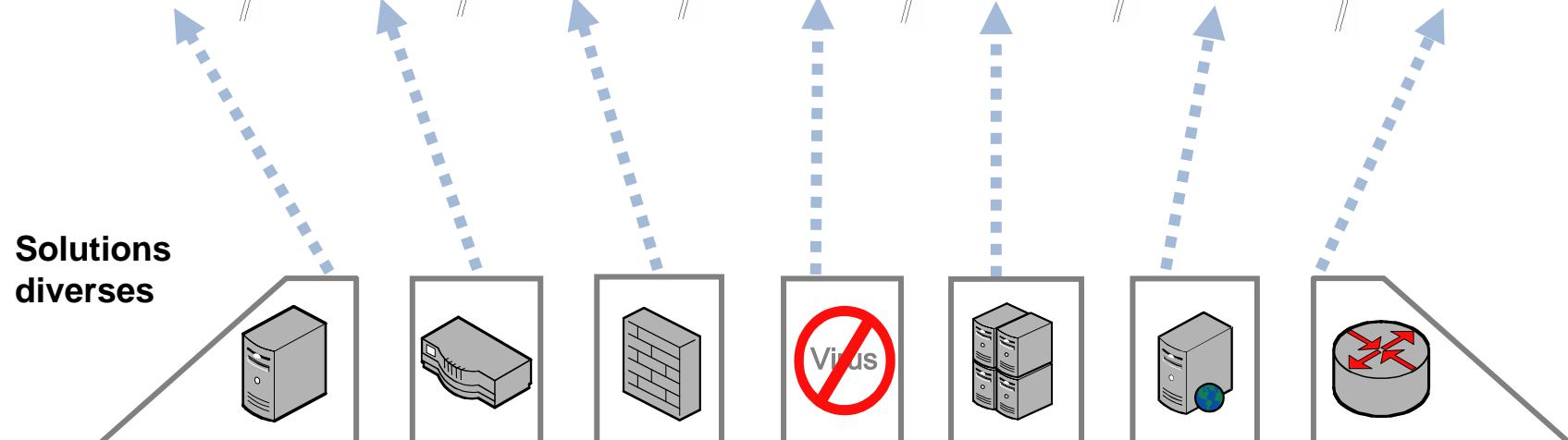
Management dissocié



Consoles Multiples



Corrélation Manuelle



Solutions diverses

Identity &
Access

Network
IDS

Firewall

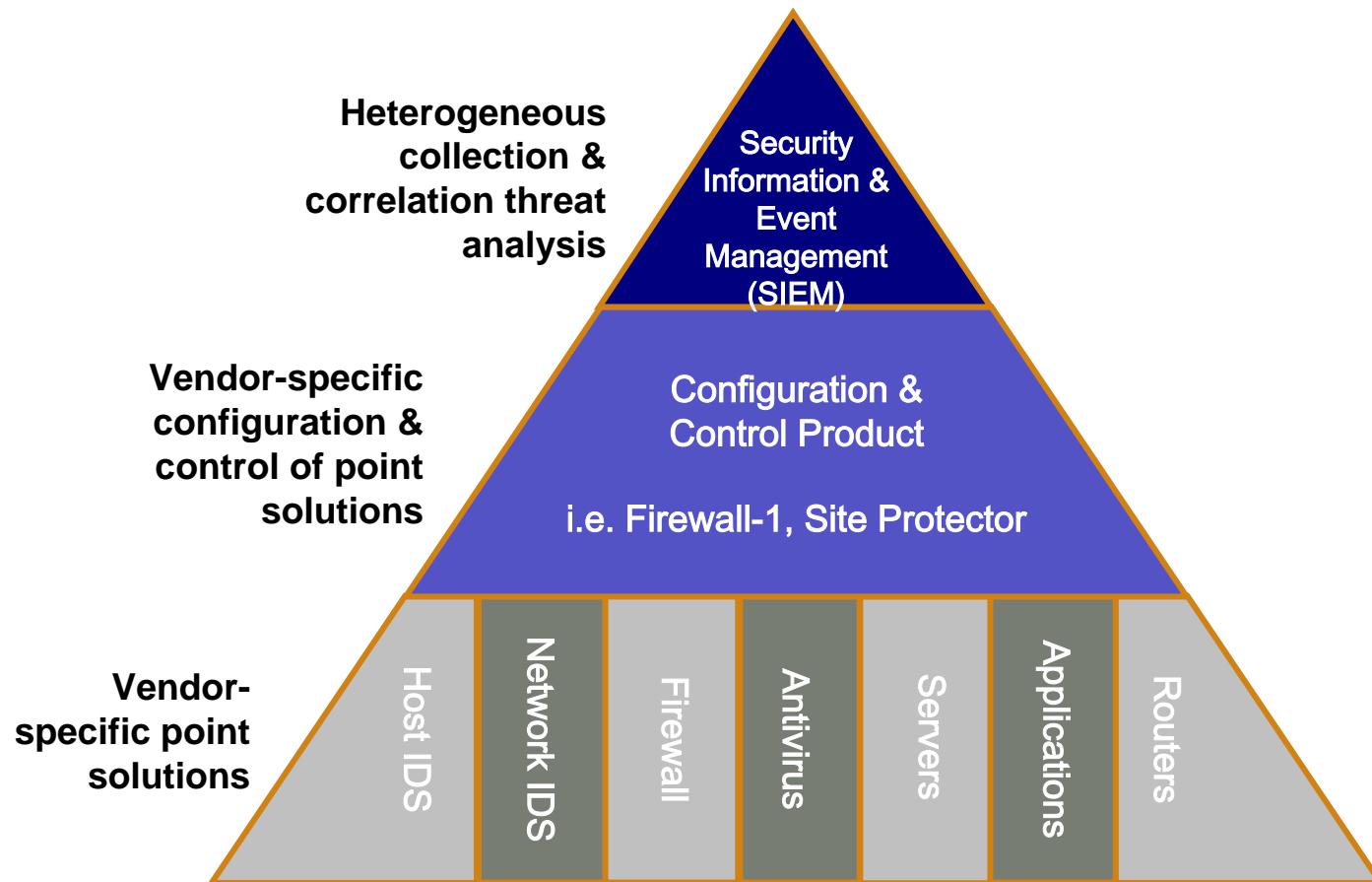
Antivirus

Servers

Apps

Routers

La solution : Une Interface SIEM unique pour une collecte hétérogène



Une solution de pilotage de la sécurité opérationnelle

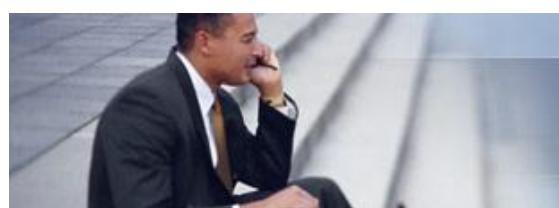
TSOM est aujourd'hui utilisé par les plus grandes sociétés (banques, opérateurs télécom, gouvernements).



- ✓ Consolidation des données de sécurité de l'infrastructure



- ✓ Gestion du risque pour les applications métiers critiques



- ✓ Fournisseurs de solutions de pilotage de la sécurité hébergés (MSSP)

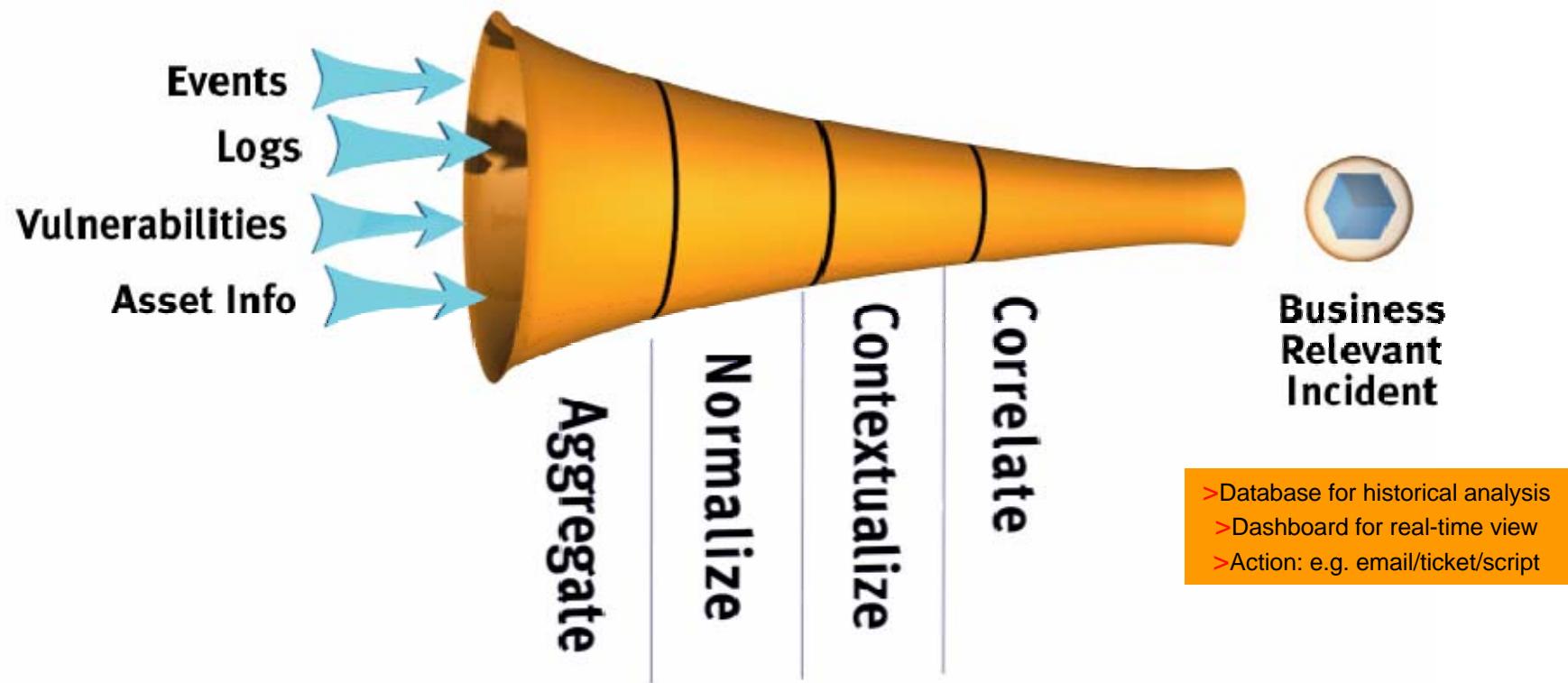


Aperçu de Security Operations Manager

- TSOM est un outil de pilotage de la sécurité et de gestion des incidents; il est conçu pour améliorer l'efficacité opérationnelle du SOC en offrant une solution intégrée d'analyse et de résolution des problèmes:
 - Agrégation et centralisation des logs provenant d'environnements hétérogènes
 - Corrélation inter équipements et gestion des priorités en temps réel sur détection d'un incident
 - Outils intégrés d'investigation et remédiation aux problèmes détectés
 - Tableaux de bord temps réel du statut du périmètre sécurité supervisé
 - Gestion intégrée des incidents grâce au système de tickets
 - Reporting détaillé sur l'efficacité opérationnel, le pilotage et la conformité aux standards (sox, Basel II, PCI...)
 - Pondération des biens métiers afin de prendre en compte cette dimension dans la gestion du risque



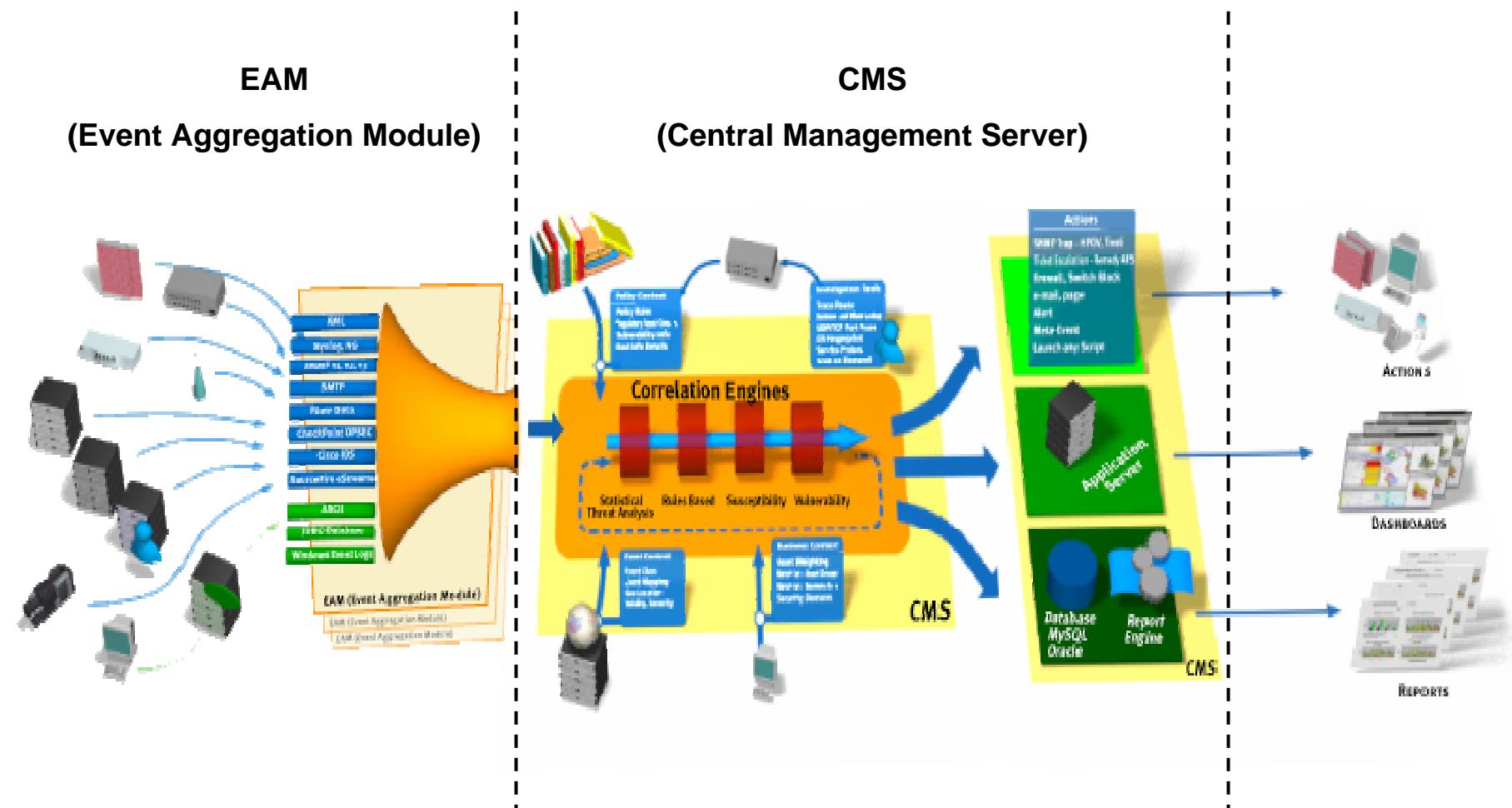
Méthode de détection des *incidents sécurité*



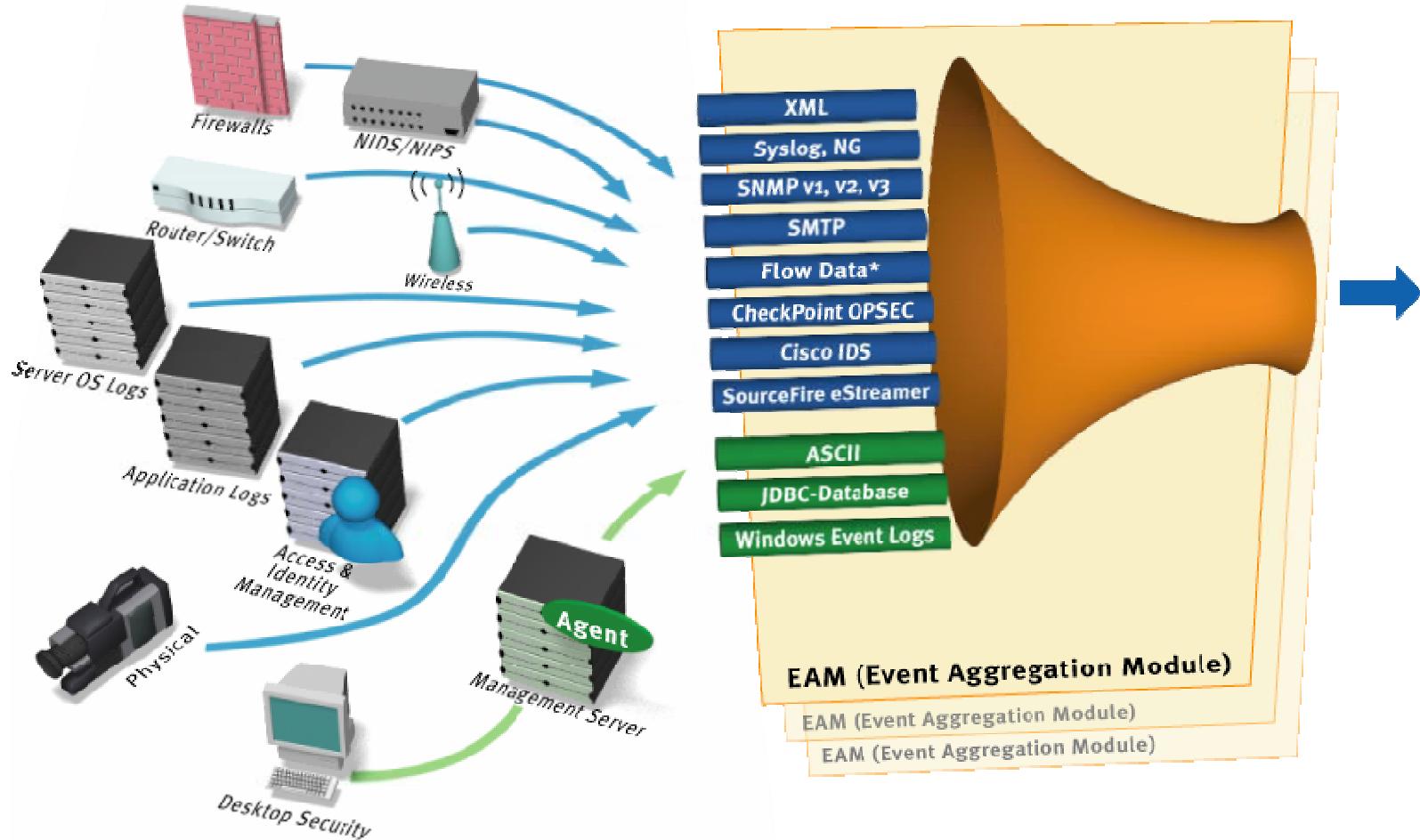
"TSOM automates the aggregation and correlation process. It mitigates false positives and alerts my team to real threats in a timely manner. The product is more or less what I would have designed and built myself, given four years and a pool of developers."

– Jeff Hartley, Cox Communications

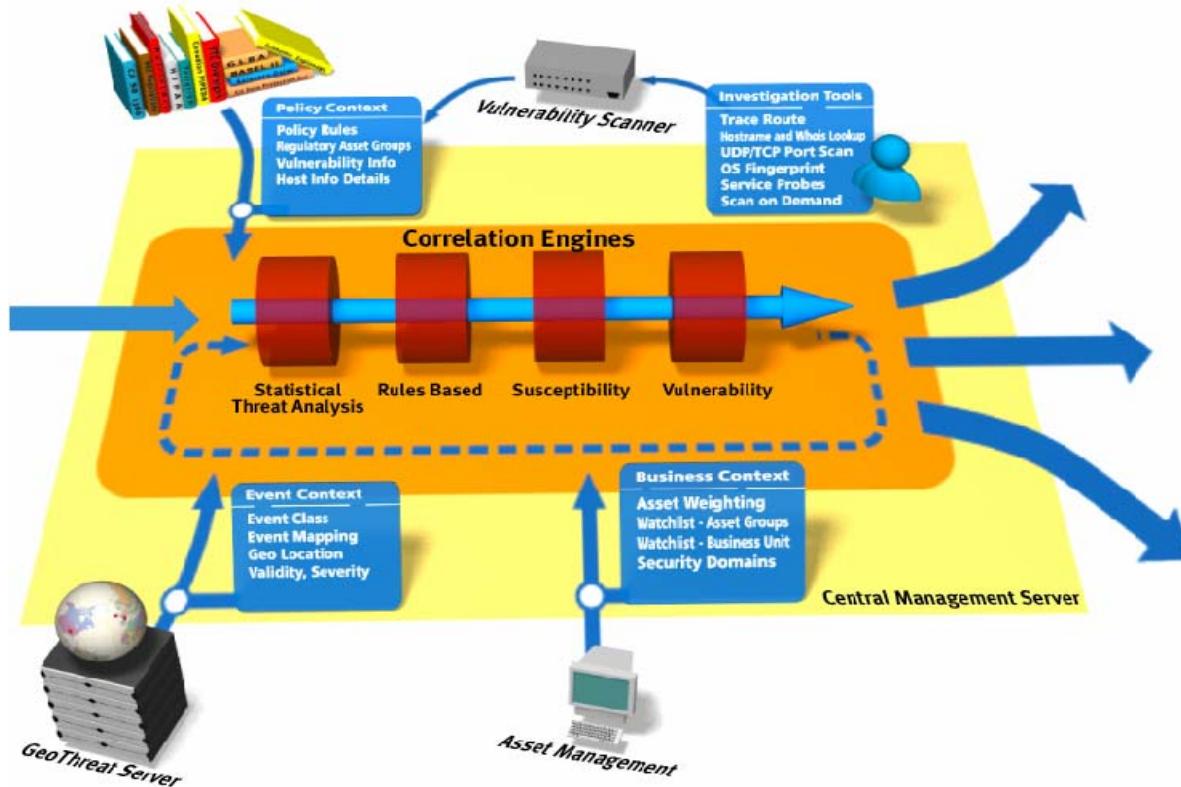
Architecture de Security Operations Manager



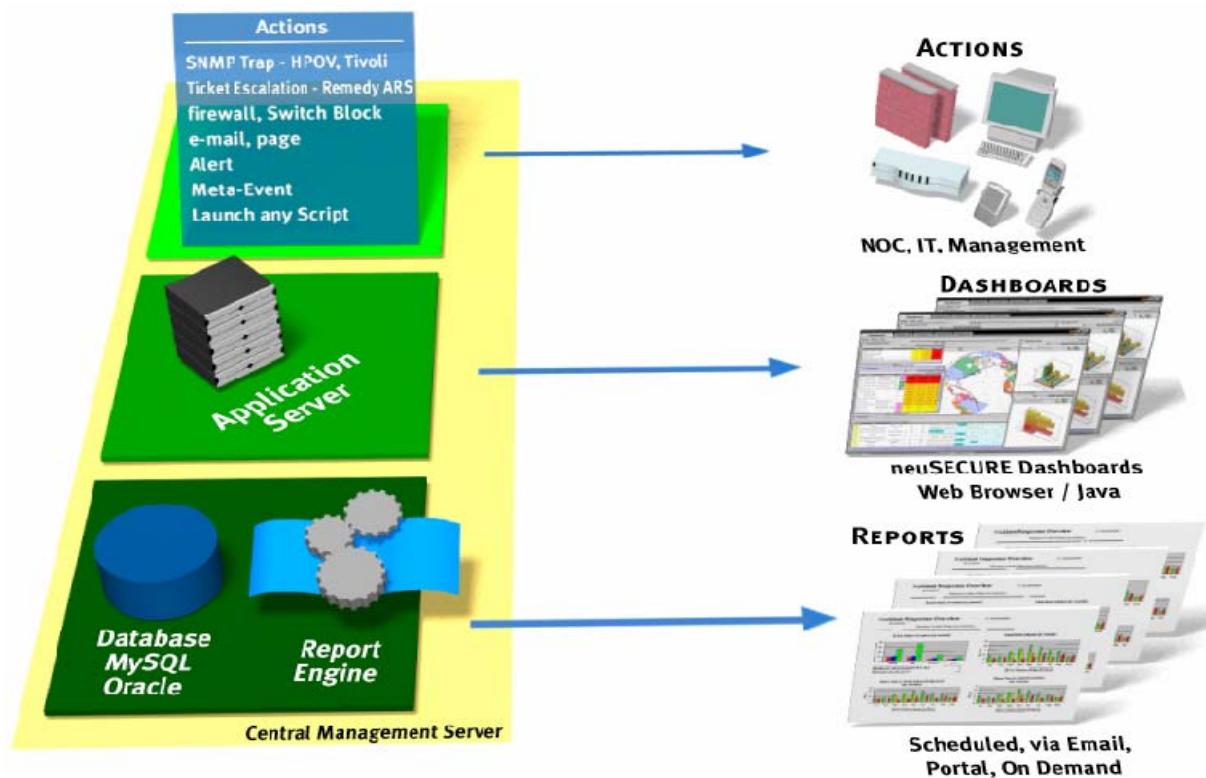
Event Collection



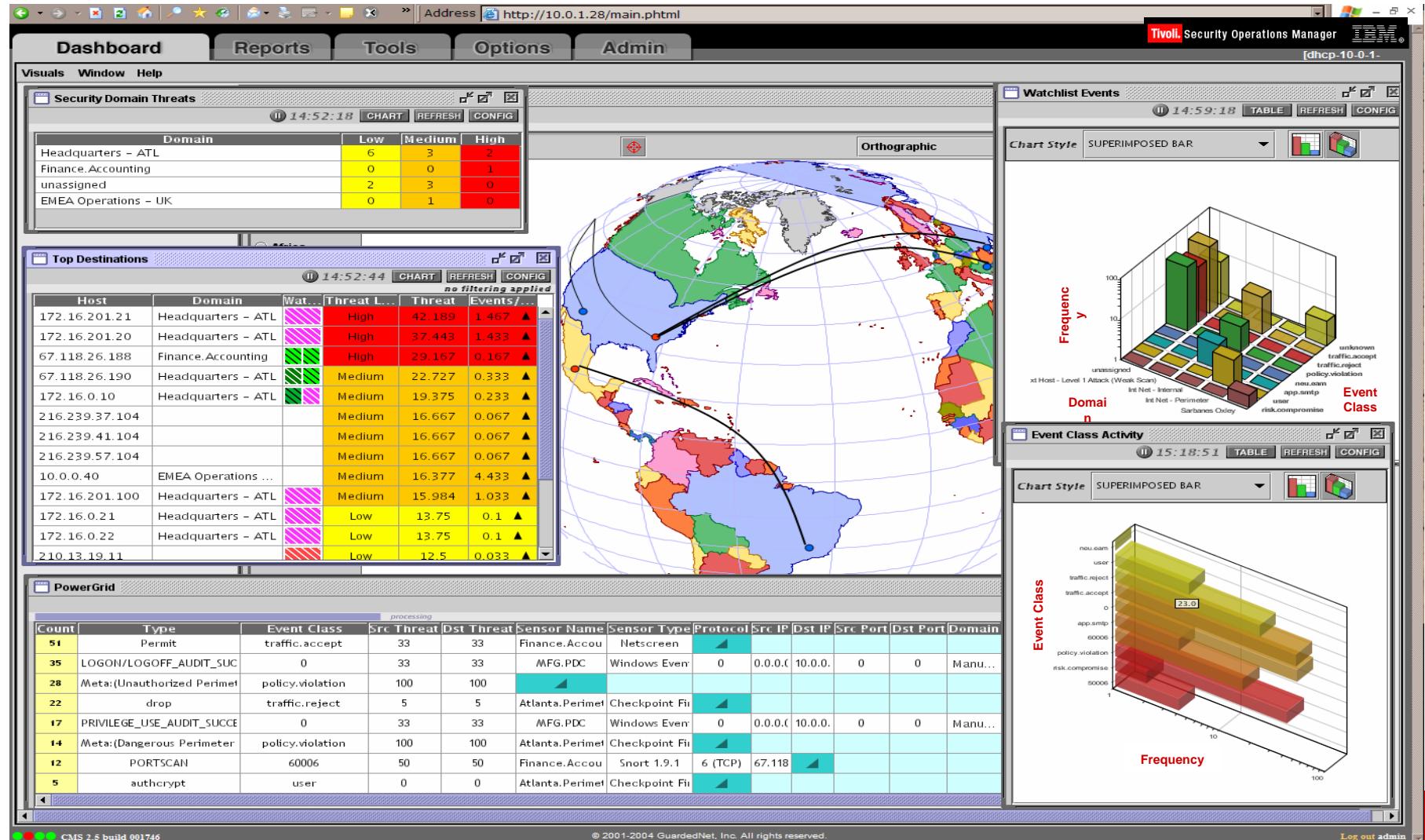
Event Correlation



Result



Tableaux de bord consolidés et temps réel



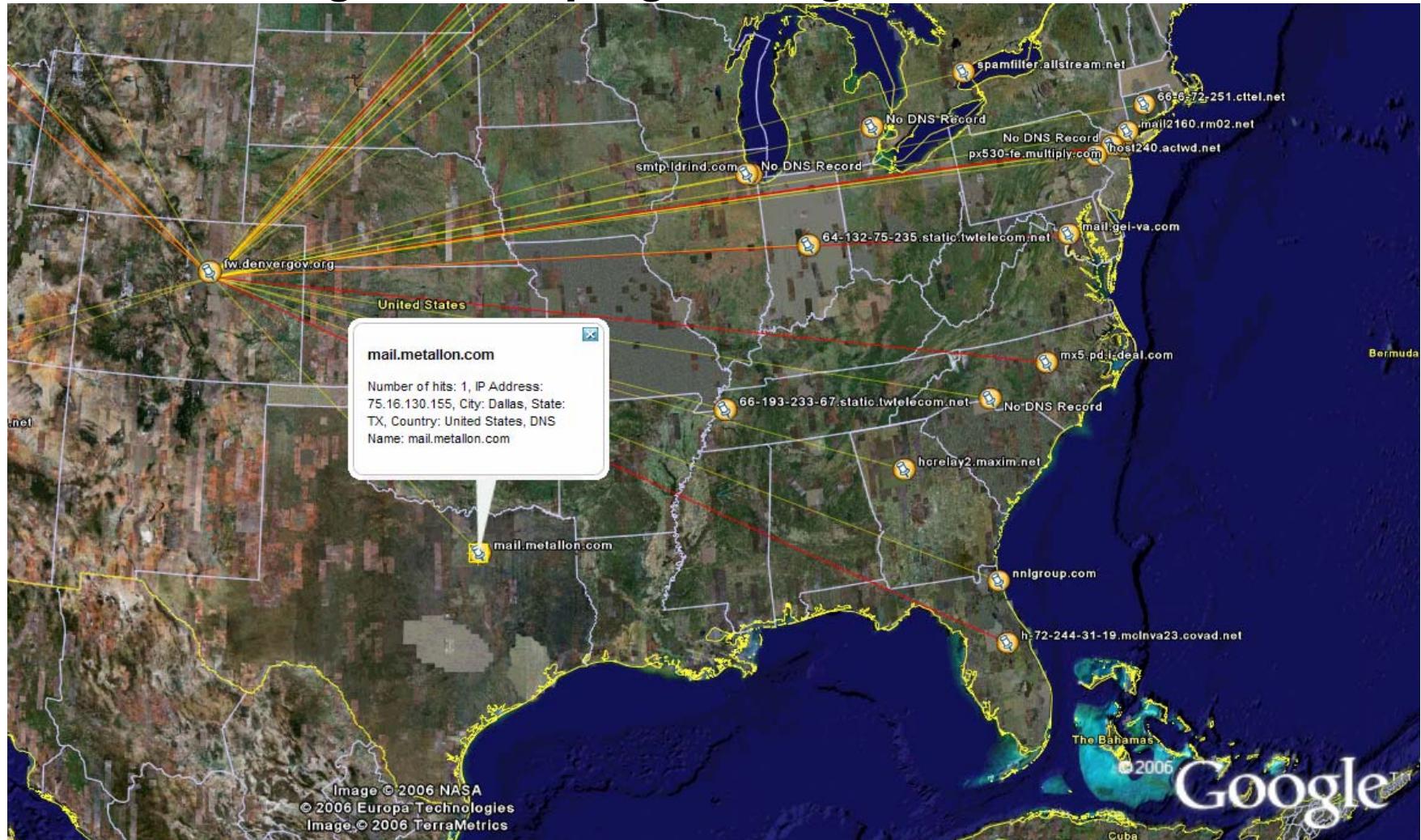


Un exemple : Logs PIX au format brut

```
root@secsrv:~#
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:129.250.137.135/22789 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:208.213.162.234/41294 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:88.36.205.34/34169 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:193.60.199.89/54368 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:194.171.180.8/4856 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:66.9.3.114/17252 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:64.109.192.3/50953 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:206.108.184.244/11774 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:210.11.172.77/58919 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:12.160.0.85/8418 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:75.16.130.155/24621 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 58.209.30.69/11294 to 199.239.30.102/25 flags RST on interface outside
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:194.139.33.72/54668 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 38.116.146.175/25 to 204.56.42.128/2303 flags FIN PSH ACK on interface outside
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:81.223.187.74/42114 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 70.42.39.14/2703 to 199.239.30.107/59488 flags RST on interface outside
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:194.167.143.7/31962 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-4-106023: Deny tcp src outside:129.41.78.34/51859 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:17 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 68.101.43.8/6234 to 204.56.46.227/25 flags FIN ACK on interface outside
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:151.11.85.135/40748 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 38.116.146.175/25 to 204.56.42.212/3018 flags FIN PSH ACK on interface outside
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:216.74.162.15/19560 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:69.9.43.74/34357 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:217.7.138.151/38036 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:192.38.94.2/53025 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:12.109.62.139/51831 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 10.4.9.27/3065 to 205.178.146.50/80 flags RST on interface inside
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:216.84.124.34/55794 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:166.84.0.211/58510 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:64.132.75.235/2432 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:18 10.146.1.3 %PIX-4-106023: Deny tcp src outside:72.244.31.19/4144 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-4-106023: Deny tcp src outside:209.25.152.168/47268 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-4-106023: Deny tcp src outside:134.157.0.129/52903 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-4-106023: Deny tcp src outside:64.81.236.90/2275 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-4-106023: Deny tcp src outside:64.81.188.26/8261 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-4-106023: Deny tcp src outside:213.252.49.30/49673 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 10.143.2.212/3045 to 69.15.190.186/143 flags RST on interface inside
Oct 11 23:00:19 10.146.1.3 %PIX-4-106023: Deny tcp src outside:66.193.233.67/25280 dst inside:204.56.46.233/25 by access-group "outside_acl"
Oct 11 23:00:19 10.146.1.3 %PIX-6-106015: Deny TCP (no connection) from 217.157.198.116/60991 to 199.239.30.107/25 flags RST on interface outside
```



Les mêmes logs avec le plugin Google Earth



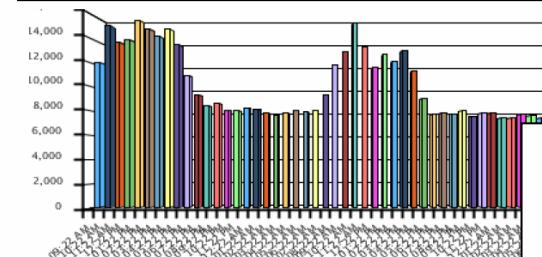
Reporting centralisé

Aggregated Event Frequency

Grouped by: Event Type

Description:

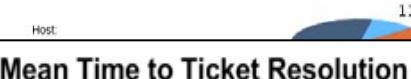
Displays the aggregate Event Frequency for a given time range based on Event Type



Hosts with Vulnerabilities

Description:

Displays all Vulnerabilities by Host and Severity



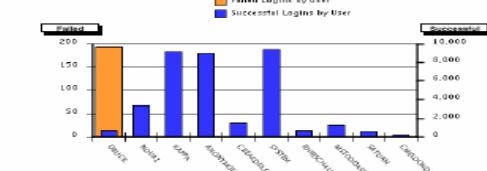
Powerful Reporting Engine

Leveraging the power of TSOM complete set of reports and report templates provides a comprehensive view of your security posture over time. **(68 standard reports +)**

Login Failures vs. Success

Grouped By: User Name

Description:
Displays login failures versus success grouped by user



Generated By: admin
Generated On: 2005-01-21 at: 14:53:14

Start Date: 01/01/2004 14:53:07
End Date: 01/21/2005 14:53:12

| User Name | Failed Logins | Successful Logins |
|-----------------|---------------|-------------------|
| admin | 195 | 600 |
| ROTA1 | 0 | 3351 |
| KARAS | 0 | 9199 |
| ANONYMOUS LOGON | 0 | 8895 |
| CSEASD1000CX | 0 | 1695 |
| SYSTEM | 0 | 95881 |
| REISCHHALU | 0 | 647 |
| METODISTEPAO | 0 | 1296 |
| SATURN | 0 | 610 |
| CMELLOUND6000 | 0 | 200 |

newSECURE Reporting

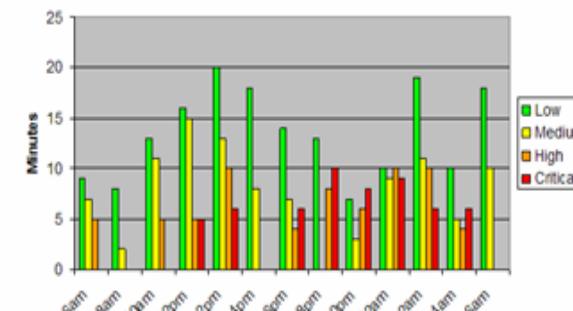
Page 1 of 1

Mean Time to Ticket Resolution

By: Severity

Description:

Shows mean time to ticket resolution for the time range specified.
Provides assistance in determining resource effectiveness.



Summary:

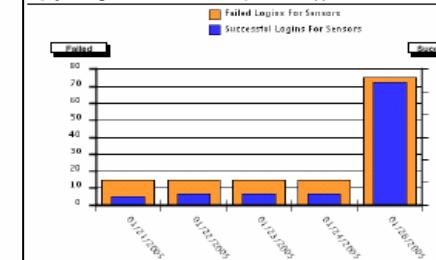
Generated by: admin
Generated on: 01/01/2004
Start Date: 01/01/2004
End Date: 01/01/2004

Parameter 1: <token1>
Parameter 2: <token2>
Parameter 3: <token3>
Parameter 4: <token4>

User Login Failures vs. Successes

For: Sensors
Grouped By: Day

Description:
Displays user login failures versus success for specified sensor(s)



Generated By: admin
Generated On: 2005-02-03 at: 10:36:58
Start Date: 01/05/2005 00:00:00
End Date: 01/05/2005 00:00:00
Sensor Names: GH-WINUMC

| Date | Failed Logins | Successful Logins |
|------------|---------------|-------------------|
| 01/21/2005 | 15 | 74 |
| 01/22/2005 | 15 | 101 |
| 01/23/2005 | 15 | 98 |
| 01/24/2005 | 15 | 98 |
| 01/25/2005 | 75 | 1005 |

newSECURE Reporting

Page 1 of 1



TSOM - Support de plus de 230 event & log sources, incluant :

Firewalls

Check Point
Firewall-1
Cisco PIX
CyberGuard
Fortinet FortiGate
GNATBox
Juniper (Netscreen)
Linux IP Tables
Lucent Brick
Microsoft ISA Server
Nortel Switched
Firewall
Stonesoft's
StoneGate
Secure Computing's
Sidewinder
Symantec's
Enterprise Firewall
SonicWALL
Sun SunScreen

Vulnerability Assessment

ISS Enterprise Scanner
ISS Internet Scanner
Nessus
Vigilante
QualysGuard
Foundstone
eEye Retina, REM
SPI Dynamics
WebInspect
nCircle IP360
Harris STAT
Tenable Lightning

Routers/Switches

Cisco Routers
Cisco Catalyst
Switches
Cisco RCMD
Foundry Switches
F5 Big IP, 3-DNS
Juniper JunOS
TACACS /
TACACS+
Nortel Ethernet
Routing Switch
5500, 8300, 8600,
400 series
Extreme Networks

Policy Compliance

Vericept

Application Security

Blue Coat Proxy
Nortel ITM (Intelligent Traffic Mgmt)
Teros APS
Sentryware Hive
IBM
DataPower(coming soon)
Discovery Tools
Lumeta IPSonar
NMAP
Sourcefire RNA

Applications

Apache
Microsoft IIS
IBM WebSphere
Oracle Database
Server
Lotus Domino
SAP R3
Peoplesoft
Operating Systems
Logs, Logging
Platforms
Solaris (Sun) *
AIX (IBM)
OS/400 (I Series)
RedHat Linux
SuSE Linux
HP/UX
Microsoft Windows
Event Log
(W2K3 DHCP, W2K
DHCP, IIS)
Microsoft SNMP Trap
Sender
Nokia IPSO
Novell NetWare
OpenBSD
Tandem Non-Stop OS
(HP)
Tru64
Triplight UPS
Monitorware SYSLOG
KiwiSyslog

zOS-Mainframe IDS

Consul zAlert (coming Soon)
Antivirus
CipherTrust IronMail
McAfee Virus Scan
Norton AntiVirus
(Symantec)
McAfee ePO
Trend Micro InterScan

Network Intrusion Detect/Prevention

McAfee Intrushield
Sourcefire Network Sensor
Sourcefire RNA
Juniper IDP
ISS Proventia G
ISS Proventia M
ISS Proventia ADS
ISS RealSecure Network
Sensor
ISS BlackICE Sentry
Cisco Secure IDS
SNORT IDS
Enterasys Dragon
Nortel Threat Protection
System (TPS)
Intrusion's SecureNetPro
Mirage Networks
NFR NID
Symantec ManHunt
ForeScout ActiveScout
QRadar
Top Layer Attack Mitigator
Labrea TarPit
IP Angel
Lancope StealthWatch
Tipping Point UnityOne NDS
Arbor Networks PeakflowX
Mazu Networks
Host-based Intrusion Detect/Prevention
ISS Proventia Server & Desktop
ISS Server & OS Sensor
Type80 SMA_RT (zOS-
Mainframe RACF)
PowerTech (iSeries-AS/400)
Cisco CSA

NFR HID

IBM Netcool SSMS
Sana
Snare
Symantec Intruder Alert (ITA)
Sygate Secure Enterprise
Tripwire
McAfee Intercept
Management Systems
Source of events into
TSOM:
Check Point Provider-1
CiscoWorks
IBM Netcool (Micromuse)
ISS SiteProtector
ISS Fusion Module
Juniper Global Pro
(Netscreen)
Juniper NSM (Netscreen)
Tripwire Manager
Intrusion, Inc. SecureNet
Manager
McAfee ePO
Nortel Defense Center
Sourcefire Defense
Center
Q1 QRadar Mgmt Server
VPN
Juniper SSL VPN
Nortel VPN Router
(Convity)
Check Point
Cisco IOS VPN, Cisco
VPN 3000
Juniper VPN, Nortel VPN
Gateway (SSL VPN)

Access and Identity Management

IBM Tivoli Access Manager
IBM Tivoli Identity Manager
Microsoft Active Directory
CA eTrust Access
CA eTrust Secure Proxy
Server
CA eTrust Siteminder
(Netegrity)
RSA SecureID RADIUS
Oracle Identity Management (Oblix)
Sun Java System Directory Server
Cisco ACS
Wireless Security
AirMagnet
AirDefense

Management Systems

TSOM escalates
IBM Netcool (Micromuse)
IBM/Tivoli Enterprise Console
Cisco Information Center
Remedy ARS
HP OpenView
CA Unicenter

Les differentiateurs de Tivoli Security Operations Manager (TSOM)



✓ COUVERTURE: *Support de plus de 230 équipements en standard*

TSOM collecte les événements pertinents de la plus large liste d'équipements sécurité du marché (e.g. firewalls, IDS, IPS, VPN, AV, Routers, Servers, OS's, hosts, apps).

✓ MONTEE EN CHARGE: *Plusieurs milliers d'événements par seconde*

L'architecture sans agent et modulaire de TSOM permet aux architectures SOC à plusieurs domaines de montée en puissance avec la base client.

✓ PERFORMANCE: *Gestion de la sécurité en temps réel*

La conception modulaire de TSOM permet de tenir la charge de d'un flux extrêmement important d'événements et d'assurer un stockage tout en offrant la fonction de haute disponibilité.

✓ EFFICACITE: *Optimiser la productivité grâce à l'automatisation*

L'automatisation possible grâce à TSOM et les fonctions d'intégration permettent au NOC d'améliorer l'efficacité des équipes et d'améliorer la disponibilité de l'infrastructure et des applications.

✓ CONNAISSANCE: *Mise en avant de notre expertise sécurité*

L'expertise sécurité est construite dans le produit avec des algorithmes de corrélation brevetés, des règles prédefinies, des rapports préexistants et tout un ensemble d'outil d'analyse des incidents sécurité.

Agenda

Présentation de l'Offre Tivoli Security

Les Challenges de l'Audit et de la Conformité

La solution: IBM Tivoli's SIEM

Architecture

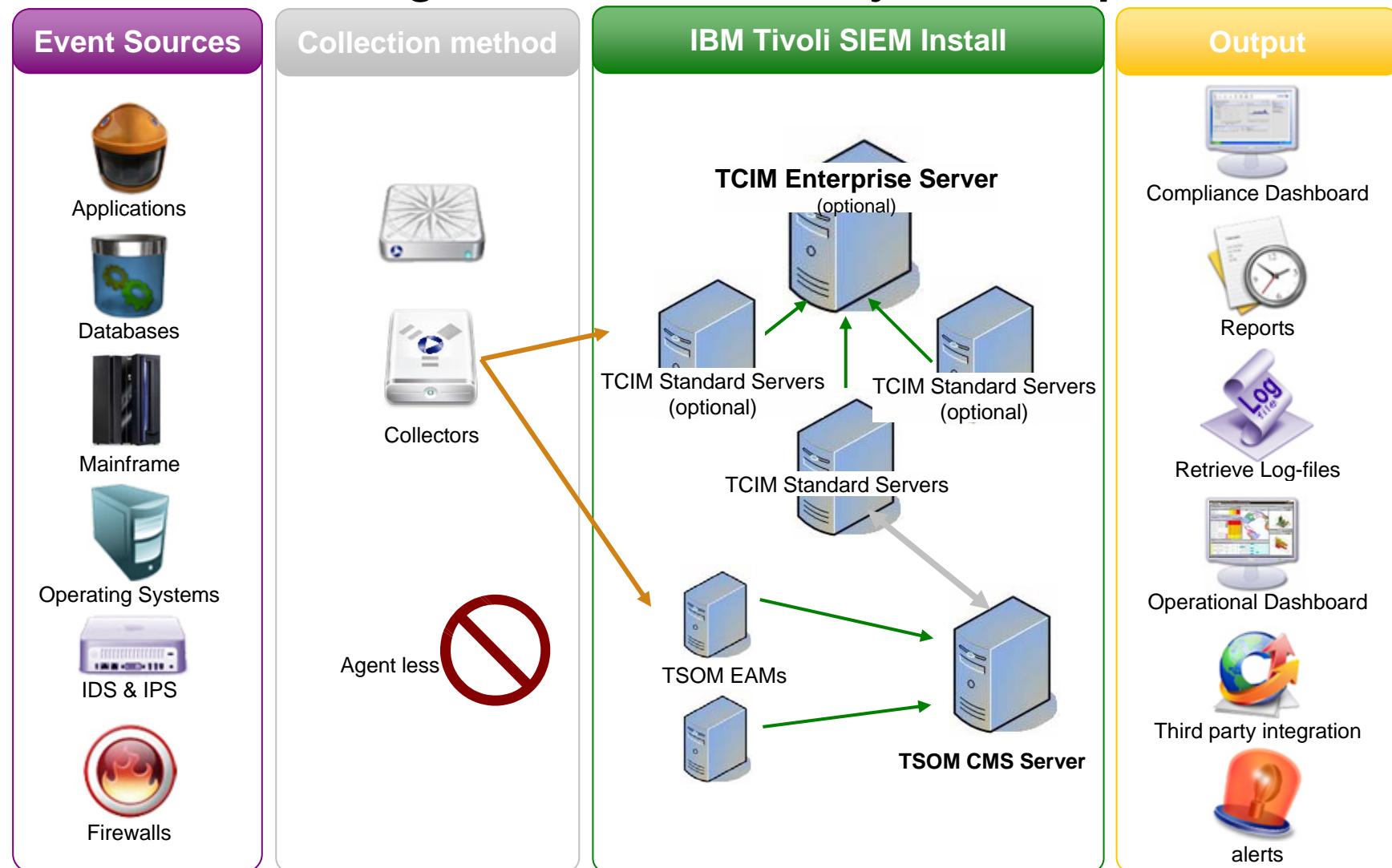
IBM Value Proposition

Proven Results

Questions



Architecture d'intégration: Tivoli Security and Compliance



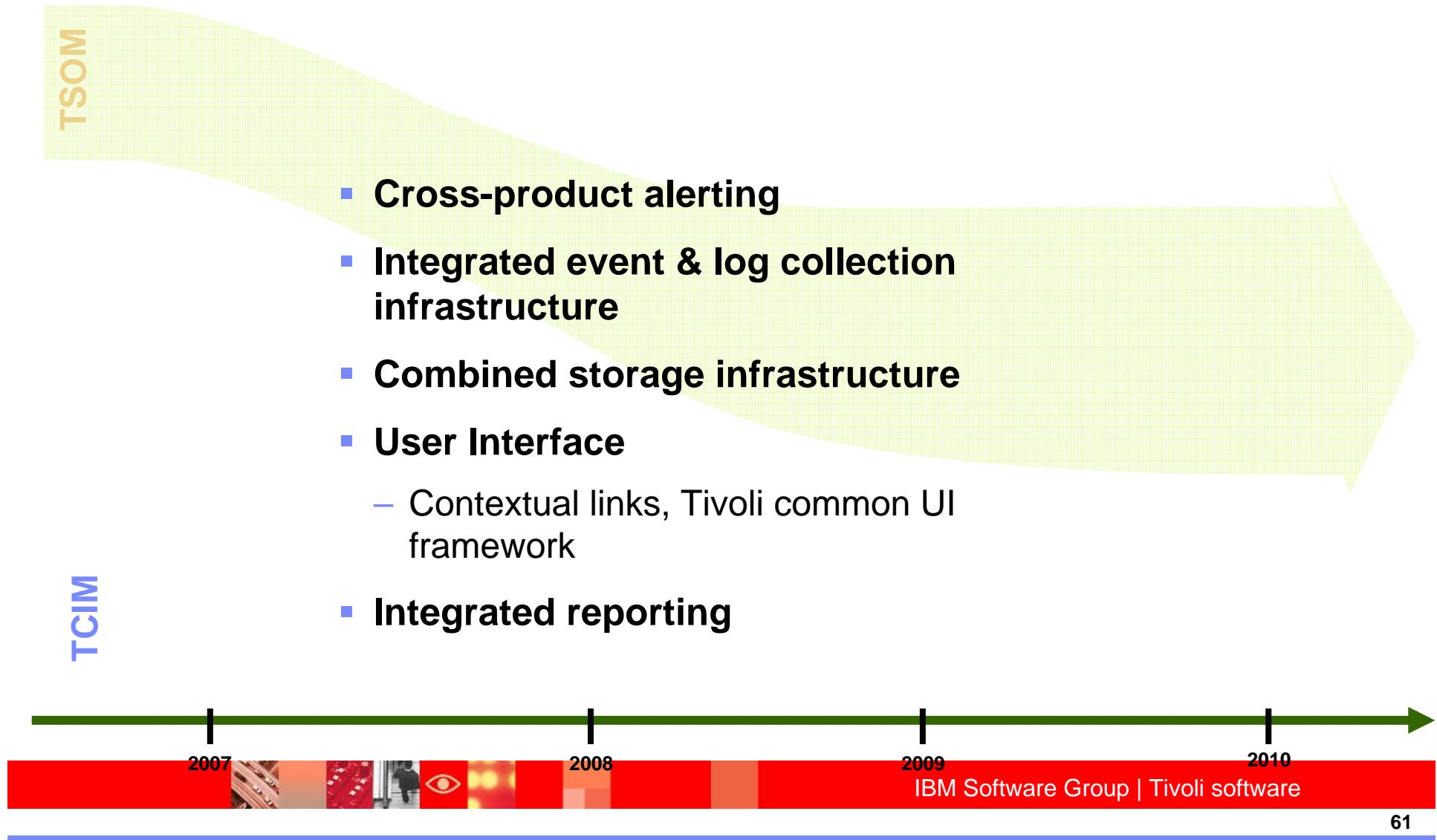
Roadmap



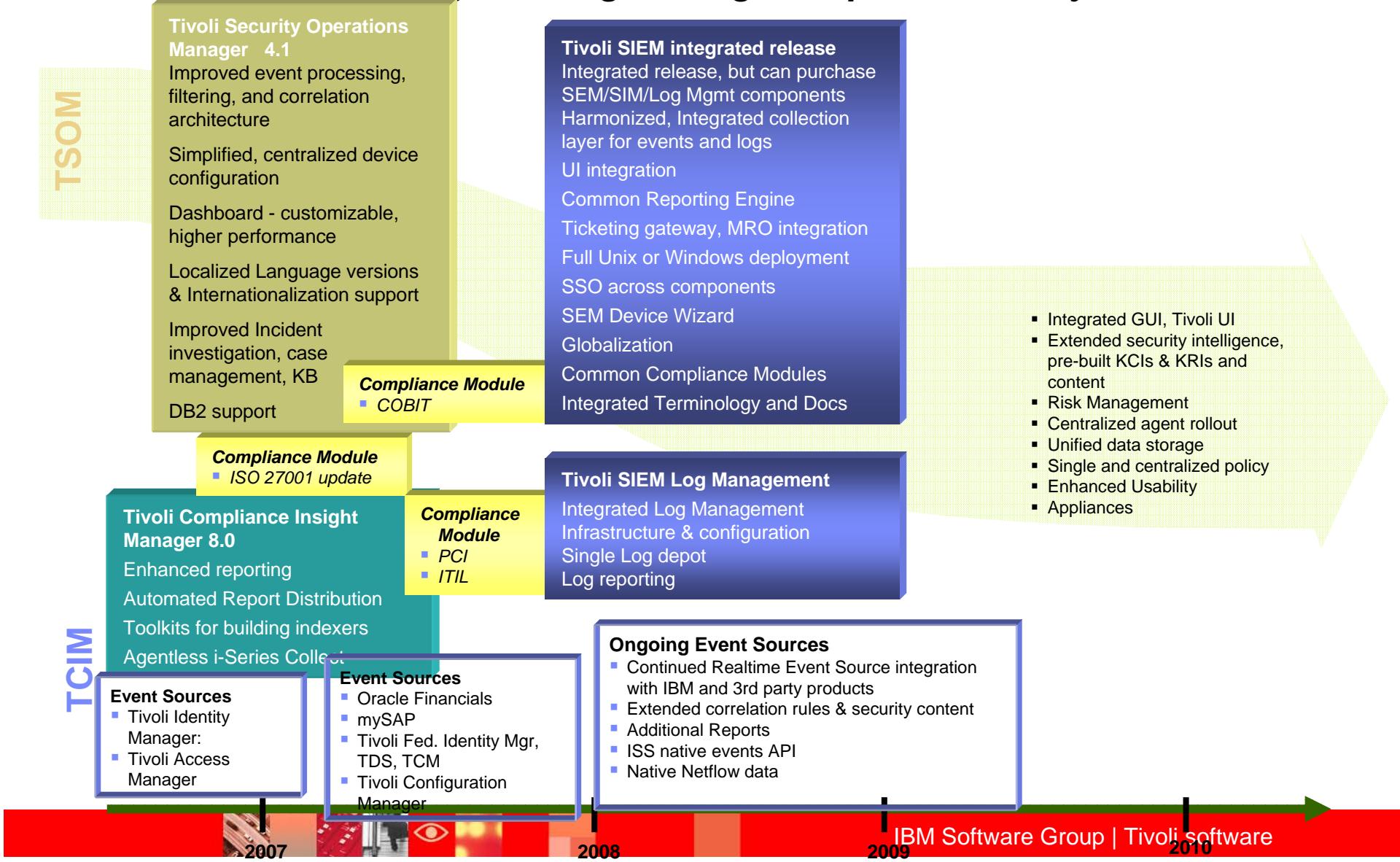
Security Compliance & Audit Solutions



High Level Integration Roadmap Tivoli SIEM



TSOM & TCIM evolving into single, integrated product family



Agenda

Présentation de l'Offre Tivoli Security

Les Challenges de l'Audit et de la Conformité

SEM versus SIM

La solution: IBM Tivoli's SIEM

Architecture

IBM Value Proposition

Proven Results

Questions



Aspects Financiers



Security Compliance & Audit Solutions



Principes de tarification

- **Prise en considération des équipements réseau et applicatifs**
- **Nombre de Serveurs** : AIX, Solaris, HP-UX, Windows, i5/OS, Linux, Netware, OpenVMS, Tandem, Stratus)
- **Nombre d'équipements Réseau** : Routeurs, Switches, Hubs & Bridges
- **Nombre d'équipements de Sécurité** : Firewalls, IDS, IPS, VPNs, anti-virus gateways, Filtrage de contenu (Web, email), solution de détection des comportements réseau anormaux et appliances de sécurité multi-fonctions.
- **Nombre d'applications & bases de données** : DB2, Oracle, SQL Server, Sybase; incluant DB2 sur le mainframe. Les applications incluent SAP, MS Exchange, Lotus Domino, et les middlewares comme les solutions de Gestion des identités et des Accès. (par exemple les solutions IBM Tivoli TIM, TAM, TFIM, TDS, etc)
- **Nombre de partition logiques du Mainframe**



IBM est Stratégique



Security Compliance & Audit Solutions



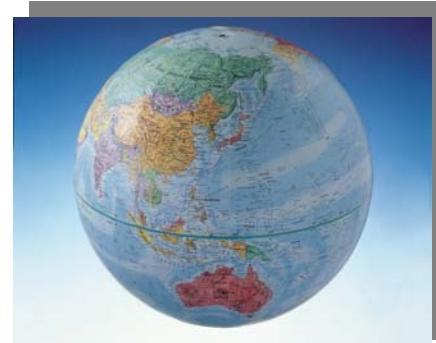
IBM Tivoli Software – Leader In Infrastructure Management

IBM Tivoli Software is used by over 20,000 enterprise customers worldwide:

- 95% of Fortune 500 companies worldwide

IBM Tivoli Security software is used by:

- 4 of the top 5 telecommunications companies worldwide
- 15 of the top 20 commercial bank companies worldwide
- 6 top health care companies worldwide
- 6 of the top 10 aerospace and defense companies worldwide
- 7 of the top 10 computer and data service companies worldwide



IBM Tivoli – A Global Support & Development team:

- 2100 development professionals in 6 worldwide labs
- Only Infrastructure Management vendor with 500 people Lab in Europe
- Global presence with local delivery in Europe and Latin America, using consistent proven methodology, intellectual capital and best practices worldwide
- 24x7 Support





Tivoli : Innovation et leadership

Mise à jour : IBM rachète MRO pour 740 M\$

[Edition du 05/08/2006](#) - par Michel Bourdier / IDG News Service

Avec MRO, IBM pousse encore la promotion de son architecture SOA et signe probablement son plus gros rachat d'ici la fin de l'année. Surtout Big Blue répond un peu après à HP qui avait très tôt gonflé OpenView en intégrant Peregrine pour la gestion d'actifs.

[Toute l'actualité](#) ► [Business](#) ► Article.

IBM avale ISS

par Christophe Dupont-Elise, le 23/8/2006 à 14:45

IBM s'offre Micromus

par Jerome Saiz, le 21/12/2005 à 16:50

IBM annonce l'acquisition de l'éditeur Micromus, spécialiste de la surveillance des applications et des systèmes. Le rachat permet à IBM d'intégrer des technologies complémentaires afin d'enrichir l'offre de gestion d'actifs, notamment en matière de corrélation des événements sécurité.

IBM muscle la gestion des actifs dans sa gamme Tivoli

Par Laurent Dupin
ZDNet France
17 août 2005

IBM rachète Vallent

[Edition du 30/11/2006](#) - par Elian Cordoue

IBM adapte Tivoli Identity Manager aux PME

[Edition du 22/02/2006](#) - par Elian Cordoue

IBM se lance à l'assaut des PME/PMI avec Tivoli Express

Administrer, sécuriser, superviser : les PME vont pouvoir utiliser des solutions abordables



elles solutions IT Service Management,

en exclusivité ses nouvelles solutions IT Service

CCMDB.

IBM renforce ses outils d'audit en sécurité et en conformité avec Consul Risk Management

[Edition du 06/12/2006](#) - par Elian Cordoue

cons

IBM dope sa gamme Tivoli avec ses récentes acquisitions

[Edition du 06/10/2006](#) - par Christophe Bardy

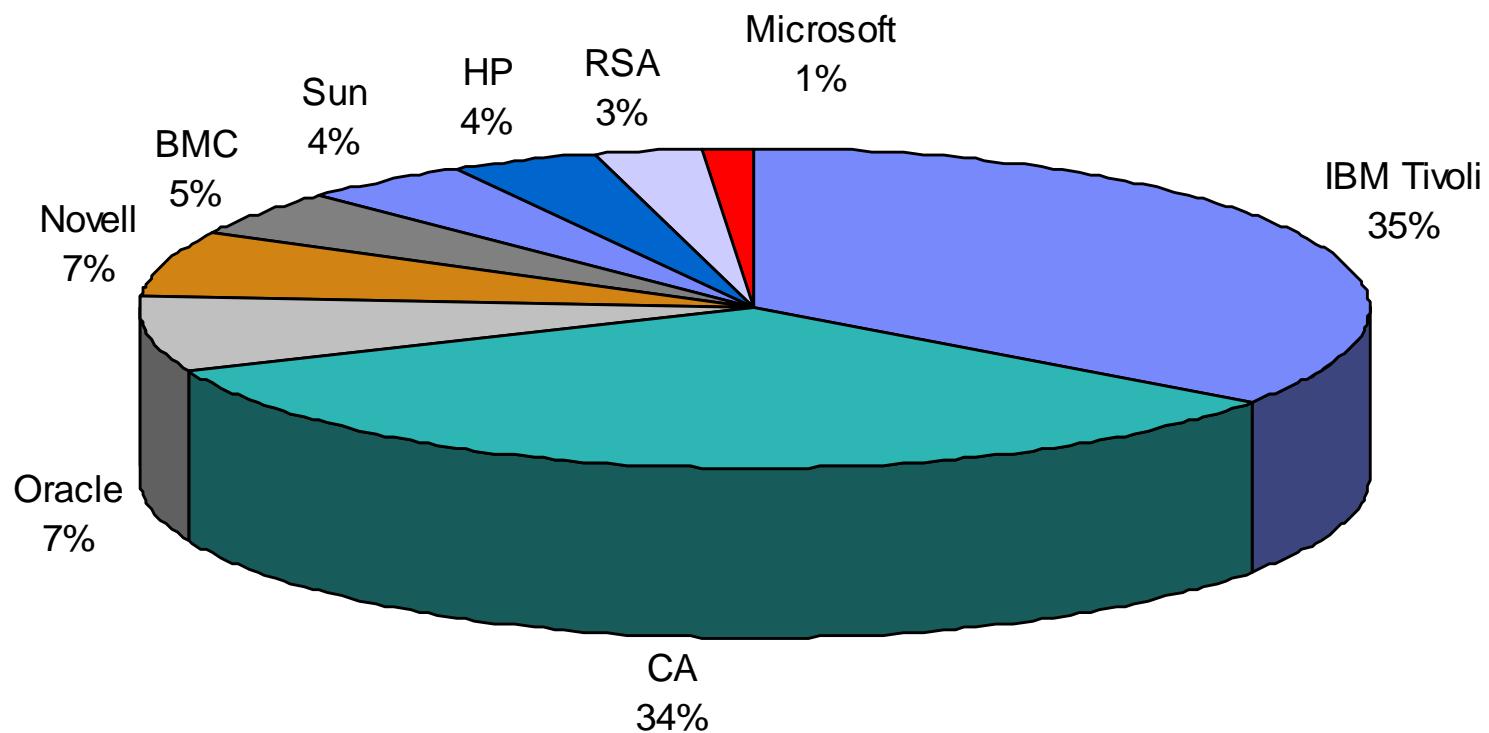
IBM Tivoli leader sur les marchés IAM, SIEM et SOA

La vue des Analystes



Security Compliance & Audit Solutions



IBM - # 1 by Market Share in Security Software (IDC 2006)

IBM - # 1 in Security & Event Management

Gartner Magic Quadrant & Forrester Wave - for Security Information and Event Management

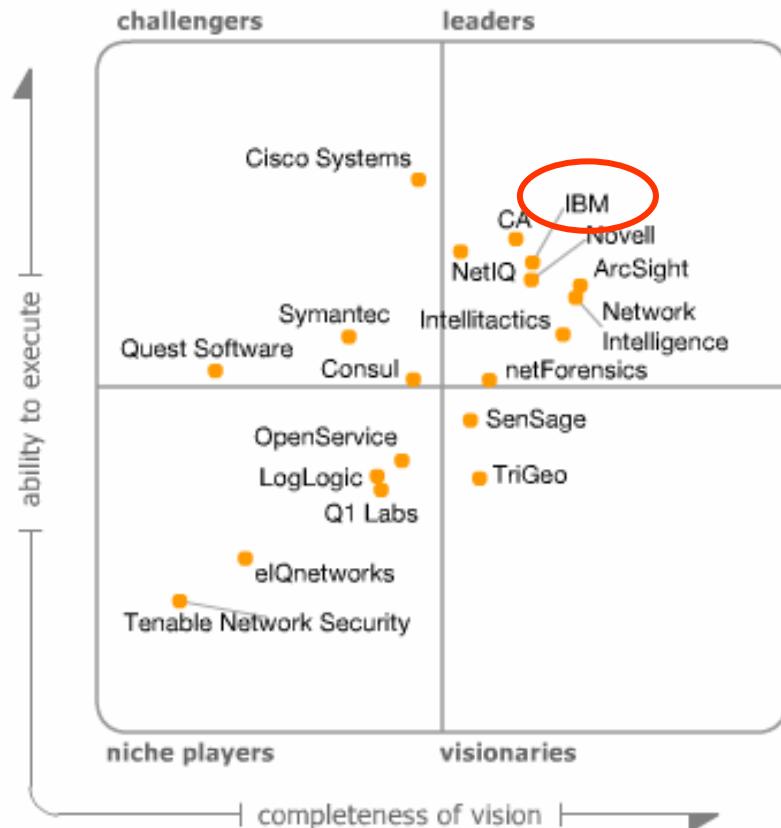
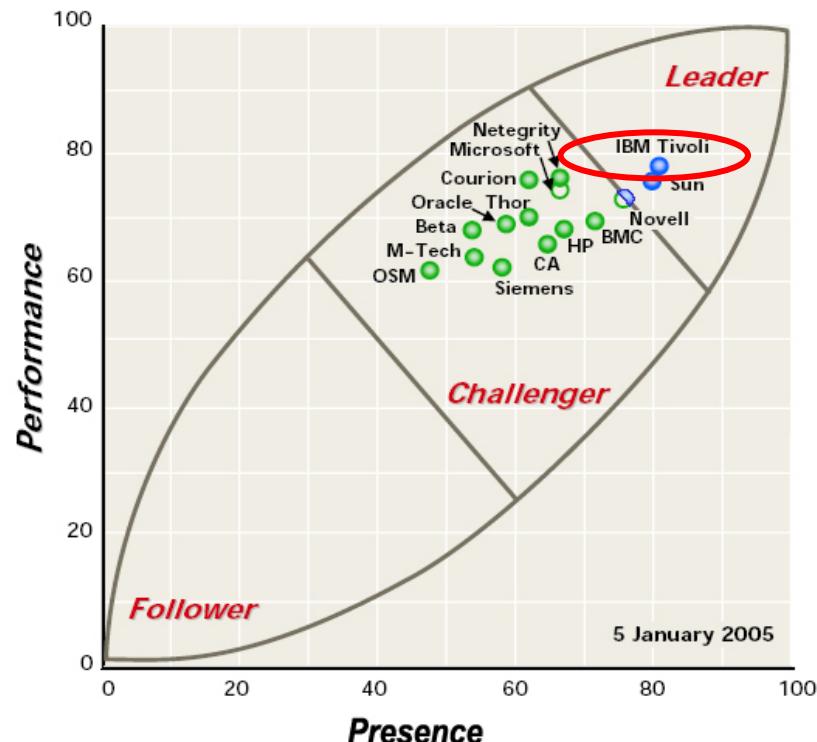


Figure 3 Forrester Wave™: Enterprise Security Information Management, Q4 '06

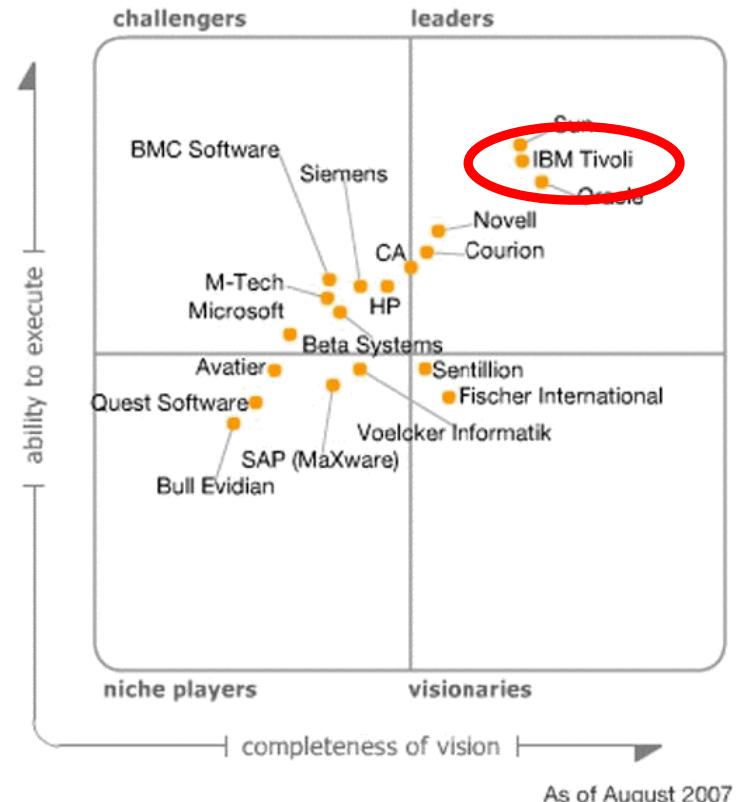


IBM - # 1 in Identity Management

Meta: ITIM Product Leadership



Gartner : Magic Quadrant for User Provisioning

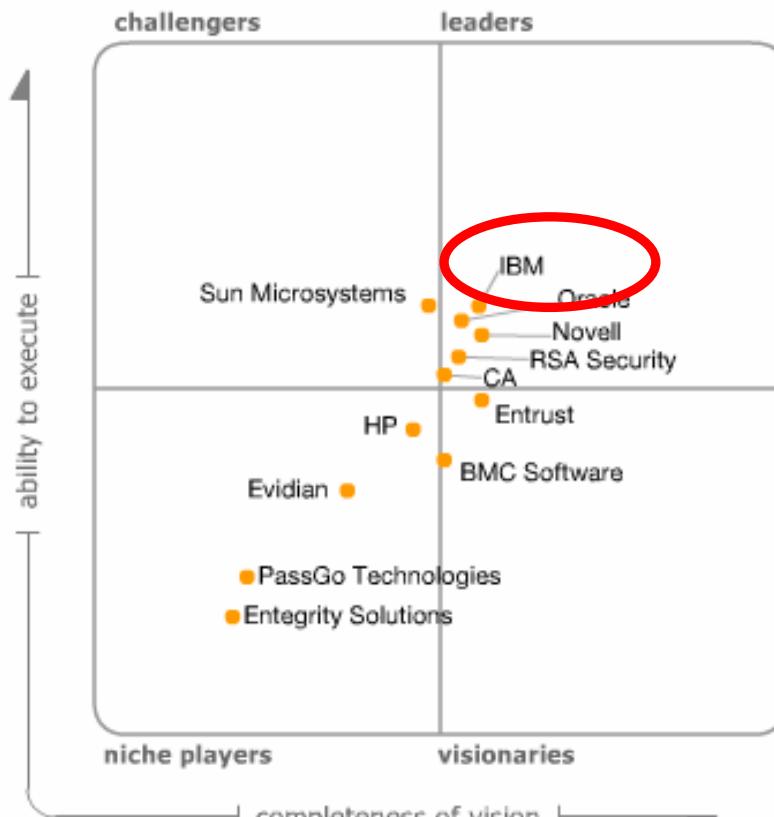


As of August 2007

IBM - # 1 in Access Management

Gartner Magic Quadrant for Web Access Management

Figure 1. Magic Quadrant for Web Access Management, 2H06



As of September 2006

Note: Formerly called the Magic Quadrant for Extranet Access Management

Source: Gartner (September 2006)

IBM - # 1 in Enterprise Single Sign-On

Gartner Magic Quadrant for Enterprise Single Sign-On



**Tivoli Access Manager for Enterprise Single Sign-On (TAM eSSO)
is an OEM product from Passlogix**

IBM Tivoli

References



Security Compliance & Audit Solutions



Références SIEM

Multinational Insurance Company

To close compliance gaps for SOX; centralize collection, monitoring, and reporting of millions of log files; and provide transparency into the activities of privileged users across a heterogeneous network.

Major US Payment Processor

To prepare for federal regulations and to meet the requirements of the VISA CISP, this large payment processor brought Consul onboard to help audit enterprise IT.

Major Office Supplies Store

The Manager of Data Security began looking for a solution to audit their entire enterprise IT environment.

Large US Grocery Chain

Needed IT audit solution they could roll-out across the corporate network to audit AIX, mainframe, UNIX, Windows and OS/400, and then to 2,500 stores.

Industrial Cleaning Firm

In order to meet SOX requirements and IT Security best practices, the Director of IT Security began looking for a product that could help them manage their log data.

Major Office Equipment Manufacturer

Company received a mandate from their CEO to comply with federal regulatory requirements, specifically Sarbanes-Oxley

Global Food Manufacturer

Références IAM

■ IDENTITY MANAGEMENT

- ING Group : **113 000 utilisateurs**
- Alcatel : 88 000 utilisateurs (France)
- Royal Ahold : 70 000 utilisateurs
- Beyond Petroleum : 155 000 utilisateurs
- France Télécom : **200 000 utilisateurs** (France)



WEB ACCESS MANAGEMENT

- T Rowe Price : **1,5 Millions utilisateurs**
- Orange : 10 Millions d'utilisateurs
- La Banque Postale : **15 Millions d'utilisateurs**
- AT&T : 500 000 utilisateurs
- IBM : 300 000 utilisateurs
- Fortis : 120 000 personnes





Références françaises IAM



LVMH



CONCLUSIONS



Security Compliance & Audit Solutions



Tivoli software

Questions?

Customers Worldwide



Recognized by the press and analysts

Gartner

FORRESTER®

ESG
Enterprise
Strategy
Group

IDC
burton
GROUP™

ENTERPRISE MANAGEMENT
ASSOCIATES®

THE WALL STREET JOURNAL.
NETWORKWORLD

InformationWeek
BUSINESS INNOVATION POWERED BY TECHNOLOGY

SC
MAGAZINE
FOR IT SECURITY PROFESSIONALS

CTO
25
AWARDS

The Washington Post