

Shalom ESX Platform v4.3

Cloud Integrated Risk Security Platform

Introductory Briefing

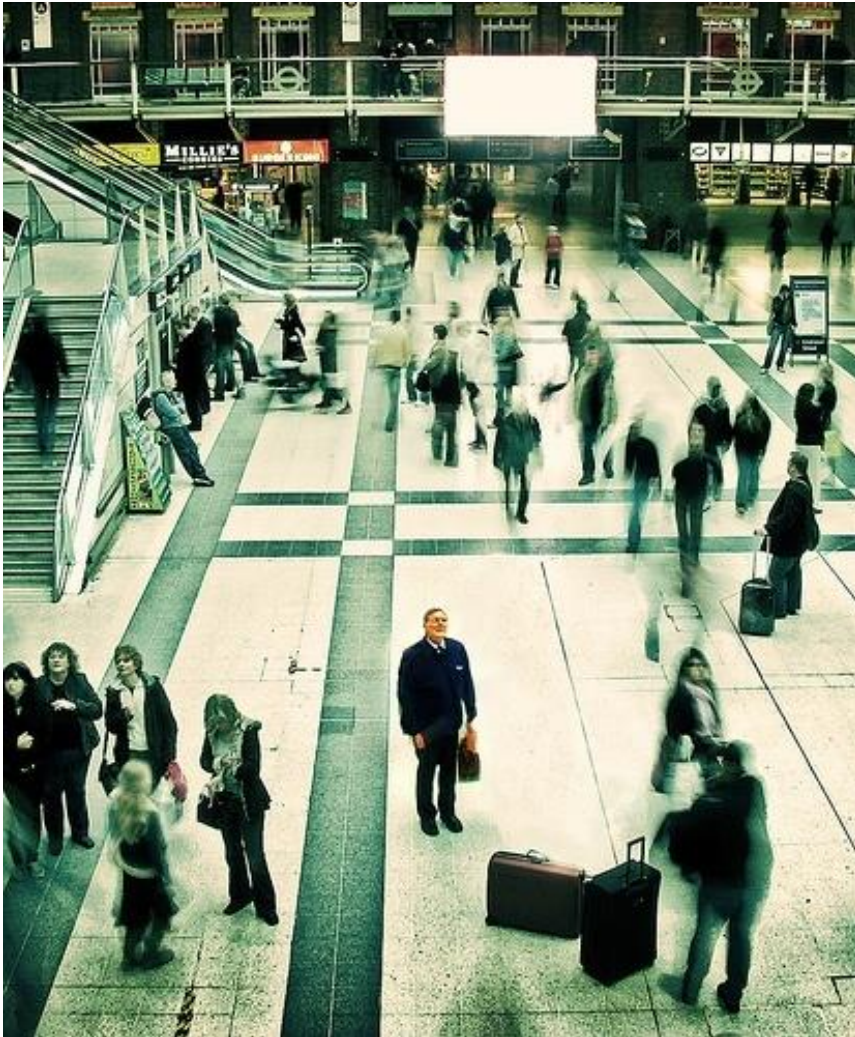
شالوم الأمان المخاطر الداخلية منهاج

2015

Nowell Development, Inc



Security and safety is a reflection of social trust, essentially who we are. While technology plays an important role, ultimately security is a human issue, which raises the issue of integrity and trust

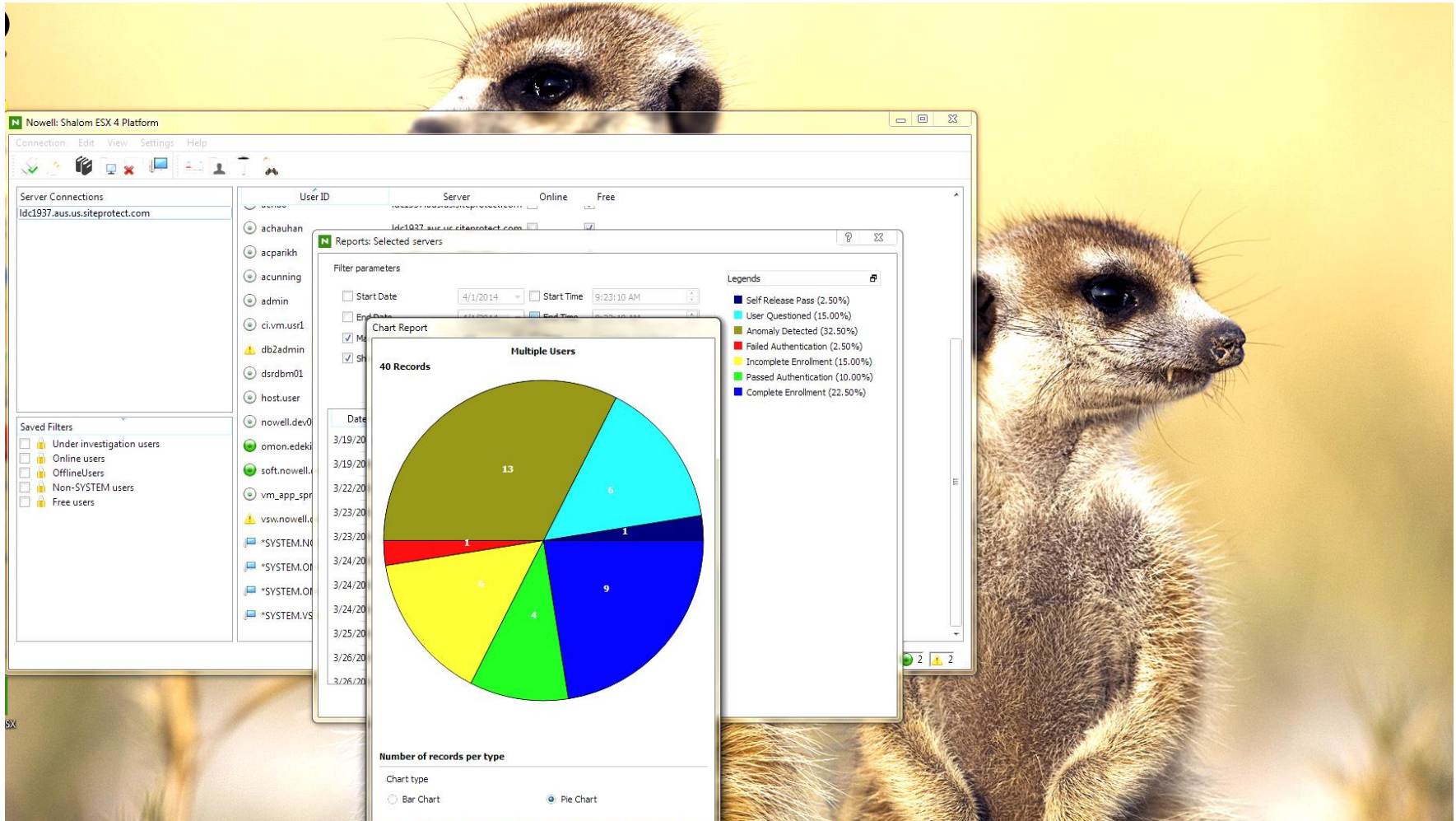


Can you identify what is suspicious in the picture?

Shalom ESX Platform Applications:

- Internal Fraud Risks
- Identity Theft
- Financial Fraud
- Real Time Analytics

Software for Cloud Authentication, Risk view analytics for private, public, hybrid cloud models



“.. can be a significant arrow in the insider threat protection quiver”

-Dr. Peter Stephenson, Chief Technology Editor, SC Magazine Review 2009 Fraud Prevention Group Test



Pain Problem: Internal Security Breaches

- International financial services firm lost \$7.2 billion – internal securities fraud
- US national retail store chain lost credit card information of 45 million. Cost: \$107 million
- Assoc. of Certified Fraud Examiners: US lost 7% of GDP ~ \$994 billion in financial fraud losses
- 2009 national retail survey: 43% of retail losses due to internal theft - \$14.4 billion of department stores sales in US nationwide (Total - \$33.5 billion)
- \$54 billion is lost annually due to financial identity fraud and identity theft
- Information security & integrity problem is hindering mass scale cloud adoption – making the cloud suboptimal in its current state

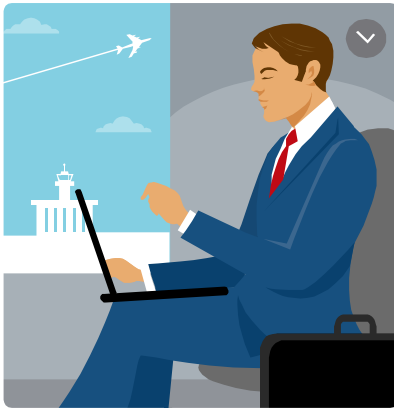


Shalom ESX Capabilities?

- Manages security issues and risks associated with cloud computing and hosted application services
- Reduce risk of insider threats, ID theft & fraud
- Provides cloud security services including anomaly detection & intelligent authentication for identity fraud detection
- Mitigates the complex risk vectors associated with gradual movement of enterprise IT to the cloud; Cloud based Insider Threat, Security & Risk Analytics Platform
- When security is enhanced, trust develops among partners allowing seamless collaboration, teamwork and the assumption of shared risk and accountability



Reduce Risk of Identity Theft



- Bill is a traveling sales guy
- Learns information about Bill through interview on his system
- Software Learns behavior patterns specific to Bill.

- An intruder **steals Bill's UserID and Password and logs into** his office desktop
- Detects suspicious behavior, very much unlike Bill.
- Software Authenticates the intruder by questioning.
- The intruder fails.
- Denies access to the intruder immediately.



Reduce Risk of Insider Misuse



- Jean, Logistics Analyst for Pharmaceutical/Biotech company



- Accesses patient data from colleague's workstation at a very suspicious time: **2:00 AM Sunday**.
- She uses an unfamiliar client application to query the database.
- **Software detects this event because Jean is behaving very suspiciously—in a highly anomalous manner.**



- Security Administrator receives report, stating Jeans suspicious behavior.
- Begins investigation into suspicious incident
- Potential Insider Threat by authorized user Jean was detected

Reduce Risk of Internal Fraud (Covert)



Mr. Julian is a retail bank teller

Plans to commit wire fraud by transferring cash from bank systems to his personal bank account.

Friday, 8:21 p.m., Julian executes plan.

- With a stolen bank manager's account, he accesses the records and executes the electronic cash transfer.

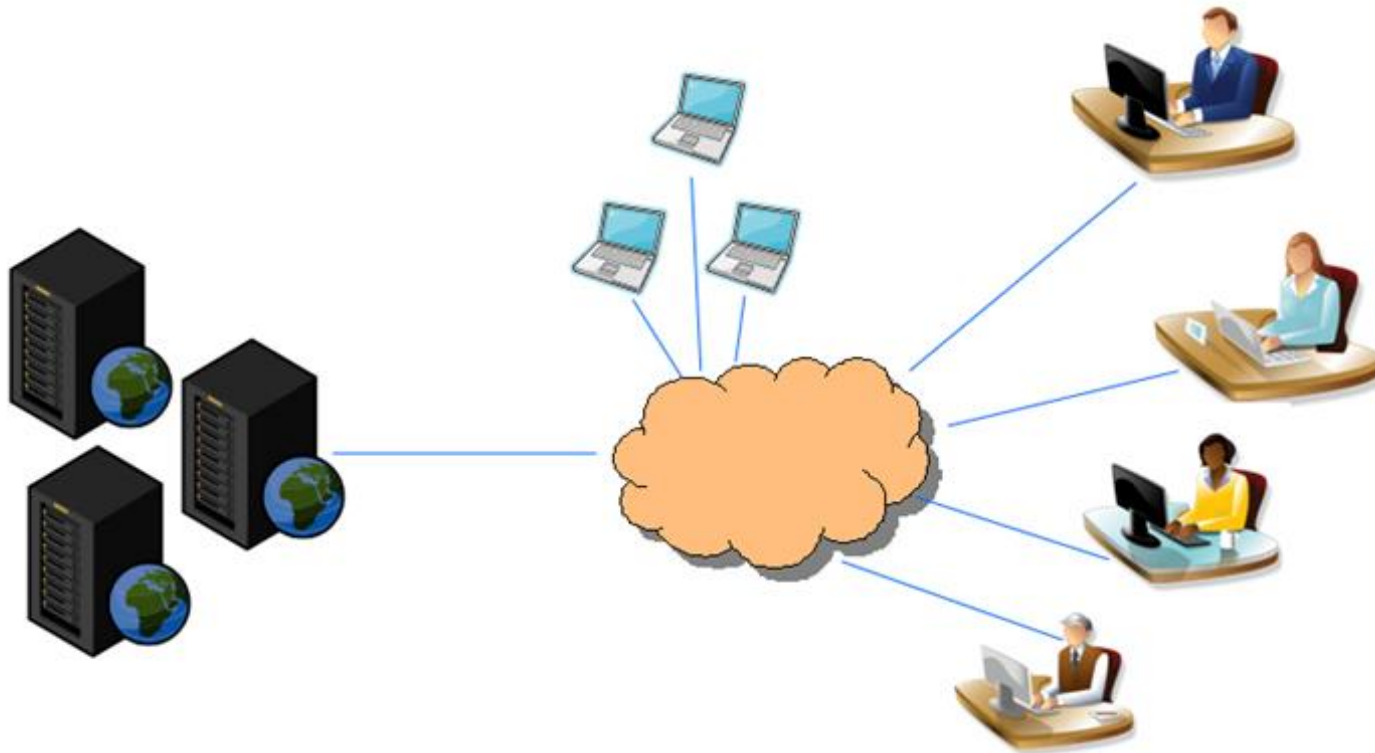
- Shalom detects suspicious behavior and silently reports him without any questioning or lock out.



8.22 p.m., Arthur the security analyst receives a report from Shalom about the anomalous activity.

- 🕒 A lead is generated for Arthur to investigate further.
- 🕒 Audit team closes out the internal wire fraud investigation

Cloud Services SaaS Security Delivery Model

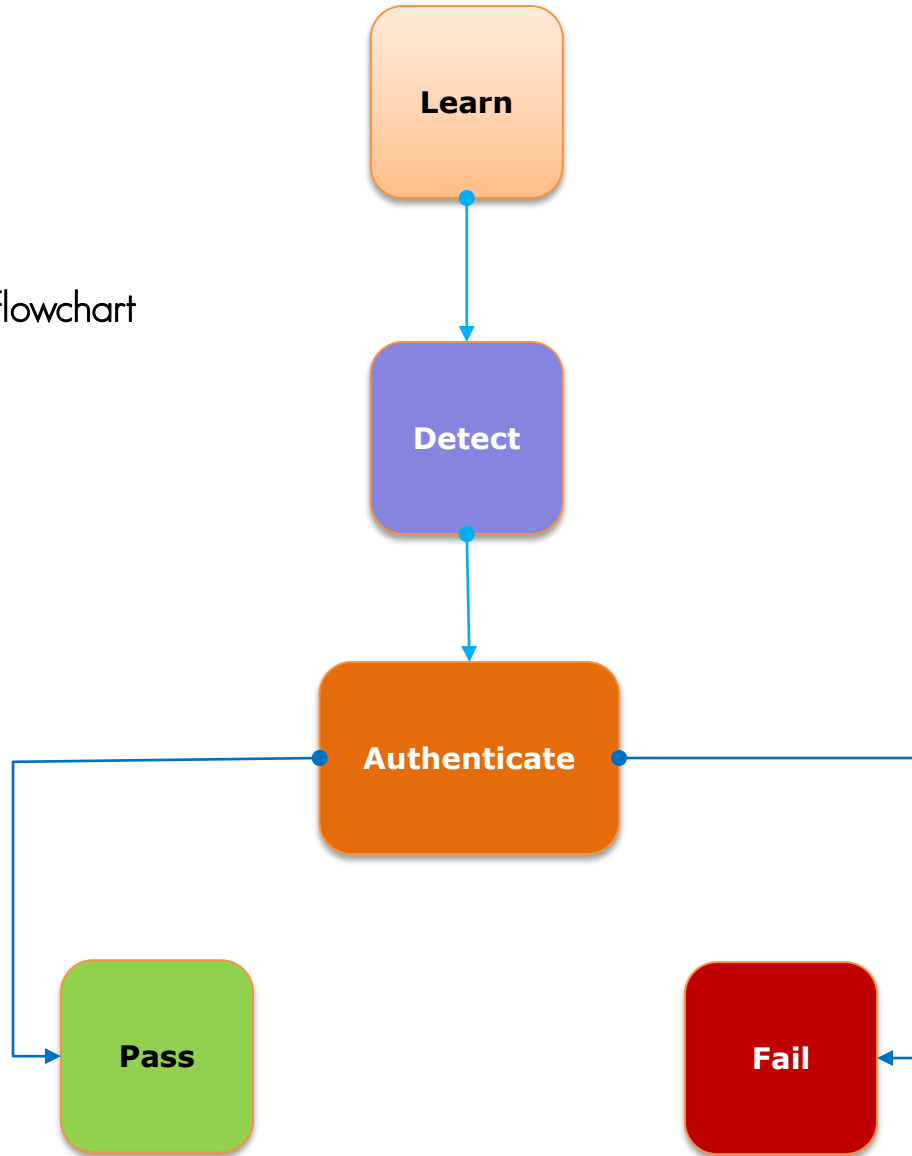


How Does Software Work?

- All fraud and falsehood exhibit suspicious, unusual behavior – “high risk” or “red flag” activities
- Identity thieves, fraudsters also perform suspicious, anomalous behavior
- Software identifies, detects and authenticates such suspicious acts in real time



Cloud Services Security Flowchart

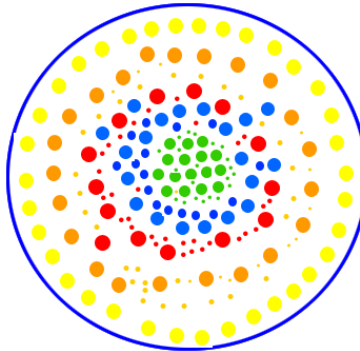


Begins By Learning Behavior Trends

- Interviews each user gathering personal information e.g. “year of birth”, “color of eyes”
- Interview and authentication serves as a deterrent to insider risks and identity fraud
- Detects suspicious, **high-risk** behavior- *Anomaly Detection*
- Nowell holds the US Patent for this type of anomaly detection & authentication method US # 7,647,645



“Moving Window” Anomaly Fraud Detection



Anomaly detection for each identity in real time – behavior towards the outside (yellow, orange, red) circle is often suspicious and of higher risk. Moving inward, green & blue represents lesser risk behaviors. Graphical illustration of statistical adaptive algorithm

Anomaly Detection & Multifactor Authentication

- If anomaly is detected, authenticate and validate user
- Asks questions using data collected earlier (multifactor authentication)
- If user fails, they're denied further access to information
- If user passes, they're granted access, but suspicious event is still reported



Why is this solution relevant ?

- Reduces internal security risks & identity theft
- Cloud security services framework for information risk posture management
- Internal fraud detection and identity integrity
- Complements directory services and identity management solutions including IBM Directory Server, Oracle Directory Server EE, Microsoft AD
- Behavior and usage risk analytics capabilities
- Can be extended to offer integrated risk services for different industry areas like supply chain, retail, transactions



Customer Product Reviews

- *Product Reviews: SC, FCW, CRN, UNIX*



- *These customers have evaluated the software:*



Carnegie Mellon



Implementation and Delivery

- Software-As-A-Service/Cloud delivery Model
- Nowell software hosts servers in a secure, firewalled collocated environment via public or private cloud
- Highly Secure: DoD certified AES 256 Strong Crypto for data security of sensitive information (in-transit/at-rest)
- On-Demand cloud platform scales to 20,000 users per server; Windows Support
- Ongoing multilingual support – English, Spanish, French, Portuguese (Brazilian), German; Planned: Arabic, Chinese, Unicode langs
- Full LDAP Integration with LDAP Compliant Directory Servers



IBM. **Tivoli** software



 Windows 7

 redhat.

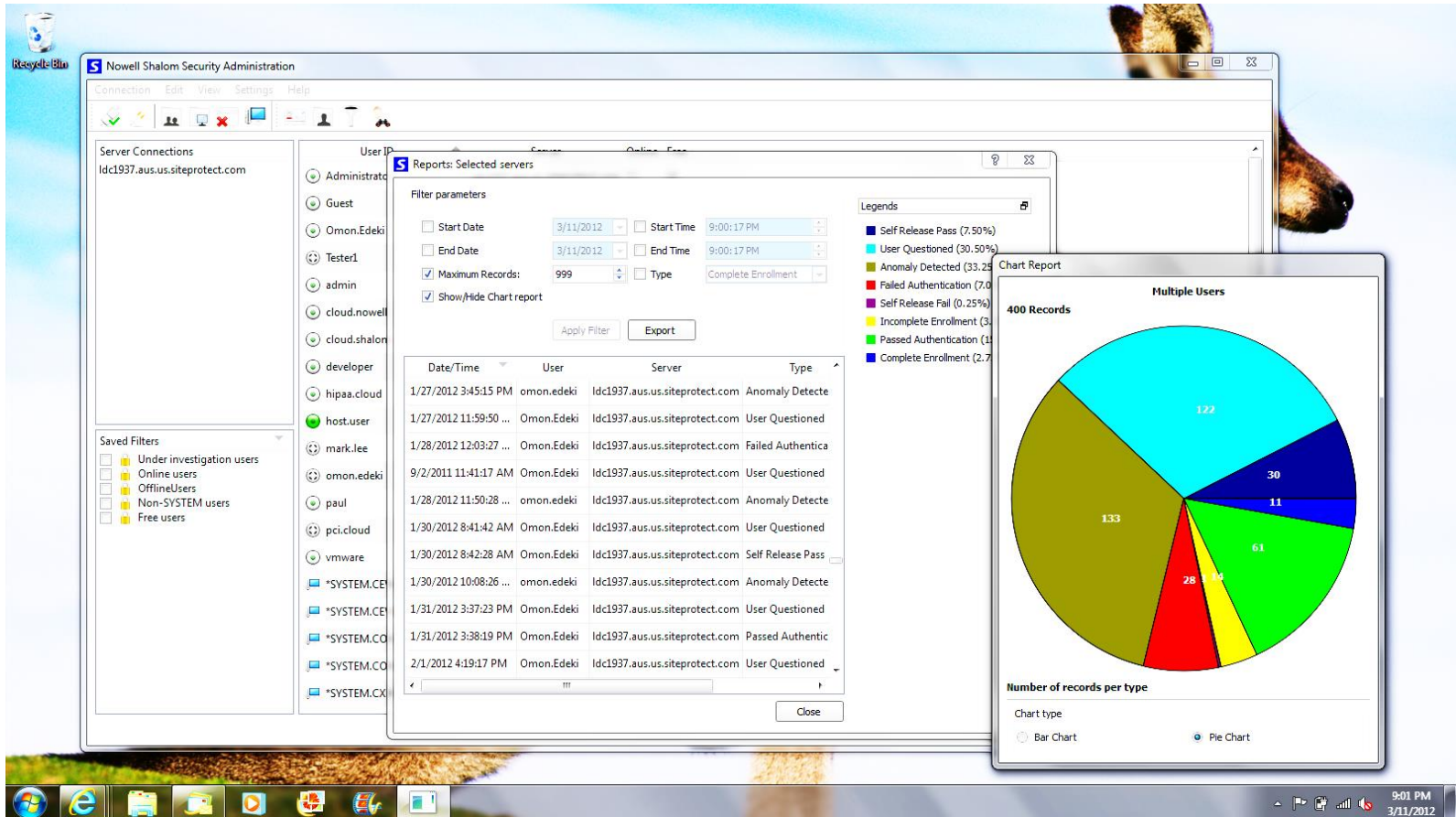


Market Opportunity - Verticals

- Financial Services and Banking (Risk Management)
- Defense Department and Government
- Energy, Communications Providers/ISP
- Pharmaceutical and Healthcare (IP Protection)
- Retail department stores (IT, Electronics, jewelry – high worth merchandise)
- International Compliance Customers: Sarbanes-Oxley, HIPAA, PCI-DSS, VISA-CISP, Basel II

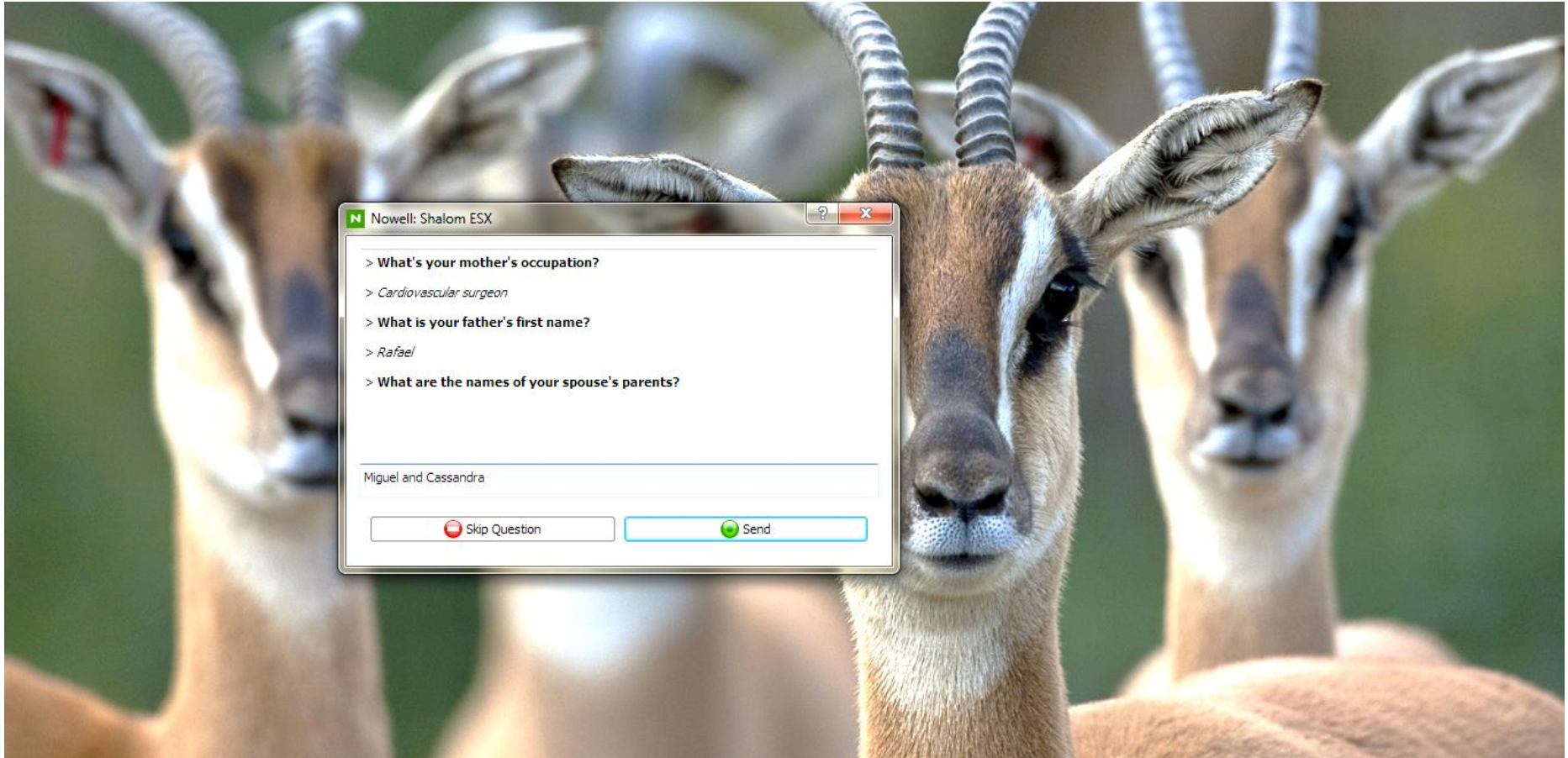


Cloud Services Security Risk Mgmt UX. Thanks for your time! 😊



For more, visit us on the web at <http://www.nowellgroup.com>





Nowell: Shalom ESX

- > **What's your mother's occupation?**
> *Cardiovascular surgeon*
- > **What is your father's first name?**
> *Rafael*
- > **What are the names of your spouse's parents?**

Miguel and Cassandra

Integrated risk management for retail supply, demand chain, entry exit history analysis

The screenshot displays the Nowell ESX 4 Platform interface. The main window shows a list of users and their status. The user 'omon.edeki' is selected, and its details are shown in a pop-up window. A second pop-up window displays the 'User Entry Exit History' for 'omon.edeki', showing a table of login and logout events.

| User ID | Server | Online | Enabled | Learning | Free |
|------------------|--------------------------------|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| admin | ldc1937.aus.us.siteprotect.com | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| db2admin | ldc1937.aus.us.siteprotect.com | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| edekio | ldc1937.aus.us.siteprotect.com | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| host.user | ldc1937.aus.us.siteprotect.com | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| nowell.dev01 | | | | | |
| omon.edeki | | | | | |
| vm.nowell.win764 | | | | | |
| vm_app_spr | | | | | |
| vm_sony_fix_u1 | | | | | |
| *SYSTEM.NOWELLD | | | | | |
| *SYSTEM.OMONED | | | | | |
| *SYSTEM.OMONED | | | | | |

| User | Action | Hostname | Date & Time |
|------------|--------|----------------|-------------------|
| omon.edeki | in | omonedeki-PC | Wednesday 02/... |
| omon.edeki | in | omonedeki-VAIO | Wednesday 02/... |
| omon.edeki | out | omonedeki-VAIO | Wednesday 02/... |
| omon.edeki | in | omonedeki-VAIO | Wednesday 02/... |
| omon.edeki | in | omonedeki-VAIO | Thursday 02/27... |
| omon.edeki | out | omonedeki-VAIO | Thursday 02/27... |
| omon.edeki | in | omonedeki-VAIO | Thursday 02/27... |
| omon.edeki | out | omonedeki-VAIO | Thursday 02/27... |
| omon.edeki | in | omonedeki-VAIO | Thursday 02/27... |



Our Greatest Days lie Ahead Of Us!

Thanks for your time in viewing my presentation 😊

Luke 1:37 – “For with God nothing shall be impossible”!

Contact Us Today:

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A glimpse into the future ...

- Hosted applications and data management services
- Applications for different industry verticals
- Security is first of such hosted apps
- Software development reusable components and frameworks
- Expect to keep integrity at the forefront of everything we do – “Blessed to be a blessing”
- Co-investing in projects that share our ideals and keep progress and momentum growing ; Help develop the next generation of technical and business leaders!

Shalom!



Security and Integrity are two sides of the same coin. Integrity is the pursuit of Truth. We believe Jesus Christ, our LORD and Savior is the source of all Truth.

John 14:6 “Jesus answered, “I AM the way and the truth and the life. No one comes to the Father except through me.”



YouVersion®

John 8:32

“Et cognoscetis veritatem, et veritas liberabit vos”

“And you shall know the truth, and the truth shall make you free”

” ويجب أن تعرف الحقيقة ، والحقيقة سوف تمنحك الحرية ”