

Security Intelligence.
Think Integrated.

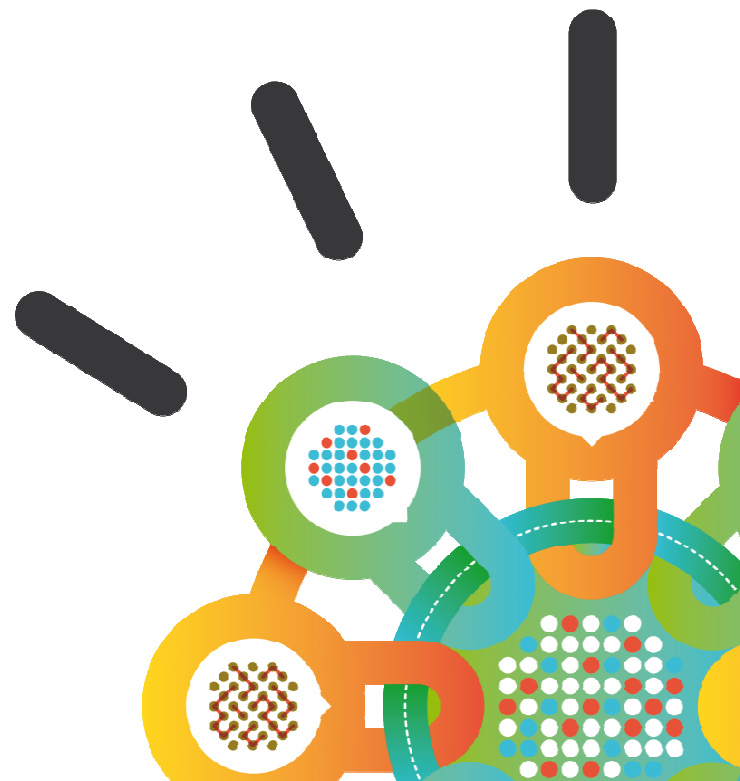
IBM IAM Security Strategy

Threat-aware Identity and Access Management

IBM Security Systems

Gonzalo de la Hoz
IAM Segment Leader, Europe

July 2014



Information Security is only as strong as its weakest link – Identity

55% of scam and phishing incidents are campaigns enticing users to click on malicious links

Social media is fertile ground for pre-attack intelligence gathering

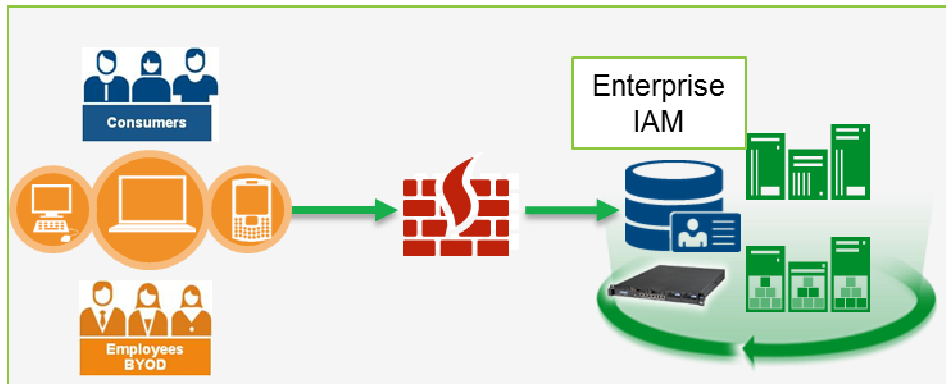
Criminals are selling stolen or fabricated accounts



Mobile and Cloud breaking down the traditional perimeter

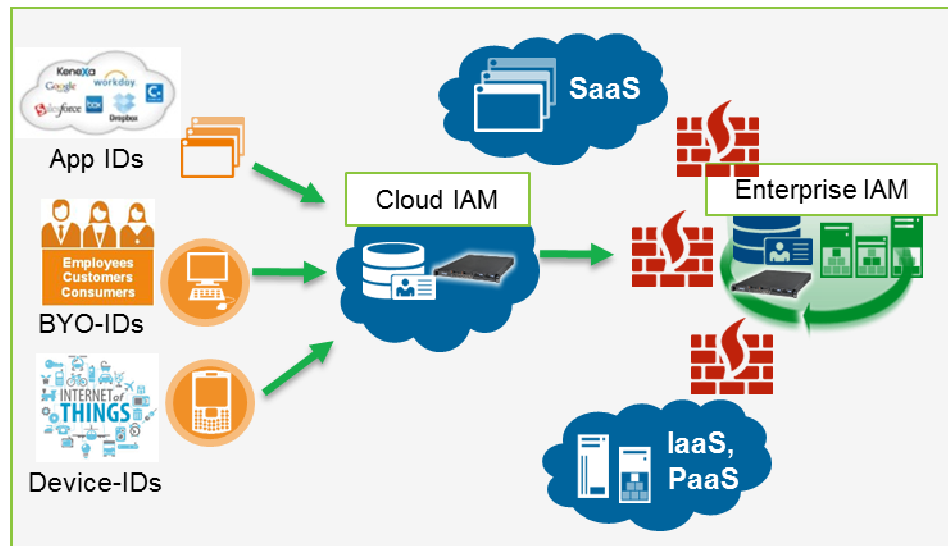
*IAM becomes fist line of defense with **Threat** and **Context** awareness*

Identity is a key security controls for a multi-perimeter world



Today: Administration

- Operational management
- Compliance driven
- Static, Trust-based



Tomorrow: Assurance

- Security risk management
- Business driven
- Dynamic, context-based

Threat-aware Identity and Access Management becomes the first line of defense for securing multi perimeter world

Safeguard mobile, cloud and social access

- **Validate “who is who”** especially when users connect from outside the enterprise
- **Proactively enforce access policies** on web, social and mobile collaboration channels

Deliver actionable identity intelligence

- **Streamline identity management** across all security domains
- **Manage and monitor user entitlements and activities** with security intelligence



Prevent advanced insider threats

- **Manage and audit privileged access** across the enterprise
- **Defend applications and data** against unauthorized access

Simplify cloud integrations and identity silos

- **Provide federated access** to enable secure online business collaboration
- **Unify “Universe of Identities”** for efficient directory management

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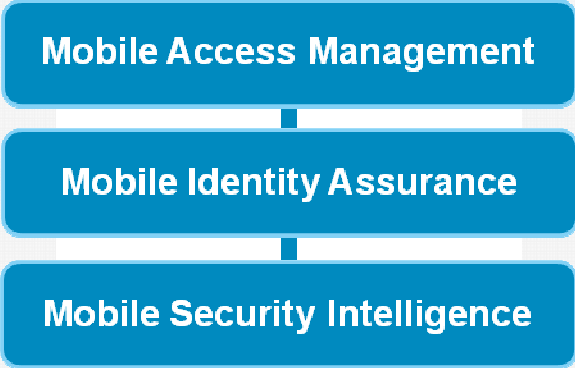
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Introducing New Access Management Solution



Safeguard mobile, cloud and social access

IBM Security Access Manager for Mobile

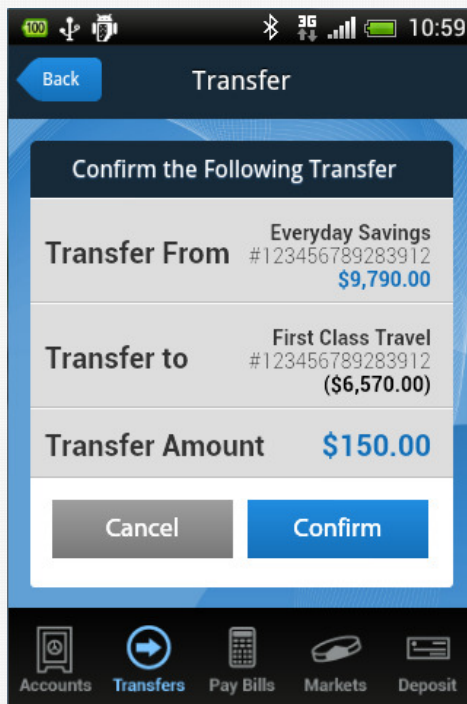


- **Deliver Mobile SSO and session management** to help secure employee and consumer access to mobile and web apps
- **Enforce context-aware access** with mobile device fingerprinting, geo-location awareness and IP Reputation
- **Improve identity assurance** using built-in mobile authentication service and one-time-password use
- **Help secure mobile app deployment** with IBM WorkLight and QRadar security intelligence integration to support access control
- **Reduce TCO and time to value** with an “all-in-one” access appliance in virtual and hardware form factors

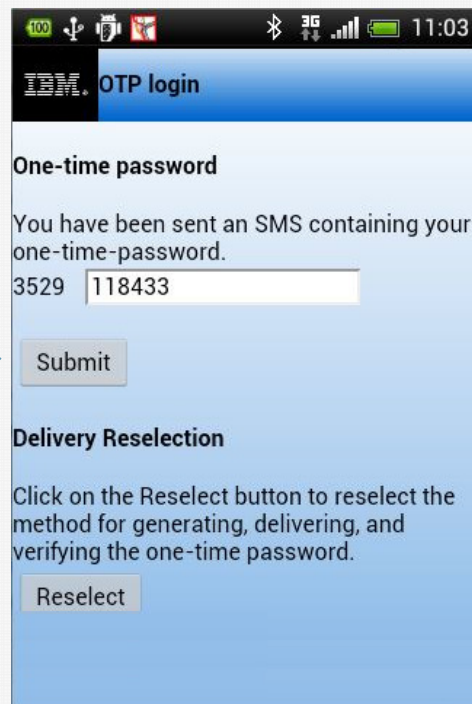
Implement a context-aware access posture for mobile access and BYOD

Safeguard mobile, cloud and social access

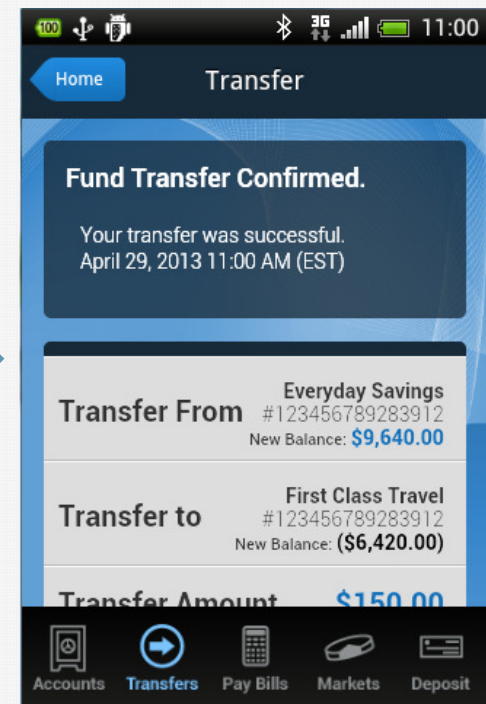
User attempts high-value transaction



Strong authentication challenge



Transaction completes



- ✓ Reduce risk associated with mobile user and service transactions
- Example: transactions less than \$100 are allowed with no additional authentication; User attempts transfer of amount greater than \$100 – requires an OTP for strong authentication

Protect against advanced threats and cyber-attacks with QRadar Integration

Safeguard mobile, cloud and social access



Potential Data Loss
Who? What? Where?

Magnitude	
Description	Potential Data Loss/Theft Detected
Attacker/Src	10.103.14.139 (dhcp-workstation-103.14.139.acme.org)
Target(s)/Dest	Local (2) Remote (1)
Network(s)	Multiple (3)
Notes	Data Loss Prevention Use Case. Demonstrates QRadar DL authentication ...

	Event Name	Source IP (Unique Count)	Log Source (Unique Count)	Username (Unique Count)	Category (Unique Count)
■	Authentication Failed	10.103.14.139	OracleDbAudit @ 10.101.145.198	Multiple (2)	Misc Login Failed
■	Misc Login Succeeded	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	Misc Login Succeeded
■	DELETE failed	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	System Action Deny
■	SELECT succeeded	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	System Action Allow
■	Misc Logout	10.103.14.139	OracleDbAudit @ 10.101.145.198	scott	Misc Logout
■	Suspicious Pattern Detec	10.103.14.139	Custom Rule Engine-8 :: qradar-vn	N/A	Suspicious Pattern Detected
■	Remote Access Login Fa	10.103.14.139	Custom Rule Engine-8 :: qradar-vn	N/A	Remote Access Login Failed

Who?
An internal user

What?
Oracle data

- Navigate
- Information
 - DNS Lookup
 - WHOIS Lookup
 - Port Scan
 - Asset Profile
- Resolver Actions
- TNC Recommendation
- Search Events
- Search Flows

QRadar Has Completed Your Request

Go to APNIC results

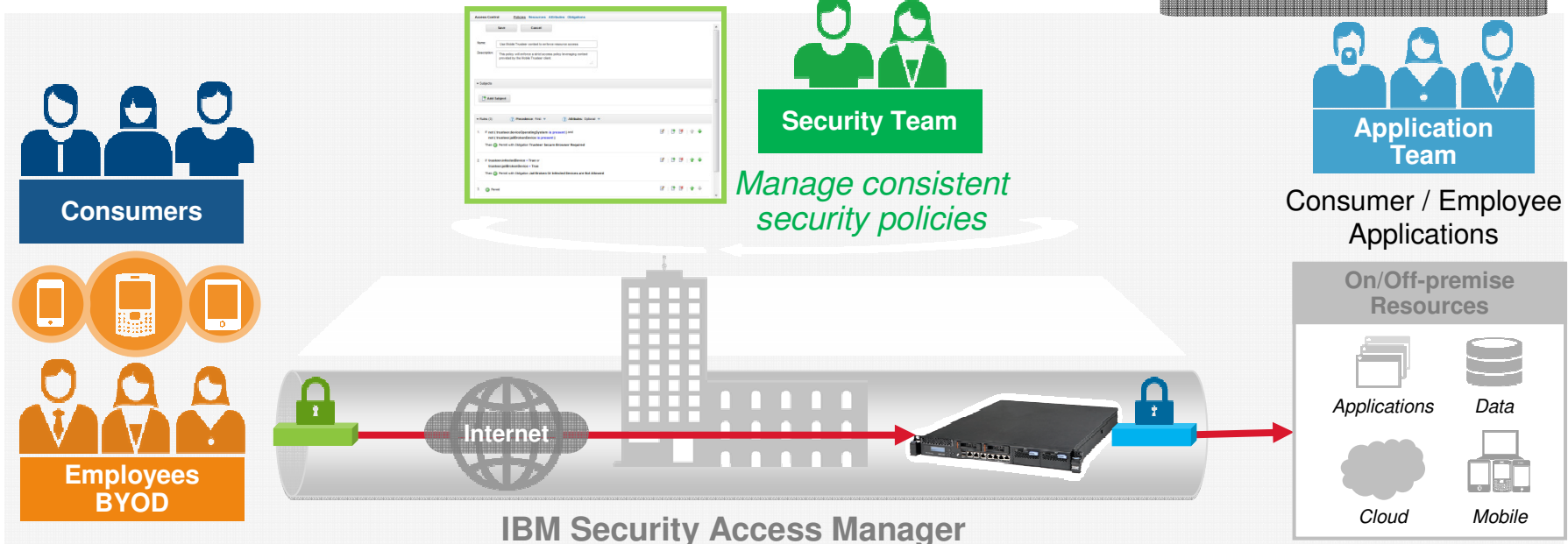
[Querying whois.arin.net]
[whois.arin.net]

OrgName: Google Inc.
OrgID: GOGL

Where?
Gmail

Unified Access Gateway to deliver modular support for access requirements

Safeguard mobile, cloud and social access



Access Manger for Web

- Web Single Sign-On and session management
- Web Application Protection (Firewall)
- Highly-scalable Reverse Proxy
- Policy Server
- Coarse-grained Authorization

Access Manager for Mobile

- Mobile Single Sign-On and session management
- Authentication service with built-in OTP support
- Context-, Risk-based Access (RBA)
- Trusteer Mobile SDK / Secure Browser integration
- Worklight integration for risk-based access enforcement

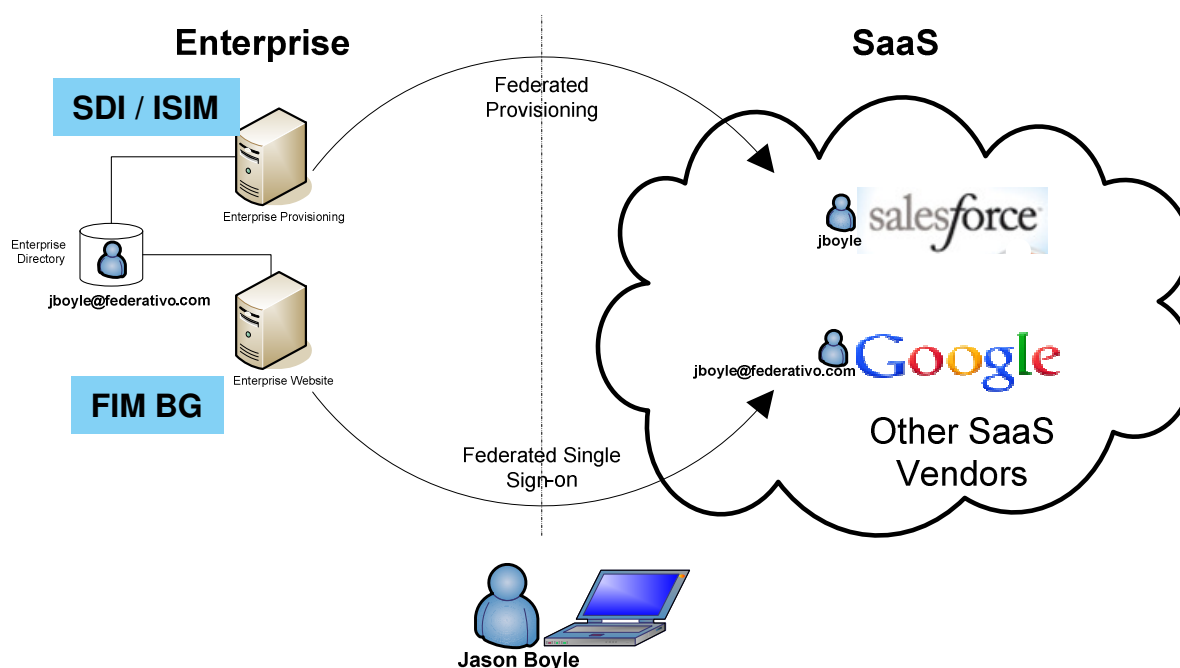
Physical appliances for hardware performance & security

Virtual appliances for deployment flexibility



Cloud Use Case 1: Enabling Access to SaaS with Identity Federation

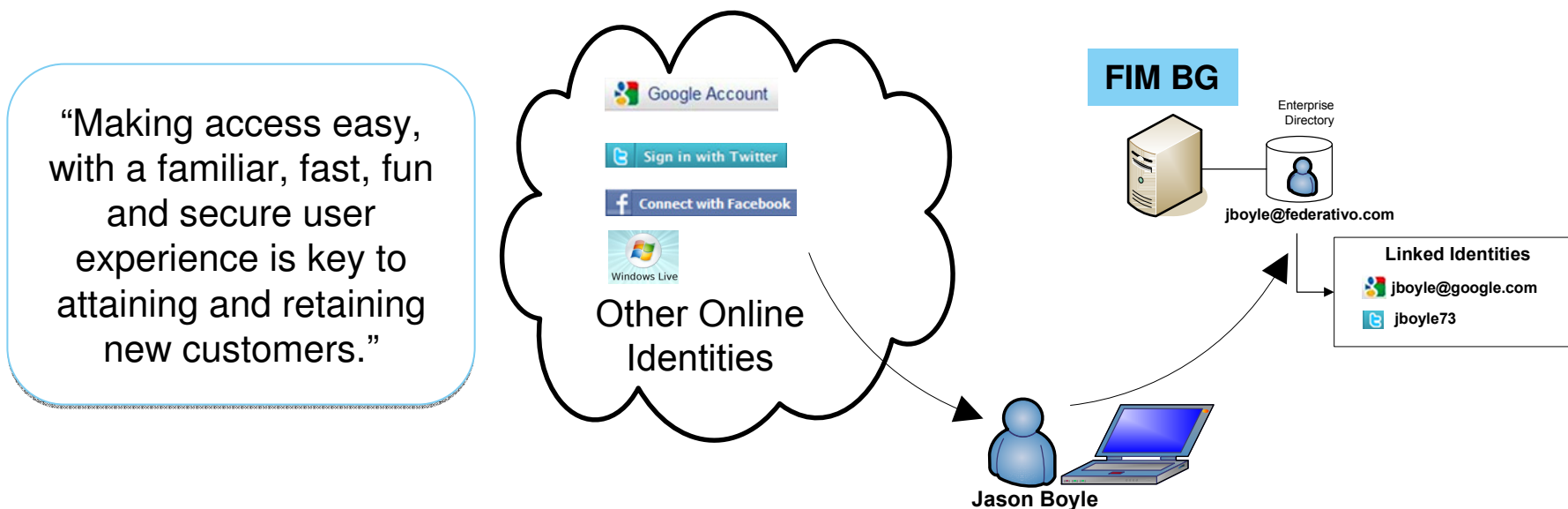
- Scenario: Identity and access to the cloud
 - Examples: Salesforce, GoogleApps, Workday, Office365, IBM SmartCloud
- Target: B2E
- Capabilities: Federated provisioning and single sign-on



SDI = Security Director Integrator
 ISIM = IBM Security Identity Manager
 FIM BG = Federated Identity Manager Business Gateway

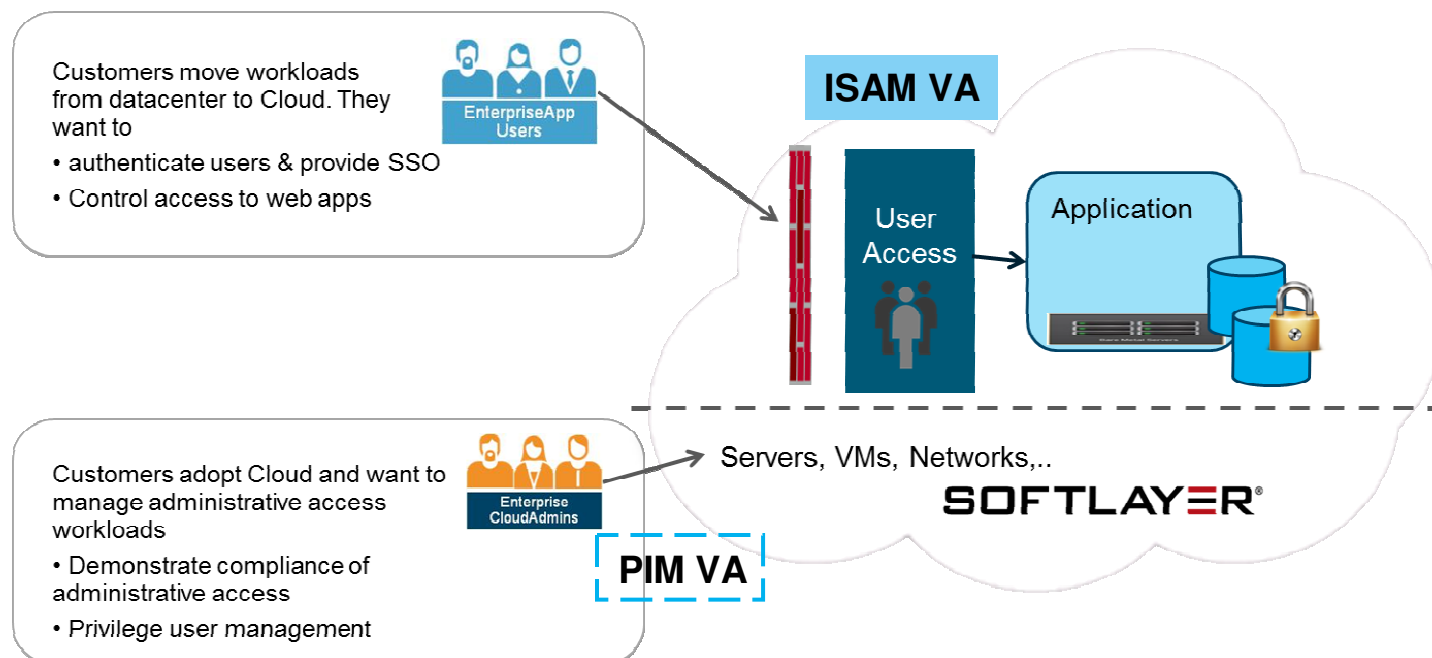
Cloud Use Case 2: Implementing BYO-ID with Identity Federation

- Scenario: Bring your own identity
 - Examples: LinkedIn, Facebook, Twitter, Google, Yahoo IDs
- Target: B2C
- Capabilities: Self-registration, single sign-on, user self-care



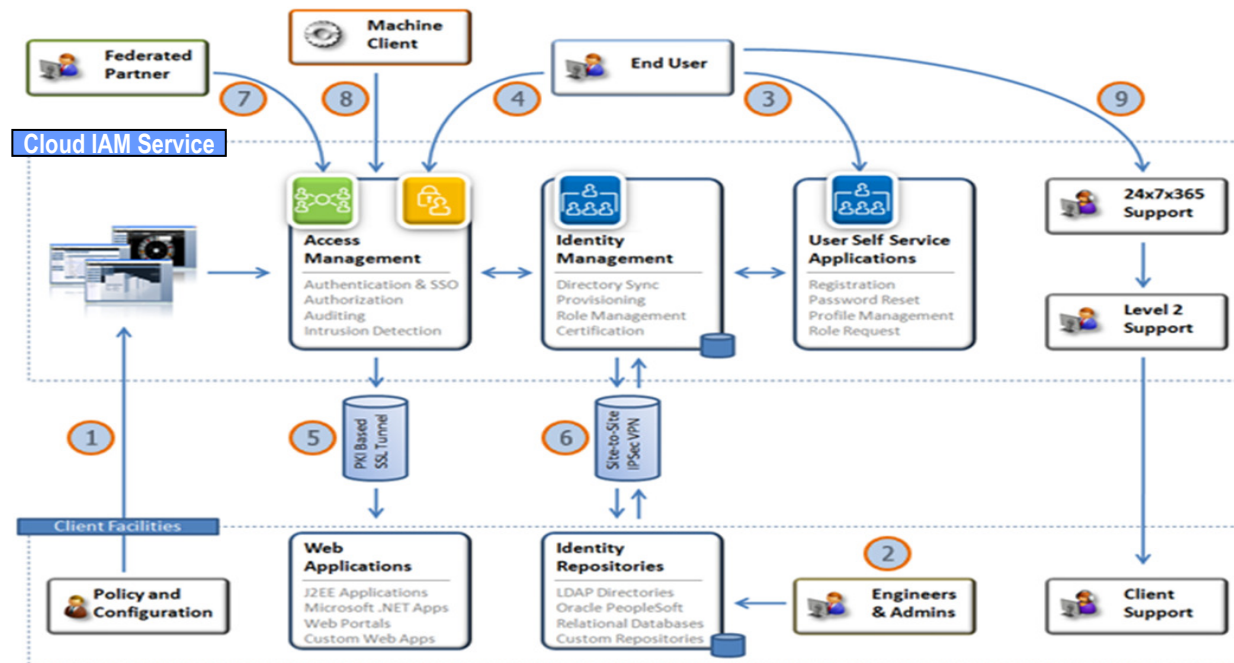
Cloud Use Case 3: Implementing IAM in IaaS to secure workloads

- Scenario: Deploying IAM capabilities in a cloud infrastructure
 - Examples: SoftLayer, Amazon EC2
- Target: Enterprise
- Capabilities: Access Management, Privileged Identity Management
- Example:

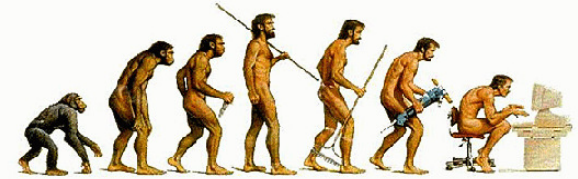


Cloud Use Case 4: Adopting IAM as a managed service from the cloud

- Scenario: IAM as a managed service from the cloud
 - Examples: Customize IAM infrastructure and deploy in a hosted manner
- Target: Enterprise
- Capabilities: Access Management, Identity Management and Federation
- Example:

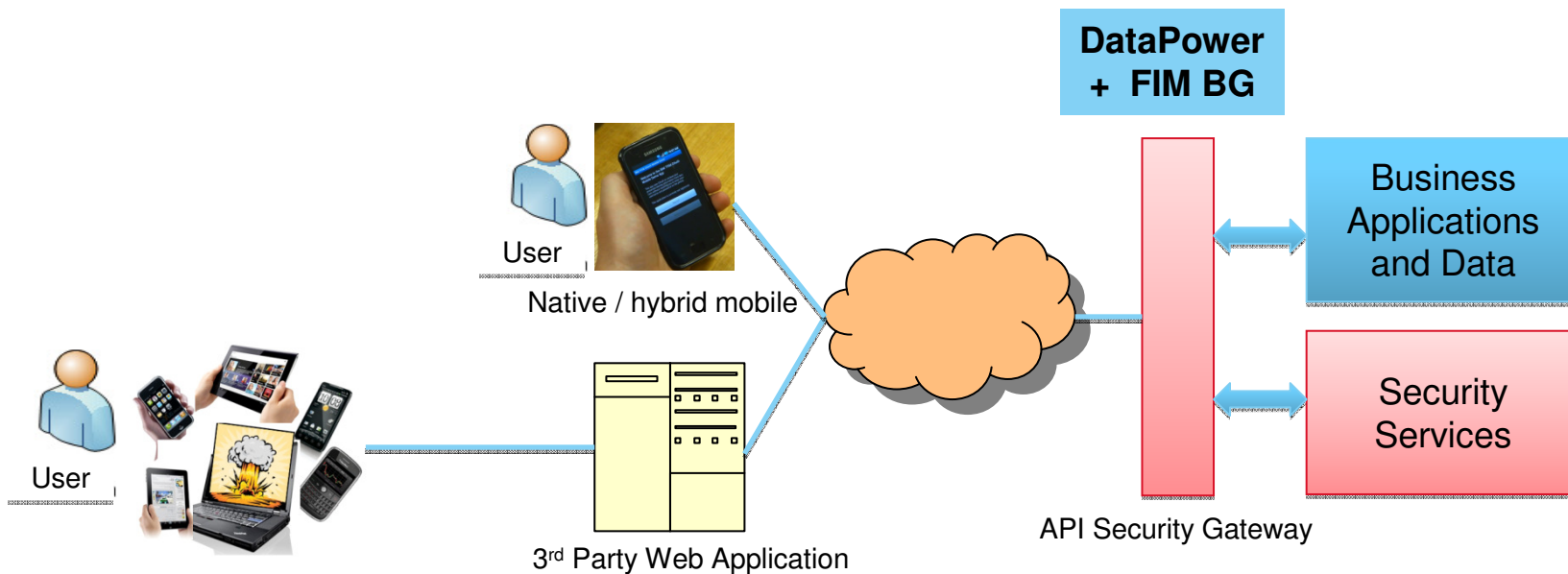


Cloud Use Case 5: Integrated Services via API



No IT → Internal IT → Web 1.0 → Business via API

- Scenario: Exposing services via API
 - Examples: Google API's, Twilio, Facebook, CloudFoundry
 - See www.programmableweb.com
- Target: Mobile, B2B
- Capabilities: OAuth, Basic-Auth, Mutual SSL, WS-*



Identity as an API: Simplified Security for App Developers

Easily add user authentication and single sign on to on-premise & cloud applications

BETA

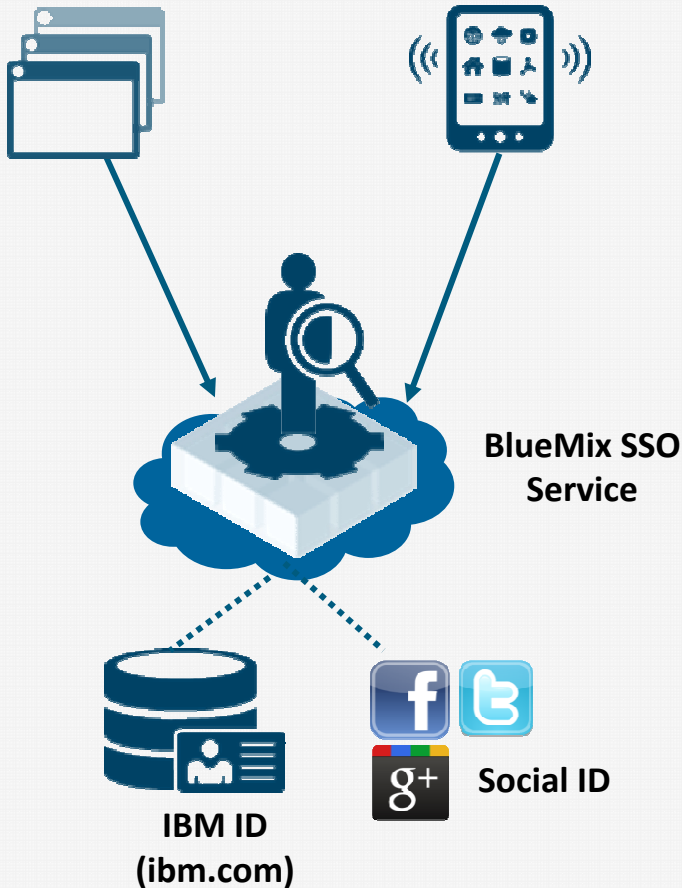
Easy to use service allows developers to add access security for web and mobile applications using “SSO with IBM ID”

Policy-based authentication service provides easy-to-use SSO capability

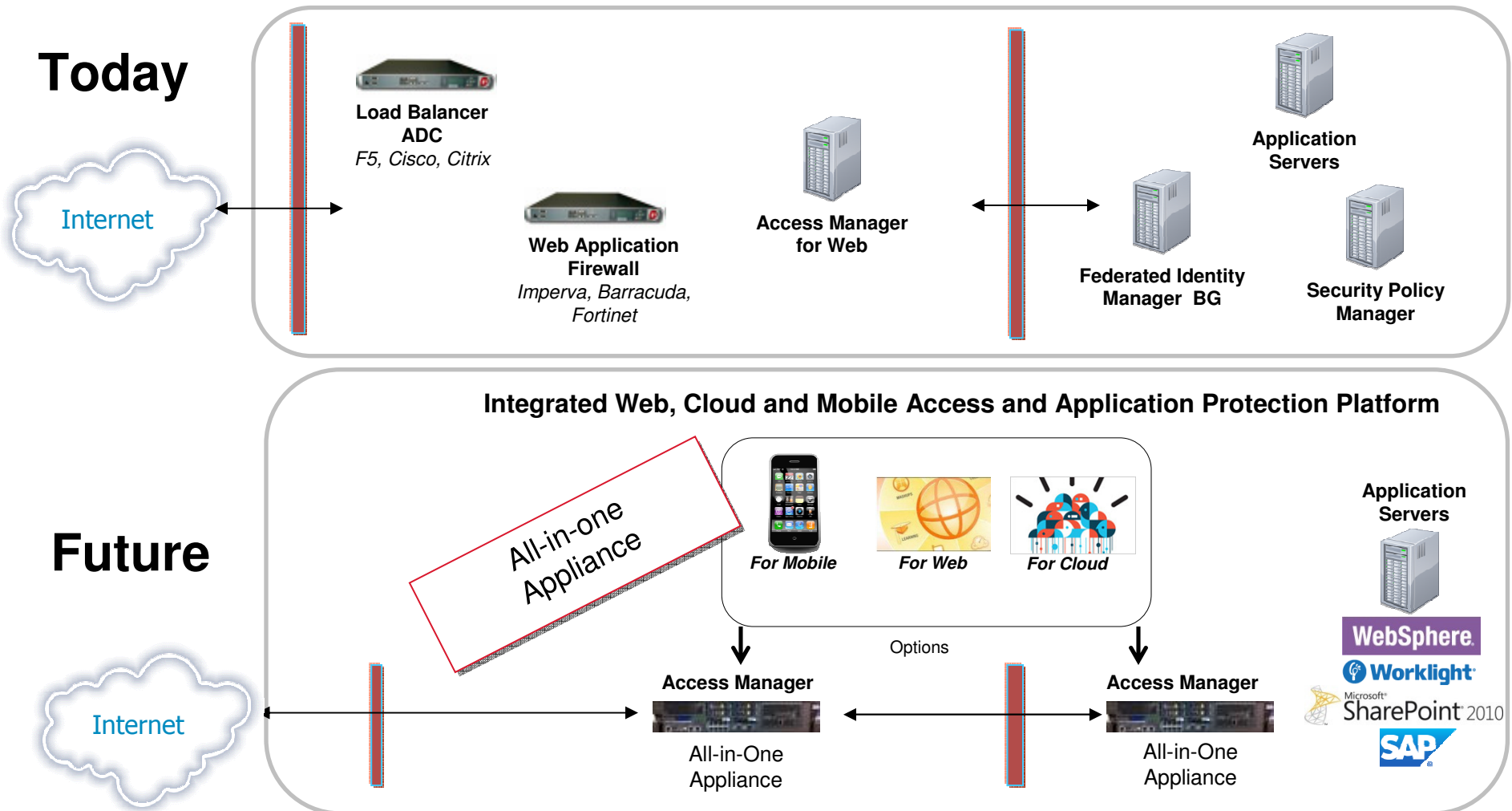
Lightweight identity proofing adds identity assurance for IBM ID

Flexible SSO options based on industry standards such as OpenID and OAuth

Safeguarding mobile, cloud, and social access








ISAM: Consolidated, Consumable, Comprehensive platform for Web, Cloud and Mobile Security



IBM Security Access Manager 8.0 - Innovative and Differentiating IAM Capabilities

Empowering clients to more easily deliver end-to-end security solutions to mitigate the risks associated with a diverse set of Web, Mobile and Cloud applications

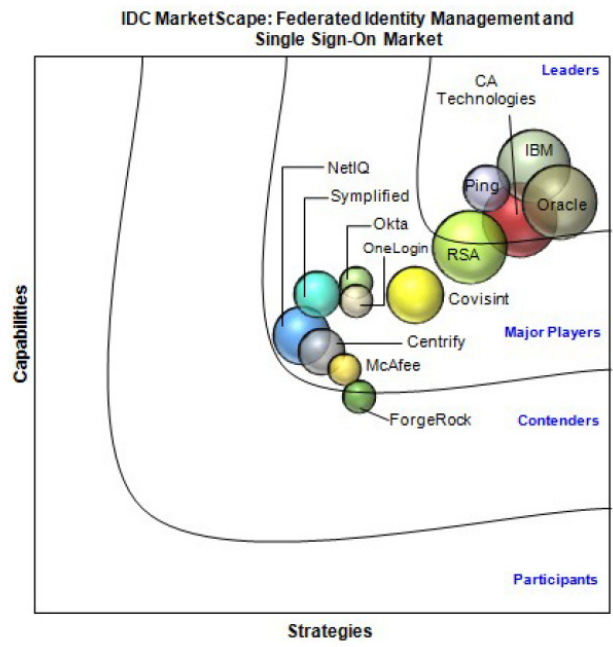
1	Embedded Threat Protection for Web & Mobile	<p>Tolly Group evaluation validates that ISAM for Web is able to effectively protect against 100% of OWASP Top 10 web application risks while maintaining high performance and scalability</p>	
2	Integrated Security Intelligence	<p>As the centralized policy enforcement point for all Web-based access, ISAM generates actionable events for QRadar SIEM that enable clients to stay ahead of threats and demonstrate regulatory compliance</p>	
3	Protection from High Risk Mobile Devices	<p>Out-of-the-box consumption of Trusteer Mobile SDK and Secure Browser context data enables users to create comprehensive access policies that include fraud and malware detection without modifying applications</p>	
4	Built-in Identity Assurance for IBM Worklight	<p>Built-in support to seamlessly authenticate and authorize users of Worklight developed mobile applications and provide additional value-add with context based access enforcement</p>	
5	Modular Access Management Platform	<p>Consolidated platform allows both Web and Mobile capabilities to be licensed as needed, including flexible deployment options with both physical and virtual appliance form factors</p>	

IBM has always been recognized as leader in Access Management



2014 Global Mobile Identity and Access Management Customer Value Leadership Award

IBM Access Management Customers



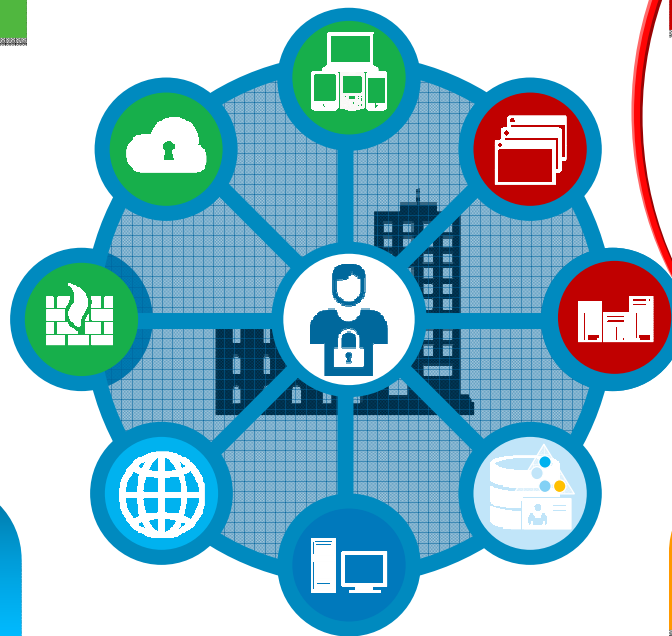
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Prevent advanced insider threats

- **Manage and audit privileged access** across the enterprise
- **Defend applications and data** against unauthorized access

Simplify cloud integrations and identity silos

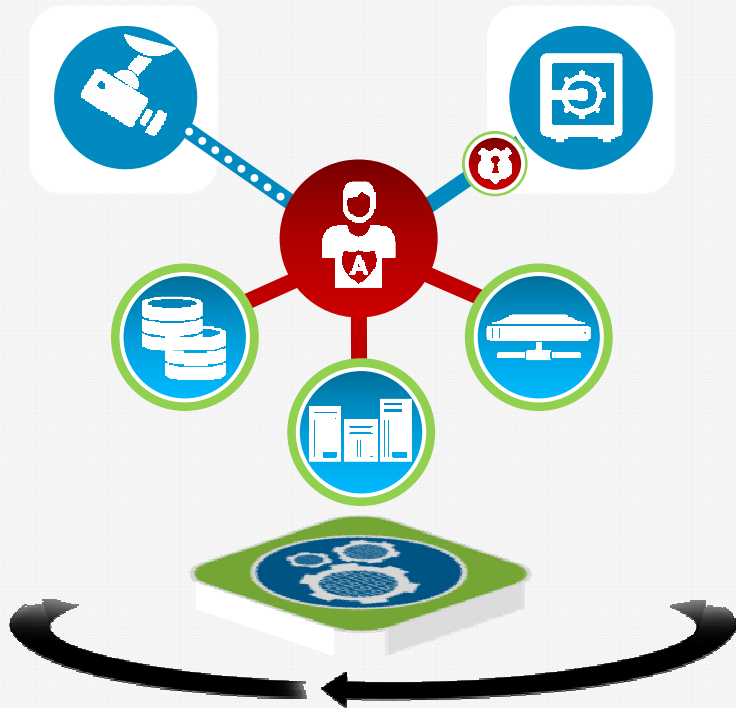
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Introducing New Privileged Identity Management Solution

Prevent advanced insider threats



IBM Security Privileged Identity Manager



- **Eliminate the need to share passwords** for privileged users and shared accounts with an automated privileged identity management
- **Ensure compliance and audit support** with session recording and replay support
- **Improve ROI** using common Identity management and support for applications and resources
- **Strong authentication controls and SSO** for high-risk account access
- **Reduce TCO and time to value** with a scalable virtual appliance deployment

Secure and authenticate access with SSO and credentials vault

Prevent advanced insider threats

1 Configure Privileged Account

2 User's credential is automatically checked out of the vault and used to log user into privileged account. Credential is automatically checked in to vault upon logout

3 User activity is logged

✓ Privileged User Activity Monitoring:

- Recording and logging of user activity in sessions accessed through a shared ID
- Discourage users with privilege from abusing their rights

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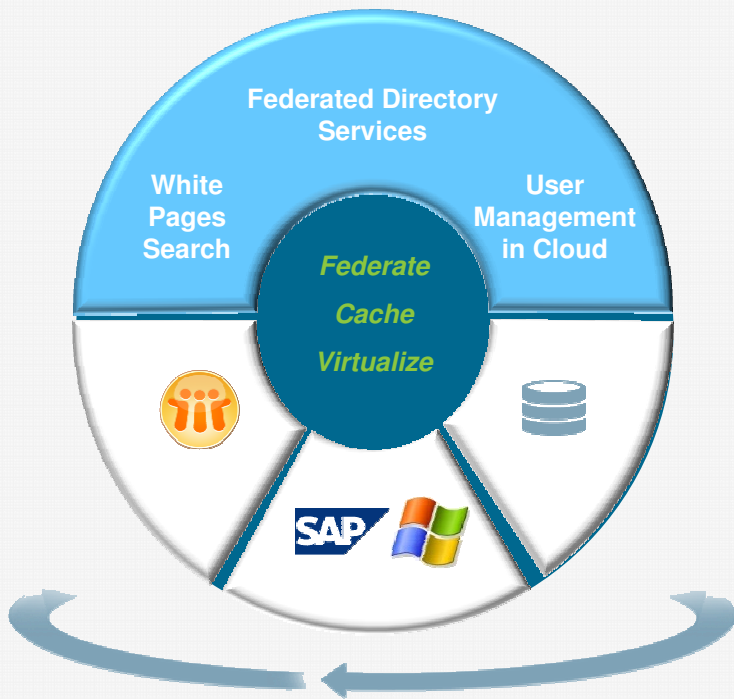
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Introducing New Directory Services

Simplify identity silos and cloud integrations

NEW

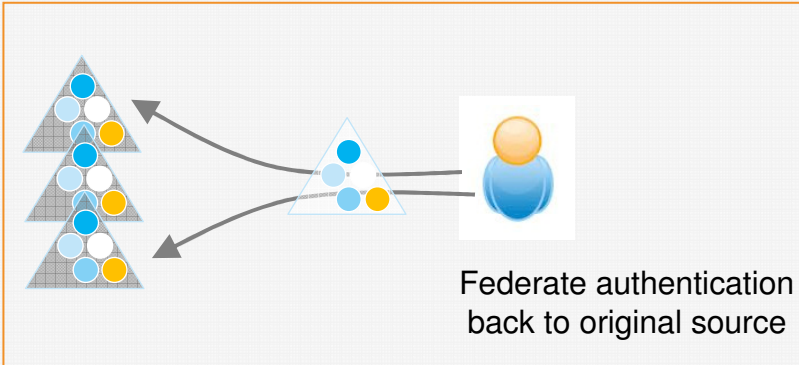
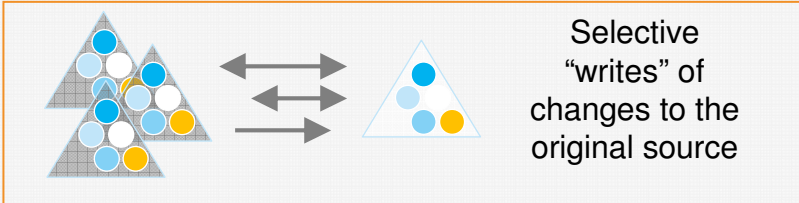
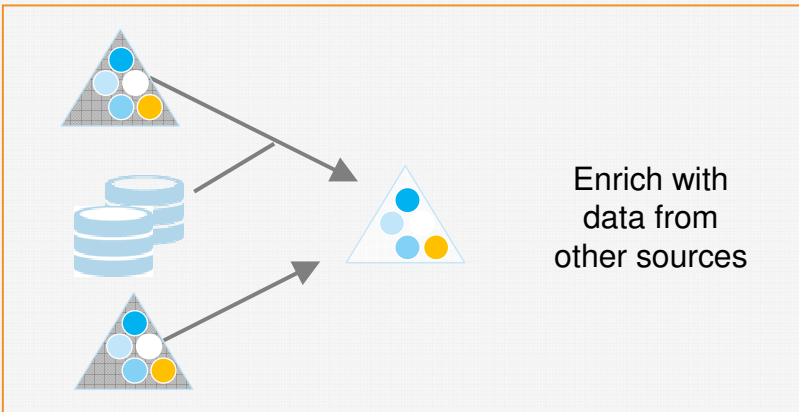
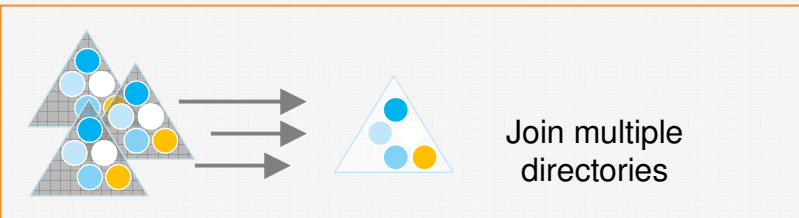
IBM Security Directory Server and Integrator



- **Universal directory** to transform identity silos and to support “virtual directory”-like deployments
- **Scalable directory backbone** leveraging existing infrastructure for enterprise-wide Identity and Access Management
- **Simplified sourcing of identities and attributes** for enterprise applications, Cloud/SaaS integrations
- **Intelligent White Pages search with social networking feature** to enable intuitive identity store browsing
- **In-depth user insight** with out of the box reports and IBM SIEM QRadar integration

“Untangle” identity silos to support business growth and increase efficiency

Simplify identity silos and cloud integrations



✓ Create a single source of truth for identity information using Federated Directory Services

Simplify integrating and maintaining multiple identity stores

Simplify identity silos and cloud integrations



The screenshot shows the IBM Connections Directory search interface. The search term 'dressler' is entered, and several profile cards are displayed, including Ingo Dressler, John Dressler, and others. The interface includes navigation tabs like 'Home', 'Profiles', and 'Communities', and a search bar at the top.

- ✓ White Pages application ready for social business
- ✓ Based on IBM Profiles
- ✓ Configured as Federated Directory Services instance to pull information from multiple repositories

Federated Service

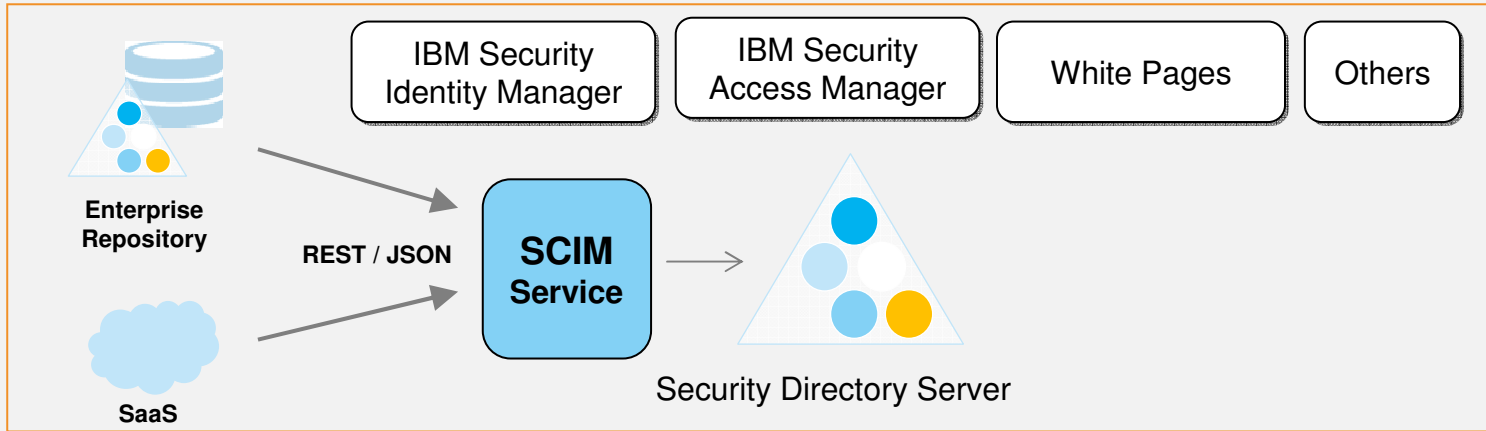
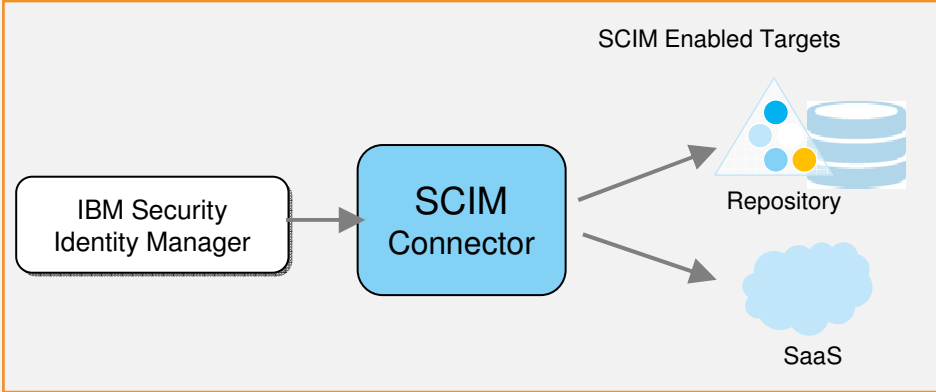


The diagram illustrates a 'Federated Service' box receiving data from multiple identity sources, represented by logos for IBM, Windows, Linux (Tux penguin), SAP, and iir.

Directory Services: Authenticate and secure user access to Cloud and online environments

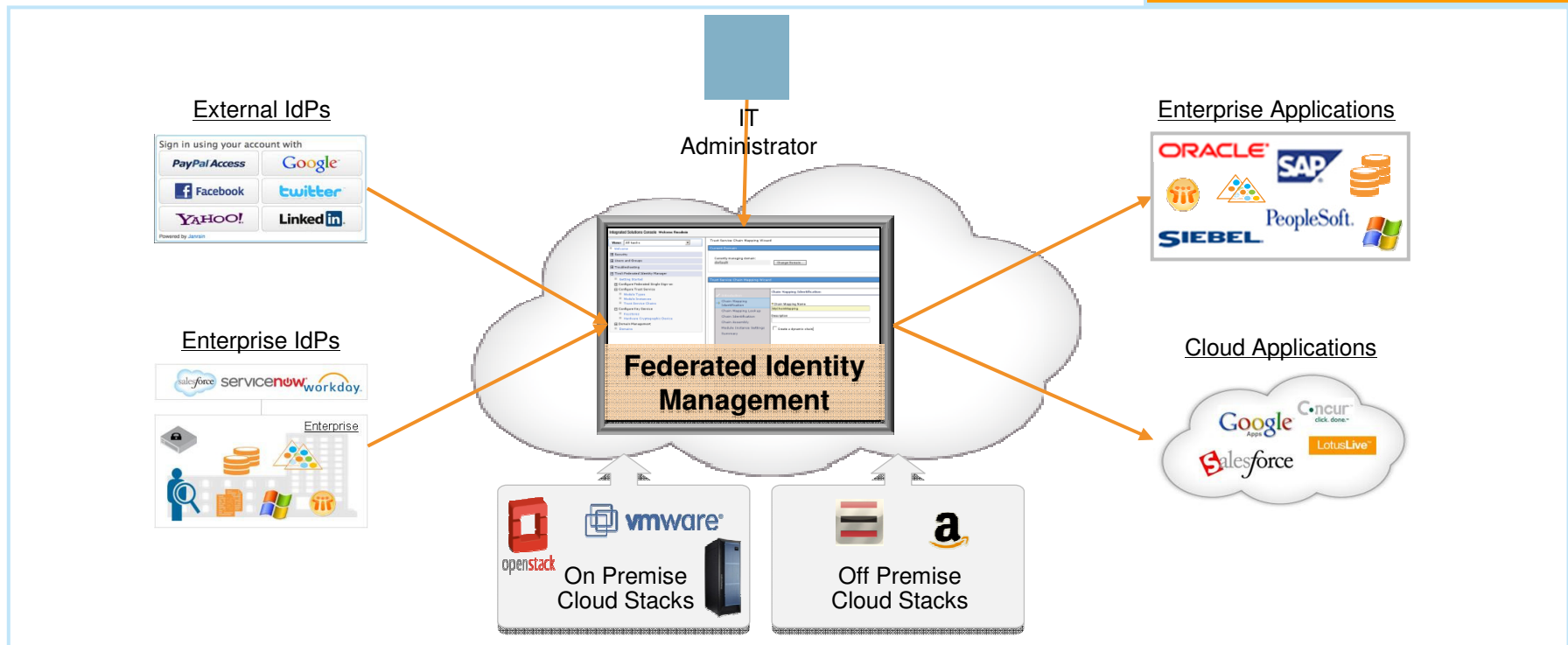
Simplify identity silos and cloud integrations

- ✓ Using SCIM for User On/Off-boarding with Cloud Environments
- ✓ REST/JSON interface for user & group management
- ✓ Security Directory Integrator provided as a service as well as through a connector



Federated Identity Manager: Enabling user access to wide variety of apps including cloud, SaaS and web services

Simplify identity silos and cloud integrations



- **Consumer Federation and SSO** with support for standard protocols like SAML, OAuth, OpenID, WS-Trust
- **Built-in B2C self service and authentication** for scalability & flexible integration to improve identity assurance
- **Ease of deployment and integration** to support rapid Cloud, SaaS and application-level federation
- **Cross platform SSO** with built-in Security Token Service (STS) transforms between inbound and outbound security tokens like SAML, Kerberos, LTPA

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IAM Analytics will help control the risks across all security domains



Wave 1

Administration

- Cost savings
- Automation
- User lifecycle
- Key on premise apps & employees

Wave 2

Governance

- Role management & mining
- Access certification & attestation
- SOD
- Fine-grain entitlement reports

Wave 3

Analytics

- Application usage
- Privileged activity
- Risk-based control
- Baseline normal behavior
- Employees, partners, consumers – anywhere

IAM Analytics – Collect and Analyze Identity Data

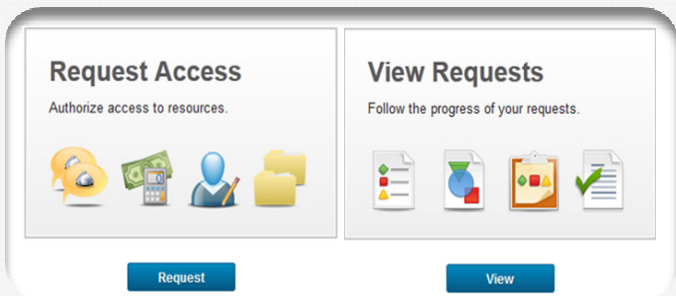
- Improved visibility into how access being utilized
- Risk-based insights for prioritized compliance actions
- Clear actionable dashboards for better business decision making

Introducing New Identity Management Solution

Deliver actionable identity intelligence



IBM Security Identity Manager



Re-designed, business friendly user interface

Identity analytics

IAM integration with Security Intelligence

- **Empower Line of Business** to manage and define the user access for governance, risk and compliance
- **Reduce cost of enterprise identity management** with centralized policy, integrated role and identity lifecycle management
- **Improve user assurance** with strong authentication integration and closed-loop user activity monitoring
- **Effective and actionable compliance** with centralized identity and access management across the enterprise
- **Real-time insider fraud detection** with integrated IAM and Security Intelligence

Integrated products provide user activity and detect anomalies

Deliver actionable identity intelligence

The dashboard displays several key components:

- My Offenses:** No results were returned for this item.
- Most Severe Offenses:**

Offense Name	Magnitude
User Login Attempt preceded by General Authentication Failed - Event CRE	[Yellow bars]
Multiple Login Failures for the Same User	[Yellow bars]
- Most Recent Offenses:**

Offense Name	Magnitude
User Login Attempt preceded by General Authentication Failed - Event CRE	[Yellow bars]
Multiple Login Failures for the Same User	[Yellow bars]
- Top Log Sources (Event Count):** A bar chart showing event counts over time for various sources.
- Flow Bias (Total Bytes):** A line chart showing network activity flow bias from 19:30 to 00:30. The y-axis represents 'Sum' from 0 to 600,000. A legend indicates 'Other' (green) and 'In Only' (blue). A 'View in Network Activity' link is present.
- Top Category Types:**

Category	Offenses
General Authentication Failed	3
User Login Failure	2
User Login Attempt	1
Auth Server Login Failed	1
Object Not Cached	0
- Top Sources:**

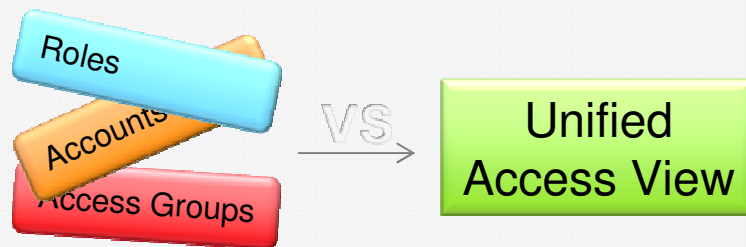
Source	Threat
10.251.196.1	
12.129.19.128	
- Top Local Destinations:** No results were returned for this item.

- Identity and Access Manager event logs offers rich insights into actual users and their roles
- IAM integration with **QRadar SIEM** provides detection of break-ins tied to actual users & roles

Empower business users to manage and govern access

Relevant to Business Users:

What access does Judith have?



Intuitive resource names

<p>IT name LDAP server a2164.raleigh...</p>	<p>VS</p>	<p>Business name East region corporate directory</p>
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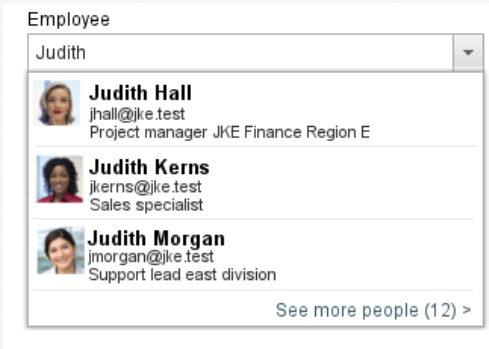
Functional tasks:

Judith is transferring departments I need to...

<p>Remember to...</p> <ol style="list-style-type: none"> 1. Delete access 2. Modify her user record 3. Notify her new manager 	<p>VS</p>	<p>Simply launch...</p> <p>Transfer my employee</p>
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Modern, Intuitive, Efficient

Modern features - take cues from social media and e-commerce



Batch requests - shopping cart



Guided



Identity Service Center – Home screen

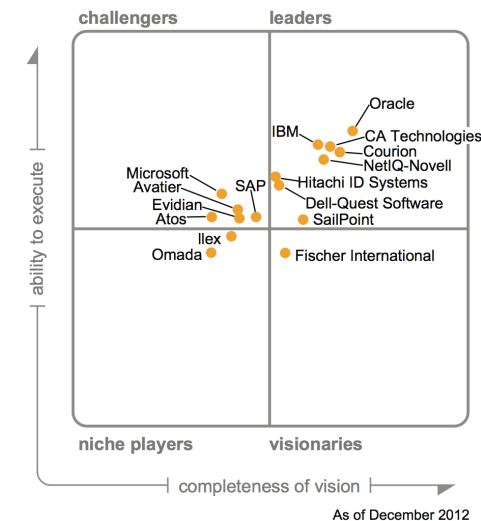
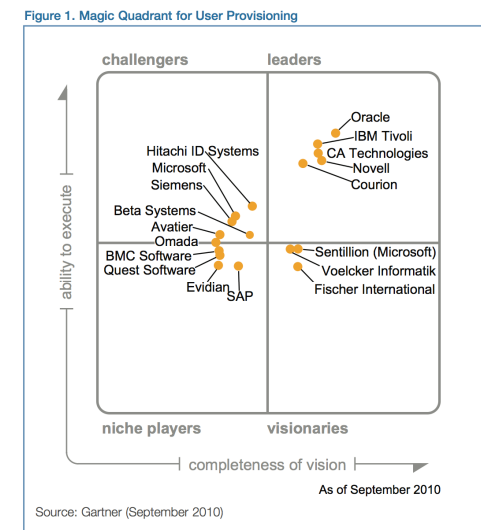
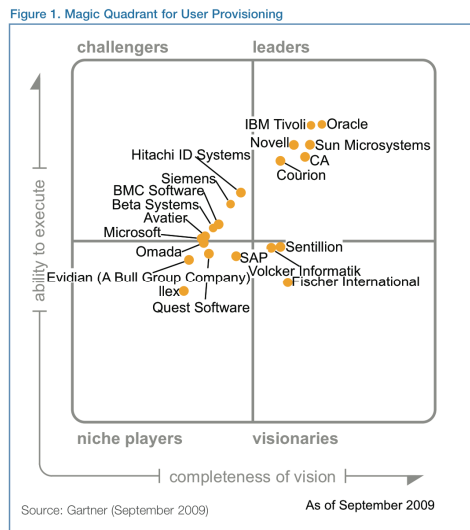
Identity Service Center - User search and selection

The screenshot shows the IBM Security Identity Manager interface for user selection. At the top, the breadcrumb navigation includes 'Request Access', 'View Access', and 'View Requests'. A progress bar indicates the current step is '1 Select User', followed by '2 Select Accesses', '3 Provide Required Information', and '4 Submit'. A search bar on the left contains the text 'Search users'. Below it, a 'Quick Select' section shows 'Select me'. The main area displays a grid of user cards, each with a profile picture, name, email address, and title. The users listed are Abe Austin, Akilah Orvis, Benton Magnani, Blythe Leak, Cali Brooks, Christal Delettre, Chuck Riegler, Deirdre Bourdon, and Dona Melandez. Each card has a 'Select' button with a checkmark and a user icon. The interface also shows '1 to 33 of 33' results and a 'Sort by: Name' option.

Name	Email	Title
Abe Austin	aaustin@jke.test	Title: Accounts receivable
Akilah Orvis	aorvis@jke.test	Title: Customer accounts specialist south region
Benton Magnani	bmagnani@jke.test	Title: account receivable
Blythe Leak	bleak@jke.test	Title: Customer accounts specialist east region
Cali Brooks	calib@jke.test	Title: Customer account specialist
Christal Delettre	cdelettre@jke.test	Title: Customer account receivables lead
Chuck Riegler	criegle@jke.test	Title: Senior Manager Accounting
Deirdre Bourdon	dbourdon@jke.test	Title: Customer accounts specialist
Dona Melandez	dmelandez@jke.test	Title: Account receivable specialist

Gartner User Provisioning MQ

- Consistent Market Leadership
- 2013 Gartner changed MQ criteria
- Changes and IBM placement not consistent with past assessments



Leading industry analysts recognized IBM IAM vision and strategy

FROST & SULLIVAN

- Recognizes IBM as a Leader in Mobile Identity and Access Management Solutions in 2014



- Recognizes IBM as **market share leader** in 2013
 - WW Identity and Access Management
 - Federation Identity Management and SSO MarketScope leader in 2014



- Recognizes IBM as a **visionary** in the new 2013 IAG MQ
 - New ISIM 6.0 service center UI
 - 2014 Roadmap focus on IAM Analytics, beyond today's Governance solutions

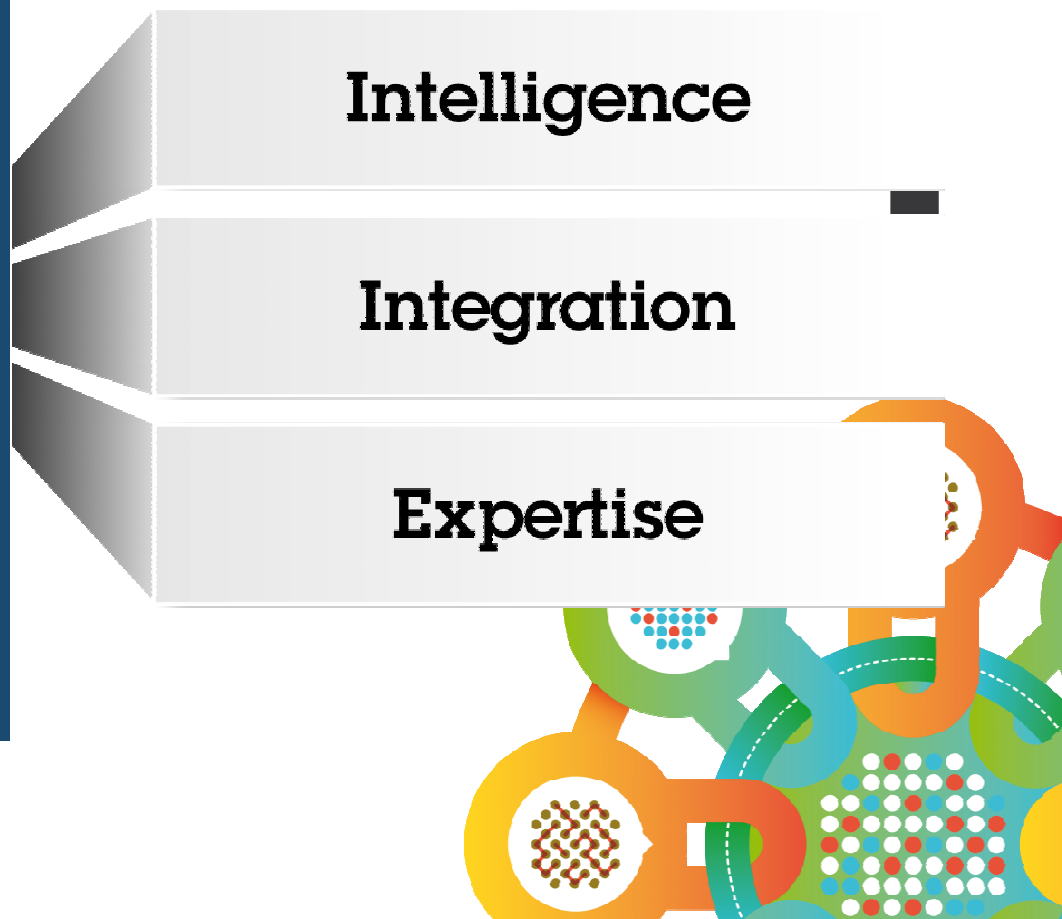
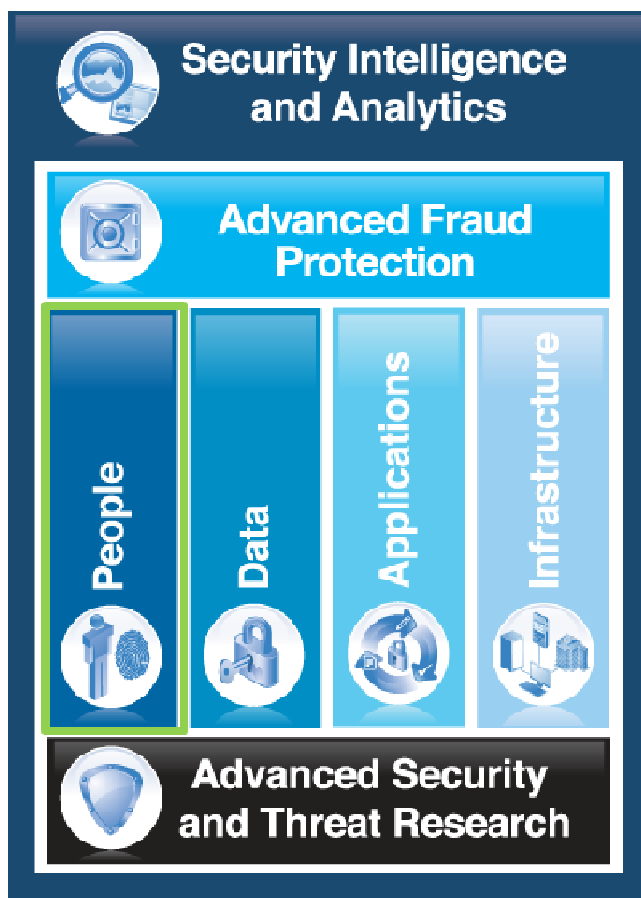


- Recognizes IBM as **leaders** in key leadership compass reports
 - Identity Provisioning, Privileged Identity Management
 - Access Management & Federation, Enterprise SSO



- Recognizes IBM as **strong performer** in their 2013 Wave report
 - WW Identity and Access Management

Security Intelligence. Think Integrated.



Thank you!



**“The identity I stole was a fake!
Boy, you just can’t trust people these days!”**



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