November 3, 2009

The Forrester Wave™: Identity And Access Management, Q4 2009

by Andras Cser
for Security & Risk Professionals

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Oracle, CA, And IBM Lead, With Novell And Sun Microsystems Close Behind

by Andras Cser
with Robert Whiteley and Allison Herald

EXECUTIVE SUMMARY

In Forrester's 79-criteria evaluation of identity and access management (IAM) vendors, we found that Oracle, CA, and IBM lead the pack because of a rich IAM portfolio (both organically developed and acquired), an understanding of a rapidly changing market, and a strong and meticulously executed strategy. Novell, Courion, and Sun Microsystems each have powerful suites and strong provisioning and role-management solutions but lack some pieces of the access management stack. Microsoft, SAP, and Hitachi ID Systems lag behind because they cannot provide a full IAM stack. Given that many customers ask about only the provisioning portion of the IAM stack, we also used a subset of the criteria to evaluate this subcomponent. When evaluating these same vendors on their provisioning products, we found that CA, Novell, and Courion showed significant improvement in their current offering; however, Oracle still maintained the top spot for provisioning.

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NOTES & RESOURCES

Forrester conducted product evaluations in June 2009 and interviewed 27 vendor and user companies, including CA, Courion, Hitachi ID Systems, IBM, Microsoft, Novell, Oracle, SAP, and Sun Microsystems.

Related Research Documents

"The Forrester Wave™: Identity And Access Management, Q1 2008"
March 14, 2008

ECONOMIC TURMOIL SHINES THE SPOTLIGHT BACK ON IDENTITY MANAGEMENT

The economic downturn caused organizations to lay off employees and shift the workload to contingent workers like contractors, consultants, and business partners. With this shift, IT security departments are forced to provide delegated, workflow-based, and automated administration of users to business partners and non-IT corporate users. However, it's not just the downturn that affects identity management. Savvy organizations are already preparing for the inevitable upturn that will unleash another wave of user provisioning and administration tasks. As a result, companies are now resuming IAM projects that had been on hold for the past nine to 12 months. Why? Because identity and access management tools let organizations:

- **Automate many of the mundane identity tasks.** IAM provides a mechanism to collect data and approvals of user access recertifications; allows users to reset their own passwords or retrieve their forgotten user IDs; and automates administrative changes in user stores like Active Directory (AD), lightweight directory access protocol (LDAP), RDBMS, and various mainframe systems.

- **Improve compliance reporting.** IAM helps security teams run periodical reports that summarize who has access to what and why. This improves the security posture of the company by systematically closing terminated employees' dormant accounts.[1]

Vendors Respond By Introducing Improvements With Integrated IAM Stacks

With tight IT budgets, organizations are looking to upgrade or revamp their IAM infrastructures in smarter ways. Today's CIOs and CFOs don't want to spend extra funds maintaining licenses for two redundant product suites. Because it's not uncommon to have four or more different solutions for managing life cycles of their internal and external users, security and risk managers routinely ask how they can consolidate the number of IAM tools. Ultimately, the goal is to implement one IAM vendor's stack solutions. Using a stack reduces product prices, integration pain, and account management issues. The need for a consolidated solution has triggered vendors to respond with IAM stacks that provide:

- **Reduced implementation time based on customer pressures.** Many companies have tried — and failed — implementing IAM for the first time. With most security teams bearing scars from previous IAM projects, today's IAM buyers are much savvier than they used to be. There's more focus on mapping out their identity-related business requirements precisely rather than crafting lengthy request for proposal (RFP) criteria and asking vendors to demonstrate relevant and integrated features during proof-of-concept days. Vendors have listened: The leading IAM stacks can meet customer requirements more or less out of the box or with much less customization and through a higher level of integration than two years ago. By now, IAM system integrators have accumulated enough implementation expertise and code to make most implementations painless.

- **Better grouping of functionality based on product affinities.** Although it was a separate product set two to three years ago, access recertifications and role management are a standard feature set of user account provisioning. Likewise, the proliferation of SharePoint portals and the decrease in mainframe talent to sustain entitlements in mainframe applications are causing entitlement enforcement to become an increasingly integral part of access management and role management. And finally, privileged user management is coalescing with password safes and fine-grained sensitive entitlement enforcement solutions.[2] IAM stack vendors have integrated these logical pairings to further gain critical mass as part of a single, integrated IAM stack.

- **Improved or new features among the suite components.** IAM stack integration isn't just about bringing new features into a single solution. Vendors are also introducing significant efficiencies and automation across the various stack components. For example, stacks improve installation, timed events, user interfaces, business user friendliness, workflow approvals, user self-service, delegated administration, high availability, performance testing information, connector support, and policy migrations.

IDENTITY AND ACCESS MANAGEMENT STACK EVALUATION OVERVIEW

To assess the state of the IAM market and see how the vendors compare with each other, Forrester evaluated the strengths and weaknesses of the top IAM stack vendors. In doing our analysis, however, we also uncovered that a specific subset of the IAM stack — user provisioning — required its own separate analysis. Why? Because many companies are choosing to focus on provisioning first where there's a high ROI due to improved IT efficiency, compliance, and security. Therefore, the goal of this analysis is to help you answer two questions: "What's the best overall IAM stack vendor?" and, "Of the IAM stack vendors, which has the best provisioning capability?"

As a result, you'll notice we compare complete IAM stacks and see how their components work together, but we also create a separate Wave graphic just for provisioning products. The underlying scores for the provisioning view of the Wave spreadsheet are the same as with the stack Wave, but the weights are set to zero for areas outside of provisioning and role management.

Evaluation Criteria Focused On Integration, Provisioning, And Role Management

After examining past research, user need assessments, and vendor and expert interviews, we developed a comprehensive set of evaluation criteria. We evaluated vendors against 79 criteria, which we grouped into three high-level buckets:

- **Current offering.** To grade the strength of the solution, we evaluated products against 60 criteria: user account provisioning, role management, access recertification, Web access management, Web services security, federation, entitlement enforcement, enterprise single sign-on (E-SSO), reporting, and other features. Since IAM products increasingly operate in environments where they need to integrate with data leak prevention (DLP), security incident management, and reporting products, we added these interoperability points to our assessment. Finally, we included feedback from customer references and also from IT client inquiries we answer regularly.

- **Strategy.** To assess how the vendor will be able to maintain a rich set of products in a space that is still dynamically evolving, we looked at the following building blocks of strategy in 11 criteria: identity management vision, breadth of IAM solutions, pricing and cost scenarios (provided as information only), system integrator partnerships, and vendors' IAM support ecosystems.

- **Market presence.** To reliably determine the vendor's market presence and penetration, in eight criteria we looked at installed base, revenue, and revenue growth of both the IAM solution and the overall company.

Evaluated Vendors Have Proven Focus And Market Share Of Integrated IAM Stacks

Forrester included nine vendors in the assessment: CA, Courion, Hitachi ID Systems, IBM, Microsoft, Novell, Oracle, SAP, and Sun Microsystems. Each of these vendors must (see Figure 1):

- **Manufacture a provisioning product, as well as license or resell another IAM product.** Each one of the IAM vendors had to develop and manufacture a provisioning and role management product as well as manufacture, license, or resell at least one other IAM product such as Web SSO, E-SSO, a directory, or virtual directory. Products evaluated had to be announced and available on or before March 31, 2009.

- **Have substantial market penetration.** Each of the vendors assessed had to have at least $15 million in annual IAM product revenues, including license, maintenance, and support, but excluding services. Multifactor and strong authentication products were excluded from this calculation.

- **Show significant thought leadership and mindshare.** Each of the vendors assessed had to be mentioned regularly in enterprise IT client inquiries, have participated in RFPs, and come up in one-on-one discussions with IT clients.

We invited Siemens to the product evaluation, but it declined to participate in the Forrester Wave process. BMC declined to be part of this Wave, although it has a compelling IAM story: they view identity management as an integral part of Business Service Management and integrate extensively with Remedy IT Service Management (ITSM), allowing them to leverage the Remedy workflow engine for identity approval processes and provide access to identity services (e.g., password reset, provisioning) from Service Request Management and other ITSM applications. Broad selection of connectors and unified workflow and policy management were features that our IT clients cited for keeping BMC solutions in operation. However, other customers expressed concerns and reluctance to continue with BMC's IAM products due to the company's degree of direct focus in areas such as role management and Web SSO, even though BMC has partnered with IAM governance vendor SailPoint for a business intelligence approach to IAM (e.g., role management, risk modeling, and access certification) and announced a year ago that the development and support of their Web SSO solution was transferred to partner Symphony.

Figure 1 Evaluated Vendors: Product Information And Selection Criteria

Vendor	Product evaluated	Product version evaluated	Date evaluated
CA	CA Identity Manager	r12	Q2 2009
	CA Role & Compliance Manager	r12	Q2 2009
	CA SiteMinder	r12	Q2 2009
	CA SOA Security Manager	r12	Q2 2009
	CA Federation Manager	r12	Q2 2009
	CA Embedded Entitlements Manager	r8.4	Q2 2009
	CA Single Sign-On	r12	Q2 2009
	CA Directory	r12	Q2 2009
	CA Access Control	r12	Q2 2009
Courion	AccountCourier	7.80	Q2 2009
	RoleCourier	7.80	Q2 2009
	ComplianceCourier	7.80	Q2 2009
	PasswordCourier	7.80	Q2 2009
	CertificateCourier	7.80	Q2 2009
Hitachi ID Systems	Hitachi ID Management Suite	6.0.2	Q2 2009
IBM	Tivoli Identity Manager	5.0	Q2 2009
	Tivoli Federated Identity Manager	6.2	Q2 2009
	Tivoli Security Policy Manager	7.0	Q2 2009
	Tivoli Access Manager for Enterprise Single Sign-On	8.0	Q2 2009
	Tivoli Directory Server	6.2	Q2 2009
	Tivoli Directory Integrator	7.0	Q2 2009
	Tivoli Compliance Insight Manager	8.5	Q2 2009
	Tivoli Security Information and Event Manager	1.0	Q2 2009
	Tivoli Access Manager for e-business	6.1	Q2 2009

Source: Forrester Research, Inc.

Figure 1 Evaluated Vendors: Product Information And Selection Criteria (Cont.)

Vendor	Product evaluated	Product version evaluated	Date evaluated
Microsoft	Active Directory Domain Services		Q2 2009
	Active Directory Federation Services		Q2 2009
	Active Directory Lightweight Directory Services		Q2 2009
	Active Directory Certificate Services		Q2 2009
	Forefront Identity Manager		Q2 2009
	Intelligent Application Gateway		Q2 2009
Novell	Compliance Management Platform		Q2 2009
	Identity Manager and Roles Based Provisioning Module		Q2 2009
	Designer for Identity Manager		Q2 2009
	Access Manager		Q2 2009
	eDirectory		Q2 2009
Oracle	Oracle Identity Manager		Q2 2009
	Oracle Access Manager		Q2 2009
	Oracle Identity Federation		Q2 2009
	Oracle Internet Directory		Q2 2009
	Oracle Virtual Directory		Q2 2009
SAP	SAP NetWeaver Identity Management		Q2 2009
	SAP BusinessObjects Access Control application		Q2 2009
Sun Microsystems	Sun Identity Manager		Q2 2009
	Sun Role Manager		Q2 2009
	Sun Compliance Manager		Q2 2009
	Sun OpenSSO Enterprise		Q2 2009
	Sun Directory Server Enterprise Edition		Q2 2009

46498 Source: Forrester Research, Inc.

Figure 1 Evaluated Vendors: Product Information And Selection Criteria (Cont.)

Vendor selection criteria
Does the vendor manufacture a provisioning product as well as license or resell another IAM product?
Does the vendor have substantial market penetration?
Does the vendor demonstrate significant thought leadership and mindshare?

46498 Source: Forrester Research, Inc.

EVALUATION ANALYSIS

Overall, the evaluation results didn't change substantially from when we evaluated full suites to just the provisioning components. However, the Leaders category did shift.

Oracle, CA, And IBM Integrate Solutions Into Well-Rounded Stacks . . .

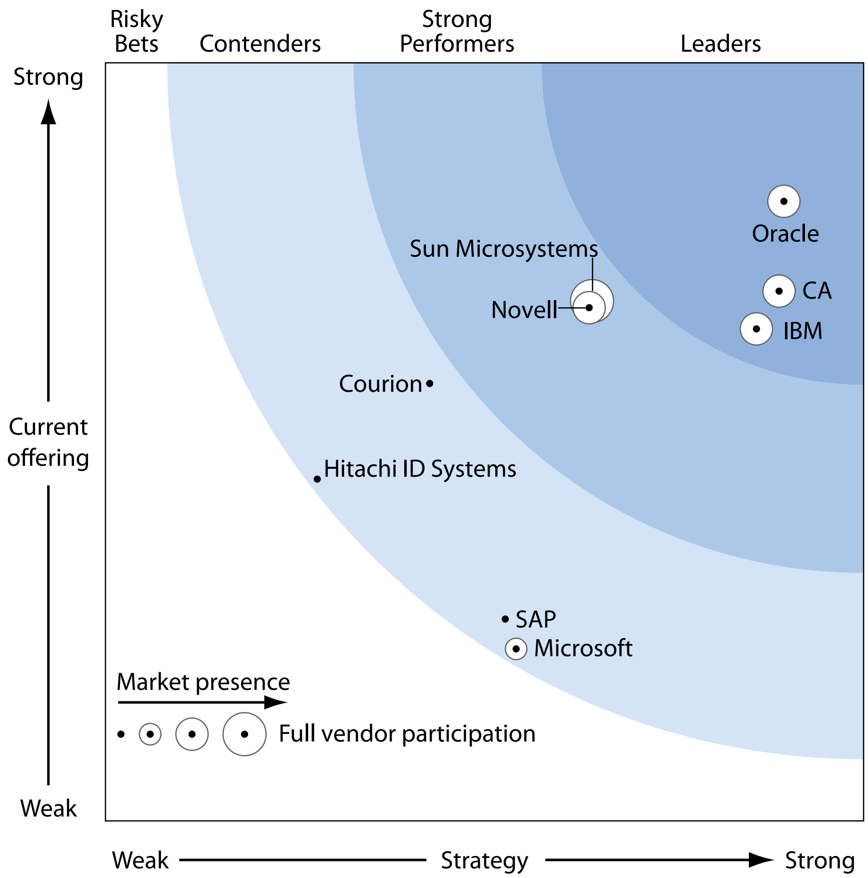
The evaluation uncovered an identity and access management suites market in which (see Figure 2):

- **Oracle, CA, and IBM lead the integrated IAM stack vendors.** These solutions offer integrated stacks with business-friendly user interfaces, advanced capabilities for identity analytics, proven Web access management offerings, and some level of integration with DLP, incident management, and centralized auditing solutions. These vendors have the largest installed base, in turn fueling their comprehensive strategy of providing customers with long-term and innovative solutions.

- **Novell, Sun Microsystems, and Courion offer competitive IAM stack options.** The vendors in this category have a large install base, great general usability, and happy customers supported by stable products. However, they lack a complete IAM portfolio or have limited traction in some large enterprise deals. Specifically, they are behind Leaders in centralized management of policies, entitlement enforcement, DLP integration, and privileged identity management.

- **Microsoft, Hitachi ID Systems, and SAP lag behind as IAM stack providers.** These vendors lack a complete portfolio in terms of fully supporting both identity and access management. Specifically, all lack a full-fledged Web access management solution, E-SSO, or entitlement enforcement solution in their portfolio. As a result, these vendors tend to exhibit unconvincing IAM customer bases or unproven deployment track records in heterogeneous environments.

Figure 2 Forrester Wave™: Identity And Access Management, Q4 '09



The Forrester Wave™
Smart data for smart decisions

Go online to download the Forrester Wave tool for more detailed product evaluations, feature comparisons, and customizable rankings.

Source: Forrester Research, Inc.

Figure 2 Forrester Wave™: Identity And Access Management, Q4 ’09 (Cont.)

	Forrester’s Weighting	CA	Courion	Hitachi ID Systems	IBM	Microsoft	Novell	Oracle	SAP	Sun Microsystems
CURRENT OFFERING	50%	3.49	2.89	2.25	3.25	1.13	3.39	4.08	1.34	3.42
User account provisioning	25%	4.10	3.20	3.20	3.60	1.10	4.30	4.30	1.80	2.90
Role management	10%	4.35	3.75	1.40	2.30	0.80	4.25	4.05	1.25	4.20
Web access management (WAM)	10%	5.00	2.30	2.30	3.80	3.00	3.05	4.10	0.00	4.30
Web services security	5%	4.30	2.00	2.00	5.00	2.80	4.10	3.40	0.00	3.40
Federation	5%	2.35	1.40	1.40	4.25	1.40	2.80	3.25	0.00	3.85
Entitlement enforcement (EE)	10%	2.15	2.40	2.40	3.30	0.00	0.60	4.40	0.00	3.85
Enterprise single sign-on (E-SSO)	5%	3.10	1.50	4.60	5.00	0.00	3.10	3.60	0.00	0.90
Directory/virtual directory	10%	2.00	4.30	0.00	0.60	1.00	3.70	4.10	4.40	4.40
Reporting	5%	3.80	2.60	1.80	5.00	0.00	3.40	4.60	0.80	2.20
Other features	5%	3.10	1.50	0.70	4.10	0.50	3.10	4.10	1.70	2.10
Customer references	10%	2.80	3.60	3.10	1.85	1.40	3.30	3.90	2.00	4.00
STRATEGY	50%	4.44	2.14	1.39	4.30	2.72	3.20	4.48	2.63	3.22
Identity management vision	50%	5.00	3.00	2.00	5.00	3.00	3.60	5.00	2.60	3.00
Breadth of IAM solutions	20%	3.20	1.20	0.60	2.20	0.40	1.80	3.40	1.40	3.40
Pricing cost scenario	0%									
System integrator (SI) partnerships	20%	4.00	1.50	1.00	5.00	3.50	4.00	4.00	4.50	4.00
Vendor’s IAM support ecosystem	10%	5.00	1.00	0.70	3.60	4.40	2.40	5.00	1.50	2.40
MARKET PRESENCE	0%	3.64	0.91	1.33	3.69	2.64	3.68	3.82	0.82	4.02
Installed base	55%	4.00	0.50	0.90	3.40	2.50	4.60	3.80	0.30	4.60
Revenue	45%	3.20	1.40	1.85	4.05	2.80	2.55	3.85	1.45	3.30

All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

. . . While CA, Oracle, And Novell Provide The Best Provisioning Point Products

Our evaluation also highlighted a slightly different landscape in the user account provisioning market (see Figure 3):

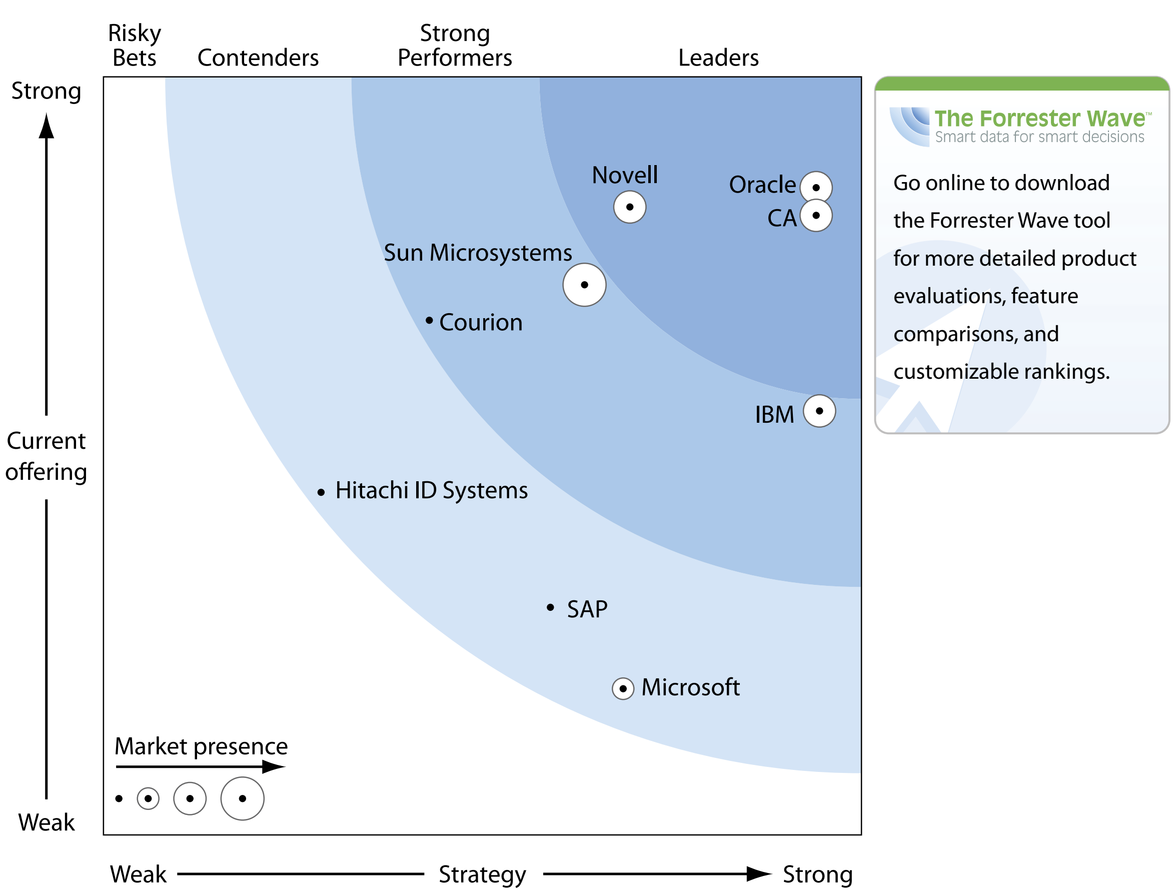
- **Oracle, CA, and Novell lead the provisioning product portion of IAM.** These vendors provide the largest set of provisioning connectors and greatest ease-of-use with setup, out-of-the-box features, and operations. All of these vendors integrated their provisioning module with a role management and access recertification solution that allows for much easier implementation of a closed-loop IT governance, risk, and compliance (GRC) life cycle.

- **IBM, Sun Microsystems, and Courion provide competitive provisioning options.** These vendors provide generally good provisioning connectivity to endpoints and have been implemented broadly, but they fall short in ease-of-use. Specifically, Sun Microsystems lacked integration with security incident management systems and activity monitoring, helpdesk integration, and expedited connector development; Courion lacked automatic user ID correlation, platform support, and Web services exposure for integration; and IBM lacked some role management functionality, strategy, and execution.[3]

- **Microsoft, Hitachi ID Systems, and SAP also lack in provisioning.** These vendors provide provisioning solutions that lack major features. Microsoft lacks role management, access recertification, and auditing; Hitachi ID lacks activity monitoring, business role management, and role and rule mining; and SAP lacks expedited connector development, wizard-based policy creation, user ID correlation, standalone deployment of access recertification, and role/rule mining.

The evaluations of the IAM stack market and the provisioning subcategory are intended to be a starting point only. We encourage readers to view detailed product evaluations and adapt the criteria weightings to fit their individual needs through the Forrester Wave Excel-based vendor comparison tools.

Figure 3 Forrester Wave™: Provisioning, Q4 '09



Source: Forrester Research, Inc.

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User account provisioning	50%	4.10	3.20	3.20	3.60	1.10	4.30	4.30	1.80	2.90
Role management	40%	4.35	3.75	1.40	2.30	0.80	4.25	4.05	1.25	4.20
Web access management (WAM)	0%	5.00	2.30	2.30	3.80	3.00	3.05	4.10	0.00	4.30
Web services security	0%	4.30	2.00	2.00	5.00	2.80	4.10	3.40	0.00	3.40
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Breadth of IAM solutions	0%	3.20	1.20	0.60	2.20	0.40	1.80	3.40	1.40	3.40
Pricing cost scenario	0%									
System integrator (SI) partnerships	30%	4.00	1.50	1.00	5.00	3.50	4.00	4.00	4.50	4.00
Vendor's IAM support ecosystem	20%	5.00	1.00	0.70	3.60	4.40	2.40	5.00	1.50	2.40
MARKET PRESENCE	0%	3.64	0.91	1.33	3.69	2.64	3.68	3.82	0.82	4.02
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All scores are based on a scale of 0 (weak) to 5 (strong).

Source: Forrester Research, Inc.

VENDOR PROFILES

The following vendor profiles relate to the overall evaluation of the identity and access management stack solutions.

Leaders Demonstrate Execution Of Business Strategy And Stack Integration

- **Oracle.** Oracle is forging ahead and has a product offering that stands out because of its breadth. It's still struggling with some integration with its acquisition and highlighting areas that need enterprise role definitions and access recertifications. However, Oracle is the only vendor that has: 1) an adopted entitlement enforcement product (Oracle Entitlements Server

[OES]), built on the BEA AquaLogic Enterprise Security solution; 2) an in-house adaptive access management product (Oracle Adaptive Access Manager), integrated with enterprise role management and mining; and 3) an application-centric identity management strategy. Oracle demonstrated the highest adherence to the scenarios evaluated. In IT inquiries, Forrester sees Oracle consistently mentioned on clients' shortlists. Future performance will depend on the speed and success of integrating Sun Microsystems' IAM portfolio.

- **CA.** Recently, some instances of other vendors' products have replaced CA SiteMinder due to high licensing costs, and the CA Role & Compliance Manager (RCM) product is not yet fully integrated with CA Identity Manager. However, CA has since made acquisitions in role management with its RCM product, built on the Eurekify platform, and has fine-grained segregation of duties (SoD) checks with IDFocus and in data leak prevention with Orchestria. These acquisitions will further CA's strong position in securely delegating administration not only for enterprise business users but also for business partners. Moreover, the RCM product's role mining, modeling, time machine analysis, role comparisons, and heuristic account linking logic stand out as tops among the role management functionality. CA is also pioneering the path to quick implementation times, where its fixed price projects bring quick results to enterprises.

- **IBM.** Companies that struggled with IBM's lengthy integration times, inflexibility in mapping TIM to business processes, and lagging role management capabilities, will find that its current Tivoli Identity Manager (TIM) 5.0 is a great leap forward. Specifically, its installation, user friendliness, and policy management are much improved over TIM 4.6.[4] The DataPower appliance integration with Tivoli Access Manager (TAM) gives IBM an edge in Web service security, while the Federation Access Management product has one of the strongest protocols support in its class. Although a new entrant in the entitlements enforcement space, Tivoli Security Policy Manager will enable IBM to represent roles in the context of entitlements — which is a fundamentally new approach. The depth and breadth of IBM's security portfolio allows the company to excel in environments where IAM, DLP, and application security need to be integrated.

Strong Performers Lack Some Of The Minor IAM Stack Components

- **Novell.** Novell's partnership with SAP GRC is remarkable, and the company made great steps toward securing a solid systems integrators partner base. Novell tends to lack in actively developing its LDAP server, eDirectory, and was hindered from winning some IAM deals due to its proxy-focused Access Manager portfolio, not having an entitlement enforcement platform, and a weak in-house-developed role management platform — the latter being resolved by Novell's OEM agreement with Aveksa and the release of the Access Governance Suite. Novell's technology acquisition in privileged identity management space will need to be integrated into its stack and expanded with finer-grained sensitive entitlement management capabilities. Novell's appeal with end users and systems administrators remains strong — the user interface of the product is clean and visually rich.

- **Sun Microsystems.** Sun's otherwise excellent — but somewhat abandoned — provisioning and role management capabilities and its open source Web access management solution, OpenSSO, were overshadowed by the lack of a cohesive, rich stack and business strategy. It's also further hampered by lack of a privileged identity management solution, entitlements enforcement, and E-SSO. Forrester expects that at least Sun's large installed base in provisioning, role management, and directory will survive as Oracle looks to integrate with its own IAM offerings.

Contenders Excel At Smaller Or Microsoft-Only Organizations

- **Courion.** With the rewrite of its architecture and the introduction of access recertification and SharePoint monitoring, Courion has shifted its focus from password reset and provisioning in the SMB market to the low end of the enterprise market. This is all despite its reluctance to support its products on non-Windows platforms and its lagging feature of visually representing organizational structures. Because Courion does not have its own access management solution, it resells RSA's access management portfolio; implementation has proven tricky for some Forrester clients because policy repositories are not integrated between the two vendors. Customers noted extensive connector support, ease of installation, solid account management, and product support as part of their RFP inclusion criteria when considering for Courion.

- **Microsoft.** Microsoft's Identity Lifecycle Manager (ILM) 2007 is a long-overdue replacement to MIIS, but the company is also actively working on the soon-to-be-released Forefront Identity Manager (FIM), which will enjoy integration with certificates life-cycle management, digital rights management, and Microsoft's desktop productivity portfolio. FIM is targeted for release to manufacture in Q1 CY10. Microsoft is a viable alternative to IAM Leaders in terms of identity management for pure Microsoft shops, but heterogeneous environments will find ILM still lacks in auditing, role management, access recertification, and delegated administration. Deeper Active Directory Federation Services 2.0 (previously code-named Geneva) adoption for Web SSO will hinge on how many applications AD FS supports without customizing the application source code.

- **Hitachi ID Systems.** Hitachi acquired M-Tech Information Technology in 2008, but this has not increased North American mindshare. Hitachi ID Systems' highly technical solution scales for enterprise environments and a large number of workflows but lags in business user friendliness and role management. Hitachi ID's client references said that the company's nimble technical support helped them a great deal with implementation. Complementary to its provisioning portfolio, Hitachi ID sells its own AD groups' self-service management and orgchart maintenance products and also resells RSA's access management suite.

- **SAP.** SAP approached IAM from the ERP perspective with its MaxWare metadirectory acquisition. As a result, SAP's adoption remains largely constrained to those enterprises that use its ERP customers. The solution has strong capabilities in role management supporting heterogeneous environments, but we expect it will further develop in this core competency. SAP lags in connector development, wizard-based centralized auditing, automated user ID correlation, the ability to deploy independent of the access recertification solution, and role and rule mining. As with other vendors, SAP does not have an access management product in its stack — something that hinders wide adoption in heterogeneous environments.

SUPPLEMENTAL MATERIAL

Online Resource

The online versions of Figure 2 and Figure 3 are Excel-based vendor comparison tools that provide detailed product evaluations and customizable rankings.

Data Sources Used In This Forrester Wave

Forrester used a combination of three data sources to assess the strengths and weaknesses of each solution:

- **Vendor surveys.** Forrester surveyed vendors on their capabilities as they relate to the evaluation criteria. Once we analyzed the completed vendor surveys, we conducted vendor calls where necessary to gather details of vendor qualifications.

- **Product demos.** We asked vendors to conduct demonstrations of their product's functionality. We used findings from these product demos to validate details of each vendor's product capabilities.

- **Customer reference calls.** To validate product and vendor qualifications, Forrester also conducted reference calls with three of each vendor's current customers.

The Forrester Wave Methodology

We conduct primary research to develop a list of vendors that meet our criteria to be evaluated in this market. From that initial pool of vendors, we then narrow our final list. We choose these vendors based on: 1) product fit; 2) customer success; and 3) Forrester client demand. We eliminate vendors that have limited customer references and products that don't fit the scope of our evaluation.

After examining past research, user need assessments, and vendor and expert interviews, we develop the initial evaluation criteria. To evaluate the vendors and their products against our set of criteria, we gather details of product qualifications through a combination of lab evaluations, questionnaires, demos, and/or discussions with client references. We send evaluations to the vendors for their review, and we adjust the evaluations to provide the most accurate view of vendor offerings and strategies.

We set default weightings to reflect our analysis of the needs of large user companies — and/or other scenarios as outlined in the Forrester Wave document — and then score the vendors based on a clearly defined scale. These default weightings are intended only as a starting point, and we encourage readers to adapt the weightings to fit their individual needs through the Excel-based tool. The final scores generate the graphical depiction of the market based on current offering, strategy, and market presence. Forrester intends to update vendor evaluations regularly as product capabilities and vendor strategies evolve.

ENDNOTES

1 Forrester expects that enterprise role management and access recertification (in which Aveksa, BHOLD, and SailPoint Technologies are strong players) will be integrated even more closely into user account provisioning.

2 Symark's acquisition of BeyondTrust and forging the BeyondTrust products and Symark's PowerKeeper and PowerBroker into one product family clearly signal this trend.

3 TIM 5.1, released in June 2009, addresses these gaps.

4 TIM 5.1 also integrated operational role management, separation of duties, access recertification, and group management.

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