

# Hitachi ID View: Oracle Acquisition of Sun

## 1 Background

This document outlines Hitachi ID's view of the announcement that Oracle will acquire Sun Microsystems. It discusses broad market trends, the impact of the deal on organizations that are already customers of Sun or Oracle and the impact on Hitachi ID.

## 2 Inevitable?

Sun is not a viable company. This may seem like a bold statement but their profit/loss in the past 5 years has been (in US\$Mil): 2008: 372, 2007: 309, 2006: (870), 2005: (370), 2004: (1,190). These are large losses and only modest profits. The current recession would likely trigger another series of large losses, drawing down the company's cash reserves and possibly leading to liquidation.

Clearly, Sun management saw the same thing and decided that an acquisition was the only way to preserve shareholder value. Once IBM declined to consummate a transaction, it was only a matter of time before Sun management found an alternative, and that has turned out to be Oracle.

## 3 Regulatory Approval

The acquisition was announced on April 20, 2009 and is subject to regulatory approval, presumably in multiple jurisdictions. While there is some overlap between the companies – for example between Sun's MySQL and Oracle's core database products, Hitachi ID does not believe regulators will block the transaction.

## 4 IT Market Consolidation

The long-term trend in the IT market is one of a handful of large companies trying to acquire a broad range of technologies, so that they can offer customers every conceivable combination of hardware, software and services.

IT vendors are motivated to consolidate for a number of reasons:

1. Growth through selling a wider set of products, since the products and services they already offer have saturated their markets and show no growth.
2. Locking customers into their technology "stack," which gives the IT vendor better price leverage when negotiating new sales and renewals.

3. Customer desire for single-source technology providers, which simplifies procurement (one contract) and problem resolution (no finger-pointing between vendors).

The major vendors in the consolidating IT market are:

1. CA (infrastructure management software).
2. Cisco (network hardware and recently entered into the server space).
3. EMC (storage hardware and infrastructure management software).
4. HP (mostly hardware, some infrastructure management software, services from EDS).
5. IBM (hardware, software and services).
6. Microsoft (all software).
7. SAP (software, specialized services).
8. Sun/Oracle (hardware, software, some services).

The lynch-pin of most medium-to-large organizations' infrastructure is their ERP system. In this sense, SAP dominates in larger enterprises, Oracle dominates in the medium-to-large space and Microsoft dominates in smaller companies. Oracle's acquisition of Sun may motivate IBM and SAP to respond by pursuing a closer relationship, so they can better compete with Oracle.

## 5 Predictions for Oracle/Sun Products

The following predictions are Hitachi ID's best guesses about what some of the impacts of the merger will be. These predictions are of general interest and do not pertain to Hitachi ID's identity management business directly. They are by no means comprehensive and none of them is certain.

### 5.1 Solaris Operating System

Oracle is likely to continue to develop and support the Solaris OS, as a primary platform on which to run Oracle database servers, J2EE middleware and other products. This is a strong OS and Oracle will leverage it as a competitive differentiator (e.g., against IBM, Microsoft) and solution enabler (e.g., database appliances).

### 5.2 Oracle Branded Linux

Having acquired Solaris, Oracle may discontinue the sale and support of its own version of Linux.

### 5.3 MySQL Database

Oracle may continue to support MySQL as an "entry level" database in the marketplace, perhaps with an objective of increasing the value of the Oracle brand (e.g., "MySQL by Oracle" comes to mind). Oracle may

even port technology from its core database products to MySQL, to strengthen the lock MySQL has on entry-level databases, in order to weaken Microsoft in that market segment.

A number of core MySQL developers have left Sun since MySQL was acquired, however. The Oracle acquisition may hasten the departure of others and may accelerate the decoupling between the MySQL developer community and the company that owns the MySQL brand.

## 5.4 Java Language and Runtime

Oracle is heavily invested in the success of the Java platform and will likely continue to support and grow the Java ecosystem much as Sun did.

## 5.5 Oracle Databases on Non-Solaris Servers

Oracle databases already run better on Solaris than on any other operating system. Oracle databases do not run as well – performance and reliability are notably reduced – on Linux and Windows, for example. This “first among equals” relationship between Oracle databases and Solaris is likely to deepen once the acquisition is complete.

## 5.6 OpenOffice.Org

Oracle clearly sees Microsoft as one of its main competitive challenges and will doubtless continue to support OpenOffice.Org as a credible alternative to Microsoft Office.

## 5.7 SPARC Hardware Platform

It's hard to see how Sun could justify the cost of continued engineering investment in the SPARC platform, when Intel and AMD already offer superior performance at lower cost for many computational loads.

With Sun's pride of ownership gone, Oracle is likely to discontinue investment in the SPARC hardware platform in the next few years.

## 5.8 Sun Server Business

Sun's revenues are derived mostly from servers. Oracle must continue that business in order to make the acquisition profitable. Oracle will likely work to make servers specialized for database workloads and with database software pre-installed. An Oracle database appliance, with AMD or Intel CPUs, the Solaris OS and Oracle database software is likely to emerge in the near future.

Getting into the server hardware business may impair Oracle's relationships with Dell and HP. These vendors may therefore strengthen their relationships with Microsoft as the sole remaining non-hardware vendor

of commercial database server software.

Oracle has no expertise in the hardware business and may outsource development and production of hardware entirely. Sun already sources storage hardware from Hitachi and CPU manufacturing from Fujitsu. Oracle may broaden this outsourcing to avoid the headaches of managing a new kind of business (server hardware).

## 6 Identity Management Product Impact

In the identity management space, Sun and Oracle are direct competitors and Oracle will likely want to consolidate products.

### 1. Directory:

Oracle's OID is core to Oracle's platform, as it uses the database as a back end. On the other hand, Sun's directory server is much more widely deployed, despite some reliability problems.

Hitachi ID predicts that Oracle will add the ability to use an Oracle database as a back end to Sun's directory server and use the resulting software to replace OID.

### 2. User provisioning:

Architecturally, Sun's identity manager product (Waveset acquisition) has serious performance and scalability problems, since it keeps a significant amount of user profile data in a complex XML object stored in each user's LDAP directory object. As a result, Oracle will likely ask Sun IDM customers to upgrade to Oracle's product (Thor acquisition).

Sun IDM customers will not accept an upgrade option unless the new product has all of the same functionality and there is a reasonably automated migration process. This means that Oracle will have to spend a significant amount of time and product engineering effort to:

- (a) Find the functional and integration gap between the Sun and Oracle user provisioning products.
- (b) Close the gap so that the Oracle (formerly Thor) product covers 100% of the capabilities of the Sun product.
- (c) Develop a migration program to help customers move from the Sun to the Oracle product.

This process will likely take 1–2 years and consume most of Oracle's IDM product engineering bandwidth, effectively ruling out any major improvements in either product during that time.

### 3. Role management:

Sun's acquisition of Vaau was mostly intended to impress influencers such as analysts and press. Hitachi ID's evaluation of Vaau convinced us that the Vaau product was totally unworkable (we could not get it to even load a real-world data set from a mid-sized company). It follows that this product will be replaced by Oracle's role manager (Bridgestream acquisition).

### 4. Web access management:

Sun has had no luck selling its WebAM/WebSSO product, and has consequently open sourced it. As an open source (and importantly: no license fee) product, this product has quickly improved both in quality and market acceptance.

Oracle's acquisition in this space (Oblix) has reasonable market share and is architecturally robust. Oracle will likely be forced to maintain both products – one commercial and one free – going forward.

## 5. Federation:

Neither Oracle nor Sun seem to have a large market share for their federation technologies, so this space remains open to strategic changes. Hitachi ID does not have any special insight about where this market segment will wind up, though the volatility in the market may well create an opening for the user-centric and claims-based technology being developed by Microsoft.

# 7 Impact on Customers

## 7.1 Tactical Impact: Forced Upgrades

Sun user provisioning customers will likely be forced to migrate off their current IDM system over the next 3–5 years. Oracle will make an effort to keep these customers by offering upgrade assistance, but clearly customers can and should re-evaluate competing products at that time.

Sun role management customers will likely be forced to migrate off their current product fairly quickly, as the acquired Sun product was very weak. They, too, should re-evaluate their options.

Sun directory server customers will likely benefit from a more robust version of the Sun directory product, that takes advantage of a fully relational back end database.

## 7.2 Operational Impact: Technical Support

As with all acquisitions, there is a question of retention of key technical staff. It is likely that some key Sun staff will leave as a result of the Oracle acquisition and this will probably impact technical support provided to Sun customers .

As it happens, some current Oracle customers already report poor technical support from Oracle for their IDM products and some of their ERP products, likely also due to difficulties retaining key staff from the acquired company (Thor, JD Edwards, PeopleSoft in these cases). This is not a good predictor of a successful transition for Sun customers.

## 7.3 Mid-Term Impact: Disrupted Product Roadmaps

Customers who are waiting for specific features from the Sun IDM suite will likely be impacted as Oracle (a) diverts resources to integrating Sun products with the Oracle technology stack and (b) looks for a path to migrate existing Sun IDM customers to the Oracle IDM set of products.

## 7.4 Strategic Impact: Technology Lock-in

Clearly, Microsoft, Oracle, IBM and SAP are making strong efforts to lock customers into their respective technology stacks. While vendor motivation is primarily to create lock-in, smart customers will realize that

their own interests are best served by being able to quickly replace infrastructure components from one vendor with equivalents from another.

The price leverage customers get from being able to credibly threaten vendors with replacement cannot be overstated – license and maintenance fees over the life of the product can be cut in half or better when customers can (believably) threaten replacement.

In the identity management space, the above technology vendors are already tending to make integrations with their own products “first among equals.” For example, Oracle and SAP routinely introduce incompatibilities and bugs into their ERP applications’ APIs, Microsoft’s ILM clearly has better connectors for AD and SQL Server than for other platforms, IBM’s identity products only work with a DB2 back end and WebSphere middleware, etc.

Customers, therefore, must make a choice: is it better to buy an IDM product, ERP product, middleware, database and operating system all from one vendor or from multiple vendors?

With one vendor, the initial purchase may be discounted and the vendor’s technical support will be unable to point fingers to other vendors when problems arise. On the other hand, the sole-source vendor will likely escalate annual maintenance and upgrade fees. Customers will generally accept these increases, since their alternative is a costly and disruptive infrastructure change.

With multiple vendors, the initial purchase may be more expensive, since each vendor has fewer products over which to amortize license fees. It is theoretically possible that some vendors will provide poor technical support, blaming other vendors for problems. On the other hand, the customer has a stronger bargaining position at maintenance renewal time, since replacing one product is much easier than replacing many. This will inevitably lead to lower lifetime support costs for deployed systems.

## 8 Impact on Hitachi ID

Hitachi ID sees both opportunities and risks in the Oracle acquisition of Sun:

### 8.1 Opportunities

Hitachi ID identity management products create choice for customers, by integrating equally well with all the major databases, operating systems, web servers, ERP applications and more. Moreover, Hitachi ID products have better scalability and lower TCO than competing products and are supported by one of the most responsive services organizations anywhere.

With this in mind, existing and prospective Sun and Oracle customers may opt for Hitachi ID solutions as an alternative to Sun/Oracle software for several reasons:

1. Existing Sun customers will sooner or later be asked to migrate to Oracle IDM products, which will put some of them at play in the marketplace. These customers may find that Hitachi ID’s products offer better value than Oracle’s.
2. Existing Sun customers may become disgruntled with the quality of technical support from Oracle,

due to the acquisition and possibly due to Oracle's approach to customer support in general. This may create some trade-out opportunities for Hitachi ID.

3. Discerning customers will become increasingly worried about vendor lock-in and may wish to consider a more platform-neutral solution for their IDM products. User provisioning, in particular, is really an integration problem and should be as open as possible. These customers may start looking for more technology-neutral solutions, which is a strength of Hitachi ID.

## 8.2 Risks

1. Hitachi ID competes with Sun in the IDM space, in part, on the basis of significantly better technology (scalability, reliability, etc.). Oracle's products are actually better than Sun's, so this particular line of competitive differentiation will be diluted.
2. By combining revenue from both Oracle and Sun IDM customers, Oracle will ultimately be able to invest more in IDM product development, and their products may become more capable, as compared to the roadmaps of either company working independently. In the short term, this strength will likely be overshadowed by the R&D investment required to integrate products and create a migration path to new versions.

## 9 Summary

Sun being acquired was inevitable, while Oracle acquiring them was opportunistic.

In the IDM space, Sun and Oracle have substantial overlap. In the next 1–2 years, Oracle will be consumed with product rationalization. This will impact customers adversely because of (a) impaired technical support due to loss of key staff, (b) a requirement that many customers change platforms and (c) inability to focus on customer-driven product development because of (a) and (b).

While this process goes on at Oracle, Hitachi ID will be accelerating product development, building on our newly released "fox" platform and adding:

1. Real time user provisioning.
2. RBAC enforcement and automatic role assignment.
3. Role discovery and role lifecycle management.
4. Advanced management of privileged passwords and security credentials.
5. Management of PINs and passwords on smart cards, tokens and encrypted hard drives.

This is an opportunity for customers to refocus their energies on a more robust, forward-looking and cost effective solution from a vendor more interested in product R&D and customer care than corporate restructuring. That vendor is Hitachi ID.