

**ORACLE®**  
FUSION MIDDLEWARE

The Foundation for **Innovation**

ORACLE APPADVANTAGE SERIES

## Cloud and On-Premises Integration for Oracle Applications

*Empower the Enterprise. Technology Your Way.*

**ORACLE®**



## Cloud Integration



If you use Oracle E-Business Suite or Oracle's PeopleSoft, JD Edwards, or Siebel solutions—as well as any of Oracle's industry solutions and other Oracle Applications—you can rely on the Oracle AppAdvantage program to simplify your IT infrastructure, differentiate your company, and embrace innovative technologies that reduce costs and boost productivity.

## Introduction

As cloud computing becomes an essential aspect of business operations for many companies, there is a pressing need to integrate cloud applications with on-premises applications. According to a recent study, however, companies frequently have significant cloud integration challenges, with 53 percent of respondents saying lack of integration with cloud applications is their main hindrance to innovation.<sup>1</sup> The middleware solutions in the Oracle AppAdvantage program eliminate this hindrance by sharing standards and components among all enterprise applications. This high level of consistency between Oracle Applications and Oracle integration solutions are key enablers for innovation and competitive advantage.

For example, an enterprise that relies on an on-premises customer relationship management (CRM) application might acquire a company that uses a cloud-based CRM application. Account managers need to be able to access data from both systems cohesively, share data between these systems, and ultimately establish an authoritative system of record. HR systems, payroll systems, and incentive compensation systems also need to work in unison and exchange information so that employees are properly compensated and paid. Putting all this information together in a unified way is essential to delivering a consistent experience for people both inside and outside the firewall.

## Oracle AppAdvantage for Cloud and On-Premises Integration

Oracle AppAdvantage is a program powered by Oracle Fusion Middleware technologies that helps customers strengthen their investment in Oracle Applications such as Oracle E-Business Suite as well as Oracle's JD Edwards, Siebel, and PeopleSoft applications. Oracle SOA Suite—the central middleware component in this program for service integration and application integration—can connect on-premises enterprise systems to a private or public cloud in a cohesive way. It minimizes the distinction between cloud-based and on-premises applications by enabling a unified approach to service integration, process orchestration, application integration, and data integration—regardless of where those applications are deployed.

Like all Oracle Fusion Middleware technologies, Oracle SOA Suite is certified to work with Oracle Applications. It enables seamless application upgrades to help keep customers current with recommended versions, and it reduces complexity with standardized extensions and enhancements across Oracle Applications and other enterprise applications. Having a unified framework for building, deploying, and maintaining enterprise applications helps customers achieve economies of

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<sup>1</sup> Report: "Cloud for Business Managers: the Good, the Bad, and the Ugly," Dynamic Markets Ltd., May 2013.



## The Three Pillars of the Oracle AppAdvantage Program

### Simplify

Minimizing complexity frees up time and resources to create value for your business. The middleware solutions in the Oracle AppAdvantage program help Oracle customers minimize complexity and lower costs while ensuring security, reliability, and optimal performance.

### Differentiate

Business processes that are unique to individual lines of business or subject to frequent change should be moved out of core applications into a middleware layer. The Oracle AppAdvantage program includes proven solutions for extending enterprise applications, integrating cloud and on-premises systems, and bringing greater agility to essential business processes.

### Innovate

Innovation includes all the business capabilities required for engagement, collaboration, and intuitive decision-making. Oracle AppAdvantage helps organizations innovate by connecting people, information, and applications anywhere, anytime with middleware solutions for enterprise mobility, online engagement, and self-service enablement.

scale by leveraging common resources and common skill sets for enterprise, cloud, and mobile apps.

Whether your Oracle Applications include customer experience, enterprise performance management, enterprise resource planning, human capital management, supply chain management, or industry-focused vertical applications, the middleware solutions within the Oracle AppAdvantage program streamline all types of integration scenarios, with direct and interchangeable connections to cloud, on-premises, and legacy systems.

For example, your main employee data might reside in a PeopleSoft HR system. If you utilize the Oracle Human Capital Management Cloud Service for talent management, you will most likely need to move data to and from that cloud-based system. Or you might depend on a cloud application such as Oracle RightNow Cloud Service to expedite customer queries and queue up automated responses. On premises, you may be using Oracle's Siebel Customer Relationship Management (Siebel CRM) to manage customer data and Oracle Financials to manage customer accounts. Standardizing on Oracle SOA Suite can significantly simplify the integration of these applications and let you focus more on innovation and less on connectivity.

## A Consistent Approach to Application Integration

Oracle SOA Suite and other components of the Oracle Fusion Middleware family work together to integrate on-premises and cloud-based services through one, cohesive middleware platform. You can integrate cloud applications and connect to on-premises information systems via adapters that mask the technical nuances between applications and data models such as connectivity options, session management, authentication, and authorization. You don't get this level of consistency from third-party cloud applications.

Similarly, as your organization embraces mobile computing, instead of adopting a new mobile enablement and integration platform that will eventually need to be integrated with your existing integration platform, Oracle SOA Suite empowers developers to build SOAP-based services as well as newer mobile applications with RESTful services. Thus, they can easily accommodate mobile and cloud services with a unified approach to integration.

## Integrating Oracle Applications—On Premises and in the Cloud

Oracle SOA Suite simplifies integration and policy management between cloud and legacy systems with a unified framework of middleware components that can be used interchangeably among all Oracle Applications.

For example, instead of creating one policy management implementation for your enterprise applications and another for your integration platform, Oracle Fusion

## Oracle AppAdvantage for Cloud and On-Premises Integration

This proven Oracle Fusion Middleware solution helps Oracle Applications customers integrate all types of information systems:

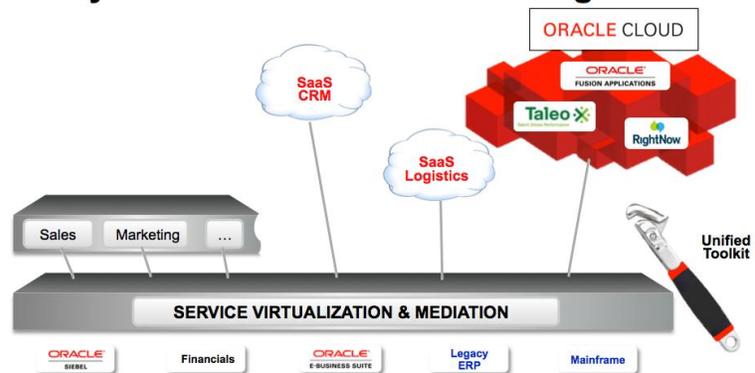
### Oracle SOA Suite—

A unified software framework for service integration and application integration

Applications share the same policy management solution with Oracle SOA Suite, which simplifies complexity and accelerates systems integration tasks. This makes it easier to develop policies for signing messages, encrypting data, authenticating users, and managing access to IT resources. These policies can be changed independently of the applications that rely on those policies, obviating the need to introduce another policy management platform.

It makes sense to leverage this enterprise platform for all of your integration needs—whether those applications reside on premises or in a public or private cloud. Oracle Fusion Applications include the core features of Oracle SOA Suite such as Oracle BPEL Process Manager for orchestrating data and messages. As you expand your existing Oracle Applications infrastructure to embrace a new generation of cloud applications, you can take advantage of the solutions in the Oracle AppAdvantage program to extend the middleware foundation you have already established.

## Unify Cloud and On-Premises Integration



## Integrating Oracle Applications with Third-Party Cloud Applications

Application programming interfaces (APIs) differ greatly from one cloud app to another. Each vendor enforces its own mechanisms for security, message delivery, metadata definitions, query criteria, object semantics, and object schema. Having a universal way to mask these technical details simplifies development and lowers long-term maintenance costs. Ideally, developers should be able to mediate among multiple applications from one centralized platform that can handle the increased complexity of disparate cloud vendor interfaces to automate both inbound and outbound connectivity.

Oracle Fusion Middleware provides Oracle Applications customers with a cohesive and flexible integration platform. It is bolstered by connectors and adapters to hundreds of popular databases and applications. Close collaboration



## A Strategy for Progress

- Ensure faster time to market and reduced risk with Oracle Fusion Middleware technologies that are proven and certified to work with Oracle Applications
- Enable seamless application upgrades and stay current with recommended versions without disruption
- Reduce complexity and improve business agility with standardized extensions and enhancements across Oracle Applications and enterprise applications
- Simplify development and integration with a common framework for building and deploying applications
- Support innovation through more-robust engagement, collaboration, and intuitive decision-making
- Achieve economies of scale by leveraging a common platform, common resources, and common skill sets for enterprise, cloud, and mobile apps
- Build for the future while delivering business value today by adopting the technologies that underpin Oracle Fusion Applications

between Oracle's applications and integration teams minimizes risk by delivering fully integrated, "version-aware" solutions. Having a robust, centralized integration platform minimizes the complexity associated with managing APIs from various cloud vendors.

For public cloud architectures, Oracle offers an extensible set of integration options. Oracle Cloud enables an organization to use REST APIs to move data through Oracle SOA Suite to Oracle Messaging Cloud Service, enabling applications deployed in Oracle Cloud to securely and reliably communicate over Java Message Service. Oracle Applications can be integrated with Workday, Salesforce, and other cloud providers. Oracle Cloud implements these same technologies in addition to best-of-breed database, middleware, and security solutions; business intelligence applications; and engineered systems.

### Case in Point: Aramark Uniform Services

Aramark Uniform Services leveraged Oracle Fusion Middleware solutions to integrate a cloud-based opportunity management system (Salesforce) with an on-premises customer database application within Oracle E-Business Suite. Aramark uses Salesforce to manage the customer-acquisition cycle, from initial prospecting to final contract signing. Furthermore, Aramark stores customer information in a legacy on-premises system called RAS. Aramark processes invoices through Oracle E-Business Suite and conducts credit checks through a cloud-based system provided by Dun & Bradstreet. Until recently, none of these systems was integrated, so the process to set up a new customer, conduct a credit check, and prepare to send invoices was lengthy and error-prone.

Aramark used Oracle SOA Suite to simplify the connections among these applications and to enable real-time updates between the on-premises system and the cloud-based systems. Previously, employees had to manually look up new customer records in Oracle E-Business Suite, log into the Dun & Bradstreet system to obtain their credit information, and then finally update the Oracle E-Business Suite record with the appropriate credit data. Now, the entire process is done automatically. Using Oracle SOA Suite, a prospect is converted to a customer in Salesforce, the new customer record is automatically created in Oracle E-Business Suite, and credit is immediately checked and updated via Dun & Bradstreet. Aramark has eliminated its legacy RAS system, increased employee productivity, and minimized days-sales-outstanding since it can invoice new customers immediately.

Oracle E-Business Suite customers can easily expand their enterprise solutions using the Oracle SOA Suite components that underlie their Oracle E-Business Suite applications, including Oracle BPEL Process Manager, Oracle WebLogic Server, and other middleware assets.



## Flexibility for the Future

The middleware solutions within the Oracle AppAdvantage program streamline all types of integration scenarios, with direct and interchangeable connections to cloud, on-premises, and legacy systems.

## Conclusion

Integration entails exchanging information among enterprise information systems to achieve a specific business objective such as synchronization of customer account data for fulfilling orders. One of the biggest issues in using cloud applications involves integrating them with on-premises applications. Oracle Applications customers can resolve these issues by facilitating universal connectivity to a common middleware platform that connects all types of applications in a consistent way. No matter how your information systems evolve, the middleware solutions in the Oracle AppAdvantage program help to mitigate complexity.

If you use Oracle E-Business Suite or Oracle's PeopleSoft, JD Edwards, or Siebel solutions—as well as any of Oracle's industry solutions and other Oracle Applications—they can all use the same integration platform and leverage the same middleware technology, simplifying connections between on-premises and cloud-based information systems.

For more information, please visit [oracle.com/appadvantage](http://oracle.com/appadvantage).



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