Dell Boomi AtomSphere

SUMMARY

Catalyst

Organizations are interested in integration solutions that cover a wide range of scenarios, including on-premise-to-cloud, cloud-to-cloud, and B2B integration. A new class of cloud-based integration solutions, often called integration platform-as-a-service (iPaaS), is fast emerging as a suitable option for these integration needs. The platforms extend the functionality provided by earlier integration-as-a-service offerings, and provide design and runtime governance, as well as enabling efficient execution and management of integration flows between independent applications. Dell Boomi AtomSphere is an on-demand, single-instance, multi-tenant iPaaS solution that allows organizations to build, deploy, and manage a wide range of integration processes.

Key findings

- AtomSphere caters for a wide range of application and data integration needs, including cloud-to-cloud, cloud-to-on-premise, on-premise-to-on-premise, and B2B integration.
- AtomSphere provides an easy-to-use configuration interface for faster development of integration flows.
- AtomSphere offers pre-built connectors and processes for a wide range of enterprise applications, including CRM and ERP.
- New functionality provided as part of the Summer 12 release allows the use of multiple data sources and reservation of cloud resources for predictable real-time data transfer in integration processes.
- AtomSphere is available on a monthly subscription basis in three editions: base, professional, and enterprise. The enterprise edition provides additional functionality such as SOA Framework, parallel processing, and advanced user security.
- AtomSphere enables centralized control over distributed integration processes to provide a robust data security and governance framework.
Ovum recommends

- AtomSphere is a good option for small and medium-sized enterprises (SMEs) that do not have well-established integration capabilities and are looking for consolidated suites that cater to a wide range of application integration requirements.
- In the case of large enterprises, AtomSphere is best suited for integration scenarios that would otherwise be too expensive to implement in the traditional way. Large enterprises that have used integration-as-a-service solutions in the past should consider the superset of functionality offered by AtomSphere.
- It is important to understand that iPaaS solutions are not yet completely mature. Organizations should therefore ask for a proof-of-concept (POC) evaluation to check if AtomSphere is capable of meeting their specific integration requirements.

Value proposition

Dell Boomi AtomSphere is one of the more mature iPaaS solutions available in the market. It caters for a wide range of integration needs, including on-premise-to-cloud, cloud-to-cloud, on-premise-to-on-premise, and B2B integration. A key differentiating feature of this solution is the underlying "Atom" architecture that acts as a portable runtime engine powering a wide range of integration processes. Given that AtomSphere integrations are always cloud-developed and managed, centralized control over distributed integration processes is possible. AtomSphere provides many other benefits, such as reduction in upfront capex, rapid scalability, flexible pricing models, and reduced implementation time.

The Summer 12 release of AtomSphere iPaaS provides additional application and data integration capabilities and greater flexibility for the management of security policies. New functionality provided as part of the release allows the use of multiple data sources and reservation of cloud resources for predictable real-time data transfer in integration processes. Noteworthy is the connectivity to Hadoop for Big Data processing.

Dell Boomi leverages its community model involving a self-sustaining ecosystem of SaaS vendors, systems integrators, independent software vendors (ISVs), and third-party developers to provide pre-built connectors and processes for a wide range of applications. Dell Boomi provides community members with a free connector software development kit (SDK) and an instant-update deployment mechanism for all connectors. Community members can use this Java-based SDK to build new connectors which, after testing and a security and privacy review, can be made available to all customers.
SOLUTION ANALYSIS

Functionality

Dell Boomi AtomSphere is an on-demand, single-instance, multi-tenant iPaaS solution capable of meeting complex integration requirements, including cloud-to-cloud, cloud-to-on-premise, on-premise-to-on-premise integration, and B2B integration involving multi-enterprise process automation.

Configuration interface

AtomSphere allows users to build, deploy, and manage integration processes by offering an easy-to-use configuration interface (see Figure 1) that provides good visibility into integration flows and allows changes, if any, to be implemented efficiently. Users can configure integration processes by accessing the library of pre-built connectors and transformation maps for various applications.

Figure 1: AtomSphere configuration interface

Integration flows are orchestrated by connecting a series of integration steps comprising discrete integration patterns, including data mapping, connector calls, data cleansing, business logic, content-based routing, and error handling, to create an end-to-end integration process. Users can test integration flows directly from the browser, and if needed, can quickly resolve issues related to the execution of integration flows.
Atom architecture

Atom architecture is one of the key differentiating features of AtomSphere iPaaS. "Atom" is a lightweight, dynamic, run-time engine that powers integration processes and enables the integration of disparate applications. Boomi Atom (see Figure 2) contains all the components required to execute an integration process, such as connectors, data maps, business logic, content-based routing, and error handling. A Boomi Atom can be deployed in the cloud for enabling SaaS-to-SaaS integration, or on-premise for enabling SaaS-to-on-premise and on-premise-to-on-premise integration.

During the course of application or data integration, integration data flows directly between the connectivity points, and once all integration points are cloud-accessible, Atoms are deployed to the Atom Cloud or deployed on-premise. Atom Cloud a multi-tenant environment that allows users to execute a wide range of integration processes without having to set up or manage any integration infrastructure. In order to avoid any possibility of interaction between different tenants, resources in the Atom Cloud are isolated through a mature security model.

Figure 2: Boomi Atom

Source: Dell Boomi

Security and governance

AtomSphere Atoms (or runtimes) are available in two deployment models: on-premise and SaaS. Because AtomSphere integrations are always cloud developed and cloud-managed, the entire integration lifecycle from development, deployment and change management, to administration and governance is centralized. In the case of on-premise-to-SaaS integration, AtomSphere provides a highly secure means of integration by enabling encryption of data sent outside the firewall. This is
managed centrally and can be turned on or off by the user. In the case of on-premise-to-on-premise integration, no data is sent outside the firewall.

Summer 12 release

AtomSphere supports a SOA framework which allows customers to publish as well as consume SOAP or RESTful web services. The Summer 12 release provides additional functionality in the form of SOA Worker, which enables the reservation of cloud resources for predictable real-time data transfer in integration processes.

Extract, transform, and load (ETL) enhancements in the Summer 12 release include Join, Bulk Copy, and Hadoop Connector, which allow processing of a large amount of data spread across multiple sources through a single application and data integration platform. Noteworthy is the connectivity to Hadoop for processing Big Data. New security features included in the release allow greater flexibility in managing and federating security policies, and enable centralized control over user access.

Boomi Assure crowd-sourced regression testing, another addition to the capabilities of AtomSphere iPaaS, allows users to submit specific integration processes along with test data to the regression-testing framework. The community-based regression-testing capability increases the range and relevance of regression tests executed in every release, and ensures that use-case scenarios submitted by customers are tested and supported in future releases.

Go-to-market strategy

Marketing in the North America, Europe, Middle East and Africa, and Asia-Pacific regions is led by Dell Boomi’s BSS sales specialist and marketing team. AtomSphere is marketed to existing Dell customers through internal customer communication channels and the Dell salesforce. Channel partners include OEMs, resellers, and referral partners such as Taleo, Intelliiworks, NetSuite, Ariba, Concur, SuccessFactors, Salesforce.com, RightNow, and Intacct.

Boomi cloud integration platform is also offered with solutions provided by other Dell teams. Examples include Quickstart Data Warehouse, Dell Cloud Business Applications, and SAP modernization offerings.

Deployment

AtomSphere iPaaS Atoms can be deployed in the cloud for enabling SaaS-to-SaaS integration, or on-premise for enabling SaaS-to-on-premise and on-premise-to-on-premise integration. The average implementation time for a pilot project varies from one to three days depending on the complexity of integration and availability of specific connectors and processes. A more extensive implementation covering 30 to 50 users takes about two weeks to complete. An enterprise-wide implementation needs at least two months for completion.
AtomSphere is available on a monthly-subscription basis in three editions: base, professional, and enterprise. The base edition starts at $550 per month and provides basic functionality such as Boomi Suggest, data transformations, and basic workflow. The professional edition starts at $1,400 per month and is well suited to the needs of organizations looking to fully integrate back and front offices. The enterprise edition, which starts at $7,000 per month, provides additional functionalities including an SOA framework, parallel processing, and advanced user security.

Implementation process

A typical AtomSphere implementation involves the following stages.

- Feasibility. This stage consists of the pre-sales, quoting, and sale execution of Boomi professional services.
- Analysis of integration requirements. Following a customer's acceptance of a quote, the Boomi integration consultant tries to identify additional interface requirements and prepares a scope document. The scope document is submitted to the customer for approval.
- Design. A detailed design document covering maps, business rules, process diagrams, and connections related to integration processes is prepared by Boomi integration consultant. Inputs from customer-side technical leads are incorporated into the document.
- Configuration and implementation. A Boomi implementation consultant undertakes implementation and provides a status report to the customer. Changes in configuration of integration flows, if any, are documented in a project workbook and sent to the customer for sign-off. Unit testing of integration interfaces is also completed in this phase.
- End-to-end testing. Customer-side technical leads execute the user-acceptance test plan, and on successful execution of different test cases, integration processes are moved into production.
- Post go-live support: A Boomi implementation consultant obtains client sign-off on the customer acceptance document, completes the process-monitoring request form, and sends it to customer services. Customers are made aware of the different support options available to them.

Technical support

Dell Boomi offers two options for ongoing technical support: standard and premier. Standard support is available 24x7 covering up to 10 cases in a year for severity 1 issues, where there is a security breach, complete system failure, or significant parts of the system are not secure, or are inaccessible or inoperable. Standard support is provided as part of the subscription agreement. Premier support is provided at additional cost with no limit on the number of cases covered in a year.
Customer Training

Boomi provides training through a wide range of mediums, including online reference guide, process libraries and tutorials, recorded trainings, Boomi TV via YouTube, and 24x7 web portal access. Boomi also conducts boot camps in Berwyn, Pennsylvania and the San Francisco Bay Area, and if needed, arranges onsite training for customers.

Deployment examples

Enterprise Business Partners needed an integration platform capable of meeting the requirements of cloud-to-cloud and cloud-to-on-premise integration, providing extensive abilities to manipulate data during integration. Another requirement was greater flexibility in developing new integration flows as a result of changes in business requirements. AtomSphere was deployed for a compliance integration project to integrate financial reports and occupancy data for more than 1,600 housing projects into PeopleSoft Financials and a custom compliance application. AtomSphere significantly reduced the implementation time of the entire project, and ensured that only correctly formatted data entered production systems.

Oneworld was looking into developing a hub for linking member airlines’ IT systems and was not inclined to follow traditional integration approaches. With AtomSphere, oneworld was able to create a cloud-based hub-and-spoke model data exchange to simplify data integration between IT systems of new and existing member airlines. AtomSphere delivered substantial time and cost savings to member airlines and reduced cost barriers for new recruits to the alliance.

DATA SHEET

Key facts about the solution

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Source: Ovum
APPENDIX

Further reading

Dell Boomi expands capabilities of its AtomSphere iPaaS, Ovum (June 2012)

The increasing complexity of application integration calls for new approaches, Ovum (February 2012)

Exploring Different Approaches to SaaS Integration, Ovum (June 2012)

Methodology

Ovum Technology Audits are independent product reviews carried out using Ovum’s evaluation model for the relevant technology area, supported by conversations with vendors, users, and service providers of the solution concerned, and in-depth secondary research.

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Ovum Consulting

We hope that this analysis will help you make informed and imaginative business decisions. If you have further requirements, Ovum’s consulting team may be able to help you. For more information about Ovum’s consulting capabilities, please contact us directly at consulting@ovum.com.

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