



**Jitterbit**

salesforce.com®

## Technical Overview

Integrating your data, applications, and other enterprise systems is critical to the success of your business – but, until now, integration has been a complex and time-consuming process that required significant investment and resources.

Jitterbit provides quick, easy, and affordable integration. Jitterbit has been designed to be a simple yet powerful integration solution that allows organizations to meet the ever-changing requirements of their business.

Jitterbit is a fully graphical integration solution that provides users a platform and suite of productivity tools to create and share their integration efforts. Jitterbit can be used stand-alone, or with existing EAI infrastructures, enabling users to create new projects or consume and modify existing ones offered by the open source community or service provider.

With Jitterbit you can integrate data between Salesforce and enterprise applications, Web Services, XML data sources, legacy systems, and simple and complex flat-files. Along with a scalable and secure server, Jitterbit provides a powerful graphical environment to help you quickly design, implement, test, deploy, and manage your integration projects.

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Jitterbit is a flexible and easy to use tool that allows us to save time and money on otherwise complex integration schemes – savings and benefits we are able to quickly pass on to our customers.

Yasir Usman,  
Manager of Solutions  
Development  
TerpSys

Jitterbit is a strategic integration partner for salesforce.com, and their certification on the AppExchange means salesforce.com customers can now rapidly and affordably integrate their CRM data into their IT environments.

Shay Casey,  
salesforce.com  
Appexchange

Thanks to Jitterbit and their Salesforce domain expertise, we were able to securely integrate multiple enterprise systems using Active Directory and LDAP on-time and within budget.

Rezaur Rahman,  
ACHP  
Division of the US  
Federal Government

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# Jitterbit Technical Overview

Jitterbit is comprised of two major components:

- **Jitterbit Integration Environment**

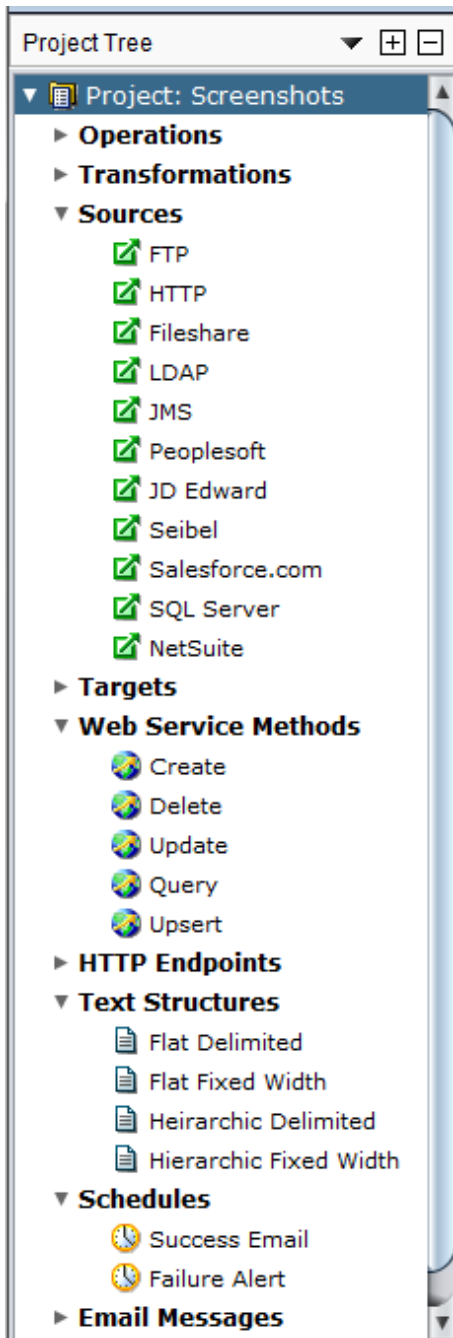
An intuitive point-and-click graphical UI that enables you to quickly configure, test, deploy and manage integration projects on the Jitterbit Server.

- **Jitterbit Integration Server**

A powerful, scalable run-time engine that processes all your integration operations. Fully configurable and manageable from the Jitterbit Application.

## Jitterbit Integration Environment

The Jitterbit Integration Environment is used to create new integration projects or open and modify existing projects. This application provides a graphical environment designed for rapid development by both business analysts and technical developers. Designed to be easy to use and maintain, the application allows you to create integration operations without writing a single line of code and intuitively guides you through the creation, modification, and management of an integration project.



## Connecting to Systems

The Jitterbit Integration Environment makes connecting even the most complex enterprise applications simple with a standards-based approach that includes native support for the major transports and protocols that you need to reach your systems:

- ODBC / JDBC connectivity to all major databases
- Internet protocols including HTTP(S), FTP, S/FTP, SMTP and POP3
- Complete XML and Web Services support
- Java Messaging Services (JMS) to publish and subscribe to a message bus such as IBM WebSphere MQ, Tibco, JBoss etc.
- Hosted Web Services enabling Jitterbit to receive messages from Salesforce Outbound Messages that are triggered by events such as creating new accounts.

All of these connectivity capabilities are available within a single application which means you can complete multiple integrations with Salesforce without ever leaving the UI. Connectivity is decoupled from the source and target systems which means you never have to install additional adapters or alter your systems.

### Integrate Salesforce with your:

**Enterprise Applications**, PeopleSoft, Oracle Financials, JD Edwards, Microsoft Dynamics, and more...

**Databases**, Oracle, Microsoft SQL Server, IBM DB2, MySQL, Sybase, Teradata, and more...

**Existing SOA Platforms**, webMethods, Tibco, Vitria, IBM WebSphere, BizTalk, BEA WebLogic, and more...

**3rd Party Applications**, QAD, Infor, Vertical Response, Interwoven, AMS Advantage, Microsoft Sharepoint, Documentum, Amazon.com, and more...

**Other SaaS Applications**, Sapien, SoftScape, RightNow!, Siebel On-Demand, NetSuite and more...

**Other Systems**, Web Services, XML, Simple and Complex Flat Files, Legacy Systems, Active Directory, Excel, Access, 3<sup>rd</sup> Party Portals, Application Servers, and more...

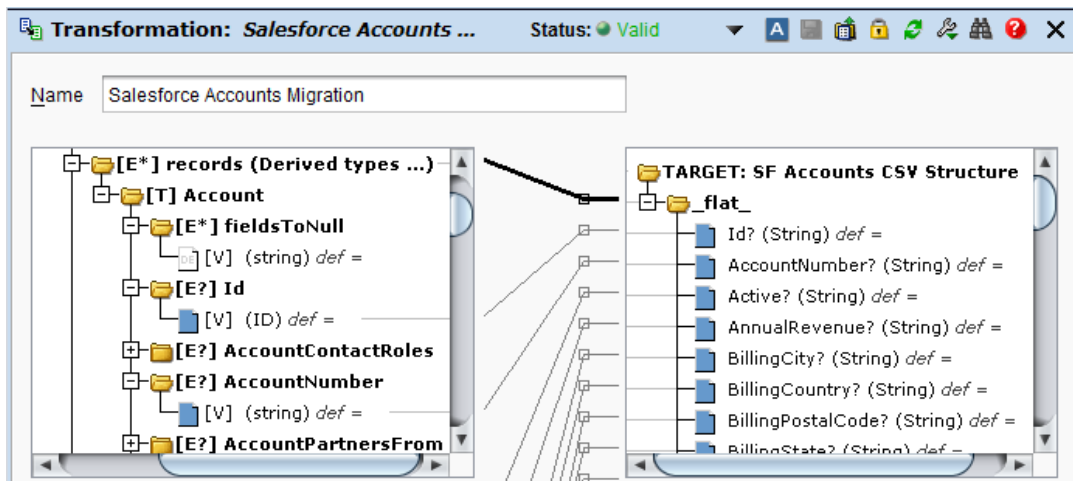
# Jitterbit Technical Overview

## Data Transformation

The Jitterbit Integration Environment provides a very powerful yet easy-to-use visual mapping tool that allows you to transform data between systems in minutes.

You can shorten transformation development time by using the auto-mapping feature to map similar document structures. This interface gives you tremendous flexibility and control over data transformations without the need for coding.

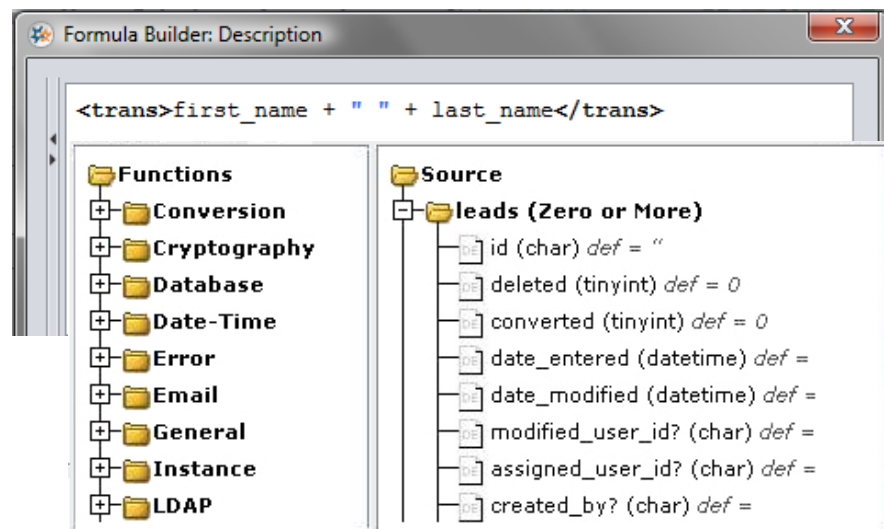
*Adding conditions, normalizing and de-normalizing between disparate data structures can be done graphically. Jitterbit will also highlight potential problems in your data transformations and suggest resolutions.*



## Formula Builder

The formula builder includes over 100 pre-built functions that you can drag and drop directly into the workspace for stored procedures. For more complex transformation logic the formula builder provides a user experience similar to creating Excel macros. The formula builder also lets you test every function you use against your data sources and highlights potential issues.

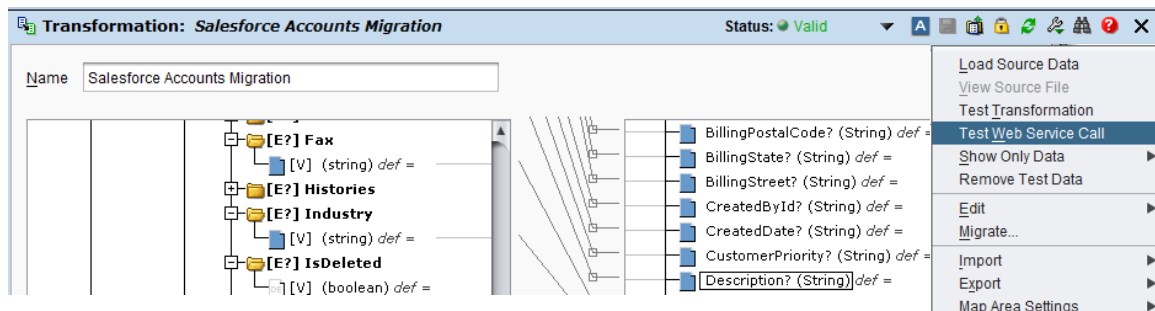
*Point-and-Click to add functions from the built-in library – you don't need to leave the UI and you never need to code your own functions!*



# Jitterbit Technical Overview

## Transformation Testing

The tool provides you with the ability to test as you configure. You can load source data to view sample data as you map. You can test a transformation made to a single target element to view the results of a formula. You can test the entire transformation, the web service call or the operation to view the complete results of your work.



*Test your data transformations on-the-fly directly in the Jitterbit UI.*

## Project Validation

In order to improve productivity, the Jitterbit Integration Environment highlights errors or potential issues as the user configures their integration. The environment includes the following types of validation:

- **Object Status** - Every object within Jitterbit such as an operation, transformation, source, target etc. includes an objects status that highlights if the object has a valid definition or not. This status changes as configuration setting are set so that any issues that a user may introduce are immediately highlighted.
- **Test All Connections**- Validates if your Jitterbit Server Environment can connect to all the systems your project needs to access.
- **Validate Project** - Every object in a project is validated automatically before deployment and the system will not deploy invalid configurations. You can validate your project at any time while using the Jitterbit Integration Environment.

## Point-and-Click Deployment and Validation

Publishing your completed Jitterpak to one or more Jitterbit Integration Servers is a simple one-click process. You can easily publish the same project to a development, test or production environment.

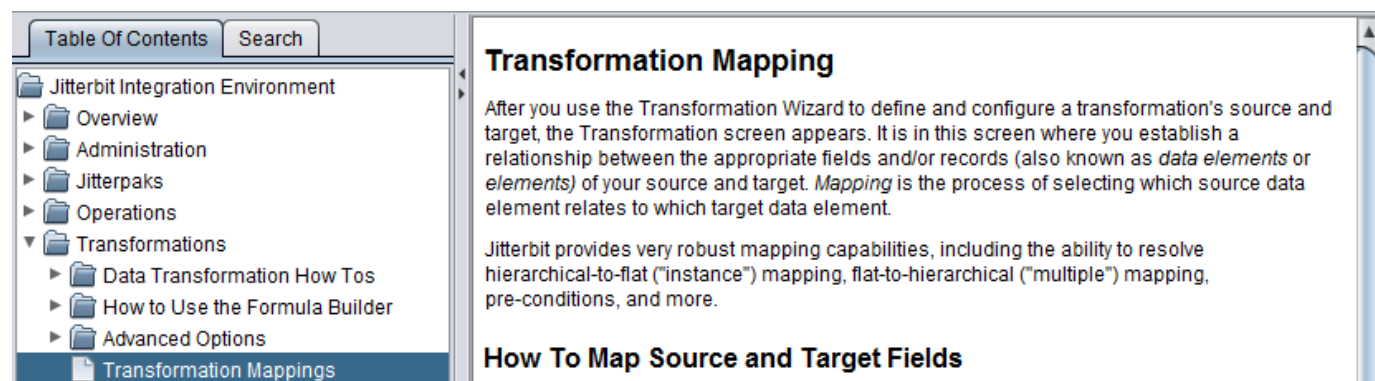
### Select a Deploy Type:

- Everything
- All New & Modified Items
- Individual Items



## Context Sensitive Help System

Jitterbit includes a context sensitive help system that provides 1-click help during every aspect of an integration project. Jitterbit benefits from a community of thousands of users providing feedback and content which ensures current and accurate content with every new release.



# Jitterbit Technical Overview

## Administration

The Jitterbit Integration Environment includes an Administration Console that has easy-to-use and powerful tools for monitoring and managing every aspect of Jitterbit, including:

- **System Console** – Allows users to monitor and manage all associated Jitterbit Servers.
- **User Console** – Manage users and groups and assign access levels to any part of a Jitterbit project.
- **System Queue** – View and manage all operations that are currently running or pending.
- **Operation Log** – View the status and details of all completed operations on the server.
- **Scheduler Console** – Monitor and manage the status of the system's scheduling engine.

At the time of deployment, the transaction is first posted to the System Queue via a scheduler or an application event. Once processed, the operation status is recorded in the Log while details of the operation are available in the corresponding history (e.g. when the operation started, when it completed, amount of data processed, number of files processed, which files were processed). The Queue, Log and History can be sorted, filtered and searched to quickly locate the information required.



*Administration tools are built-in. Never leave the UI!*

## Jitterbit Integration Server

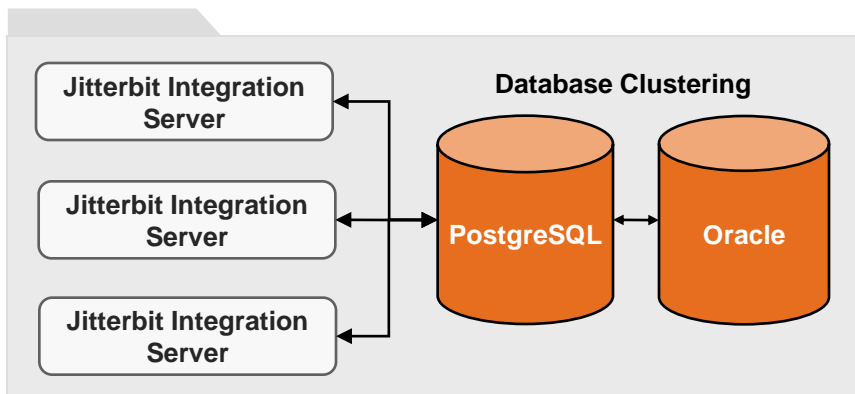
The Integration Server is the powerful, scalable run-time engine that processes all integration operations that have been deployed to it from the Jitterbit Integration Environment.

### Scalability, Reliability and Disaster Recovery

The Jitterbit Server architecture has been developed so that you can configure the level of reliability and transaction volume that your organization requires.

The Jitterbit Server uses a multi-threaded architecture to execute hundreds of operations concurrently and the number of threads can be configured based on your hardware and predicted workload. In addition, Jitterbit optimizes the execution of integration operations by caching connections and using reference data to reduce application communication. The transformation engine is optimized to auto-select appropriate parsing techniques for faster data throughput. If the system detects a fault it will send appropriate notifications and/or execute additional operations to compensate for failures.

With Jitterbit, you are never locked into hardware or licenses tied to hardware - you can install Jitterbit on any readily available hardware platform that runs Windows or Unix-based platforms. If your integration workload requires more processing power you can simply add additional Jitterbit Servers in a clustered configuration. Adding additional servers also improves reliability and availability.



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## Security

The Jitterbit Integration Server provides comprehensive security including encrypted messaging, access restrictions to a Jitterbit project, Role-based Access Control that allows control over any objects in your project.

The server includes an Apache server that enables for full administration SSL and x.509 certificates to ensure that all messages sent from Salesforce are authenticated and have not been altered from When Jitterbit accesses information on either source or target systems it uses the security protocols supported by those systems e.g. database user authentication and access control, PGP (Pretty Good Privacy) options for encrypting data in files, LDAP authentication for accessing directory serves, Web Service and Oasis authentication for web services.

Existing enterprise security protocols can be imported and reused within Jitterbit via standards-based plug-ins.

### Transport Protocols

- HTTP/S
- FTP
- SFTP
- Web Services (SOAP)
- ODBC
- Windows File Share
- JMS
- JDBC
- POP3

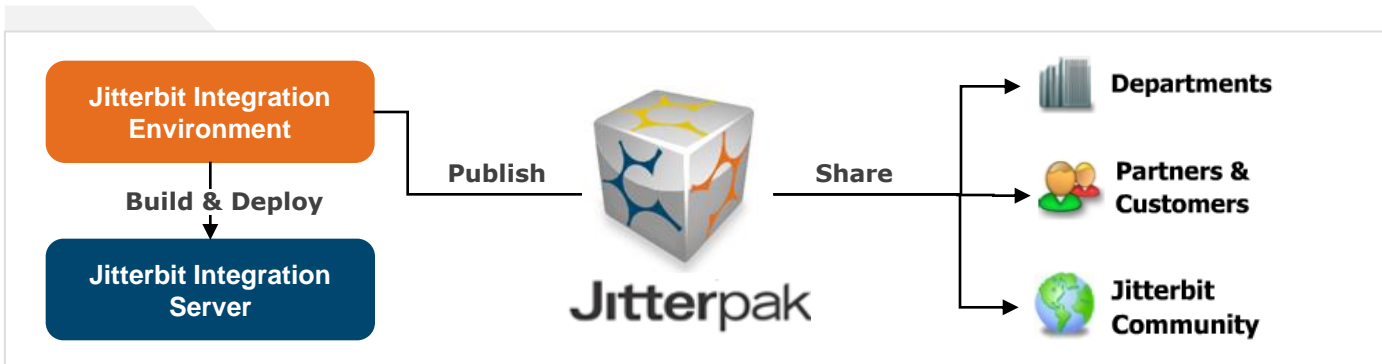
### Data Formats

- XML - Schema (.xsd), Document Type Definition (.dtd), Web Service Definition Language (WSDL)
- Major Databases
- Single Structure Flat Files
- Hierarchical Structure Flat Files

## Jitterpaks: Sharable Integration

Today, most organizations start their integrations from scratch, doing monotonous work that has already been done in similar projects. Jitterbit has been designed to make integration a shared goal where common integration definitions can be reused within organizations and by the Jitterbit community. This is made possible by Jitterpaks. Jitterpaks are portable and sharable documents that include everything necessary to complete a standard Salesforce integration. Jitterbit users can import, export, and share every aspect of a Salesforce integration, including document definitions, data mappings and transformations, and operations.

Importing a Jitterpak for Salesforce will save you significant time in setting up an integration. With support for all Salesforce operations like Create, Delete, Update, Upsert, Query, etc., Jitterpaks give you a jump start on synchronizing your master lists of customers, products, prices, previous order histories, and much more.



Jitterbit makes it easy to import and export the entire blueprint of your integration. Jitterpaks can be shared across your enterprise, with partners, and throughout the Jitterbit community. As the Jitterbit community continues to grow, integration projects will take less time and become easier to maintain as best practices continue to evolve with the Jitterbit community.

Jitterpaks and associated professional support and services can be found at [www.jitterbit.com](http://www.jitterbit.com).