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Boomi **E** Basic Concepts

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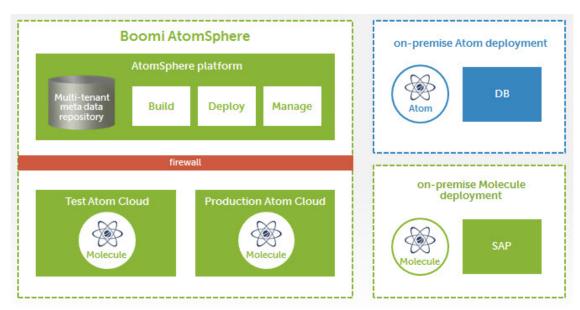
Before starting to work with the Boomi AtomSphere platform, it is important to understand the general terminology and concepts of this platform.

Atoms, Molecules, and Atom Clouds

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AtomSphere provides a cloud-based integration platform. It supports two deployment models: an in-the-cloud deployment model that is used when all the integration endpoints are cloud-based and an on-premise deployment model that is used when any of the integration endpoints are within a corporate network.

- If you use the in-the-cloud model, you can deploy your integration processes via a Boomi Atom Cloud.
- In case your organization require the on-premise model, AtomSphere allows you to create your **Atom**. This represents a lightweight Java application that is deployed on a host with the Internet access.
- If you use the on-premise model and want to have a highly available, load-balanced solution, in case you want to change your Atom's processing time or volume handling, or if you are worried that your Atom's processes may not run because of a computer outage, consider using a **Molecule**. It is an enterprise-grade version of an Atom that executes integration processes and that can be deployed on multiple servers.
- If you need a multi-tenant solution to accommodate multiple customer accounts, consider setting up your own *private Atom Cloud*.



Atoms, Molecules, and Atom Clouds use the same basic technology. Note, however, that to differentiate these terms. A Molecule represent an Atom with multiple nodes. An Atom Cloud is a Molecule that is available to multiple tenants.

Integration Lifecycle

The integration lifecycle on the AtomSphere platform consists of the three steps that are introduced and described below:



Build

By using the AtomSphere library of provided connectors and maps, it is possible to easily design your integration and required business processes. Thereafter, you can load your configuration into a lightweight, a dynamic run-time application that is called an *Atom*.

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Deploy

Deploy your *Atoms* to the AtomSphere for SaaS, PaaS, or Cloud integration. You can also deploy your applications on-premise and use your firewall to protect your data.

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Manage

By using a feature-rich web-based dashboard, you can monitor and maintain the status of all your deployed *Atoms*, integrations processes, and business partners, regardless of the location.

