

Board Cloud Overview



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1. Introduction

Board Cloud provides all of Board's Intelligent Planning Platform capabilities plus all the benefits that a powerful cloud infrastructure can offer.

Backed by Microsoft Azure, Board Cloud reduces both setup time and maintenance overheads of your planning applications by offering world-class security, reliability, scalability, and performance.

Board Cloud supports the continuous growth of globally leading organizations such as H&M, BASF, Burberry, Toyota, Coca-Cola, KPMG, and HSBC, amongst many others.

Board Cloud gives organizations the ability to adjust the technology to suit their business, rather than the other way around.



2. Board Cloud Description

Board Cloud is deployed on Microsoft Azure datacenters around the globe. These geographically dispersed datacenters are managed and operated by Microsoft and comply with key industry standards, such as ISO/IEC 27001:2013 and NIST SP 800-53, for security, availability, and reliability. They also meet a broad set of international and industry-specific compliance standards, such as ISO 27001, HIPAA, FedRAMP, SOC 1, and SOC 2, along with country- or region-specific standards, including Australia IRAP, UK G-Cloud, and Singapore MTCS.

You can learn more about Microsoft's compliance offerings [here](#).

This solid partnership enables Board to deploy Cloud solutions on servers strategically located to dramatically reduce potential latency issues encountered with some globally scaled cloud-based services. Such broad geographical coverage allows Board to comply with a large number of policies and regulatory requirements regarding the processing and storage of personal or financial data.

Board Cloud helps companies deploy global rollouts by assisting organizations in the following areas:



Simplifying business models



Standardizing global processes



Deploying across an industry standardized platform and interfacing technologies

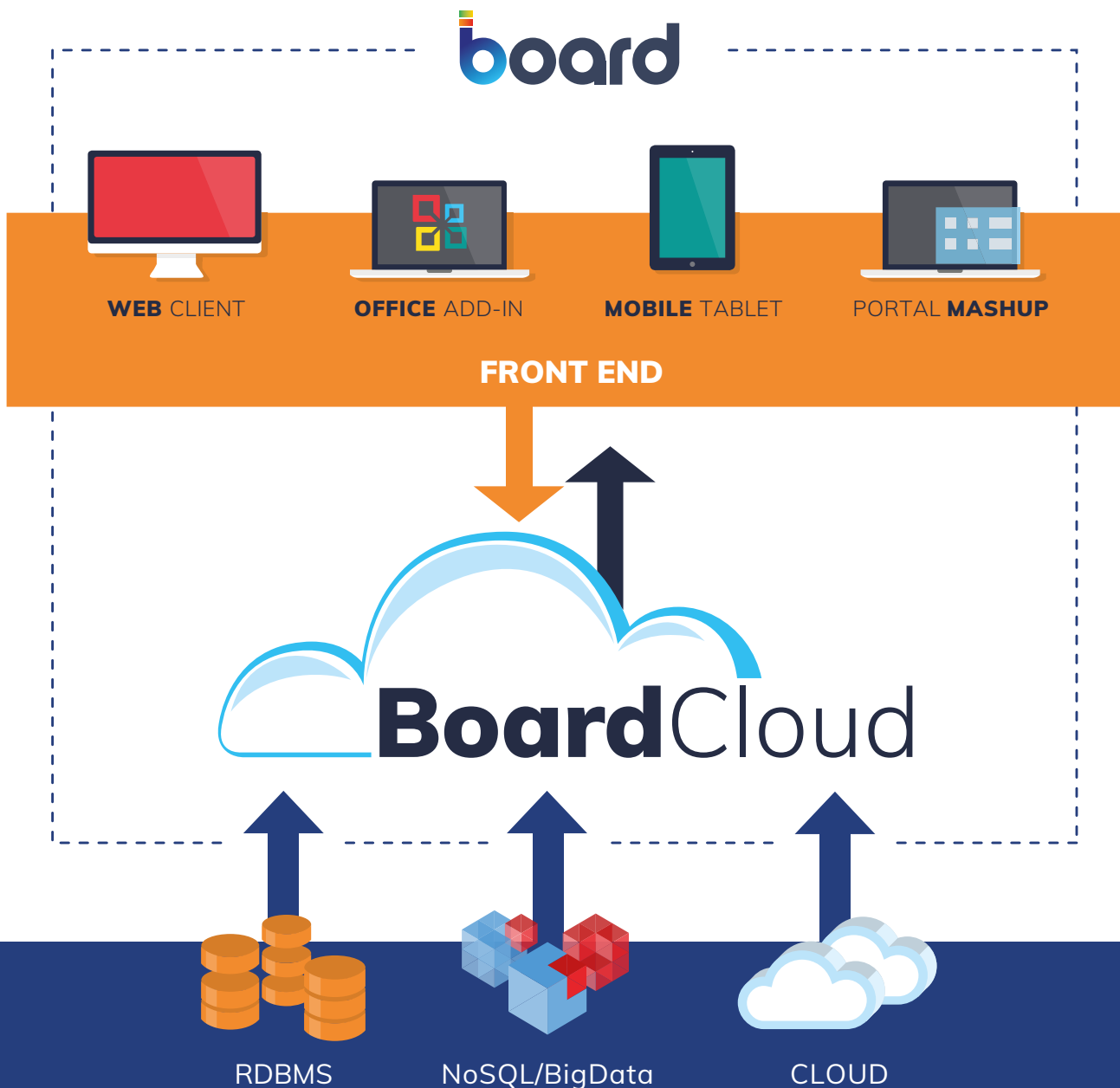
With **zero infrastructure investment** required, organizations only pay for what they use, making planning more cost-effective and less risky than ever before.

Board Cloud is available in **different languages**, such as English, French, German, Spanish, Italian, Chinese, Japanese.

Your organization-specific terminology can be translated in any language using Board's built-in translation mechanism that allows users from different countries to see the same application dimensions and measures in a language they are familiar with.

Users can easily access Board Cloud from various kinds of devices (tablets, laptops, smartphones etc.), using the most common web browsers and a secure, encrypted HTTPS connection.

Board Cloud enables seamless **connections to On-premise, Hybrid and Cloud data sources** through its industry leading connectivity technology that eliminates the need for complex configurations on the Customer's source systems.



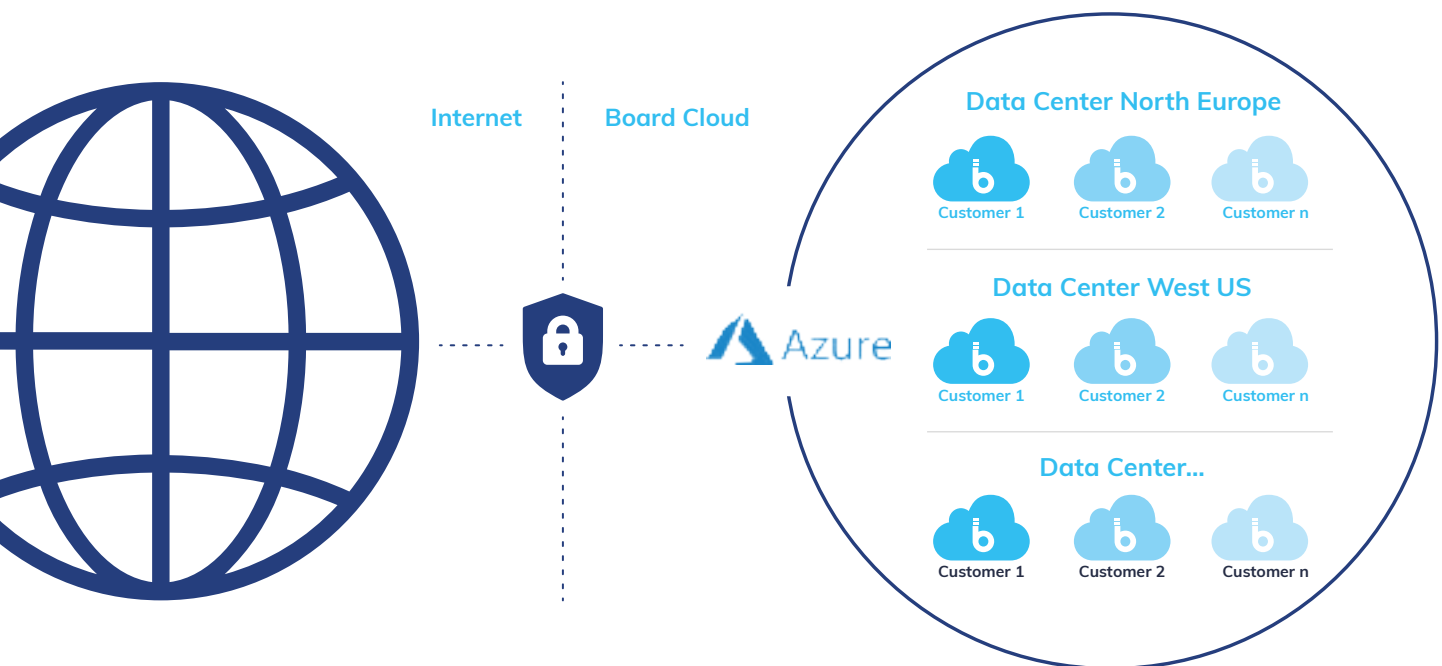
3. Cloud Architecture

Board Cloud 's globally spanning infrastructure supports enterprise level rollouts by providing robust levels of integration with various third-party systems such as ERPs, CRMs, Cloud applications, Data Warehouses and many more.

Board Cloud provides one (or more) production environment(s) with the possibility to activate one or more Sandbox environments to be used for Development, User Acceptance Testing, and Pre-production Platforms, depending on the Customer's project requirements and policies.

Board Cloud customers can also access a dedicated Cloud Administration portal where they can manage their Board Cloud environment and perform various administrative tasks.

Board Cloud Infrastructure



Each customer has a dedicated tenant, where environments and associated storage units reside, and a private network that ensures complete isolation from other tenants.

This architectural approach provides the following benefits:

- **Enhanced Security:** A complete separation ensures the isolation of all customer data.
- **Superior Reliability:** The performance of a customer's Platform will never be impacted by any concurrent activity of another Board Cloud customer.
- **Fail-safe geographic redundancy:** All customer data is replicated across a primary and secondary Azure datacenter, providing failover solutions in the event of a major outage at the primary datacenter.
- **Version Isolation:** Customers can upgrade their Cloud environment whenever it's needed, regardless of other customers' upgrade activity.

4. Subscription Hub

The Board Cloud Subscription Hub is an administration portal that allows you to carry out several user management tasks on multiple Board Cloud Platforms at once. It also handles user authentication and authorization for all tenant Platforms.

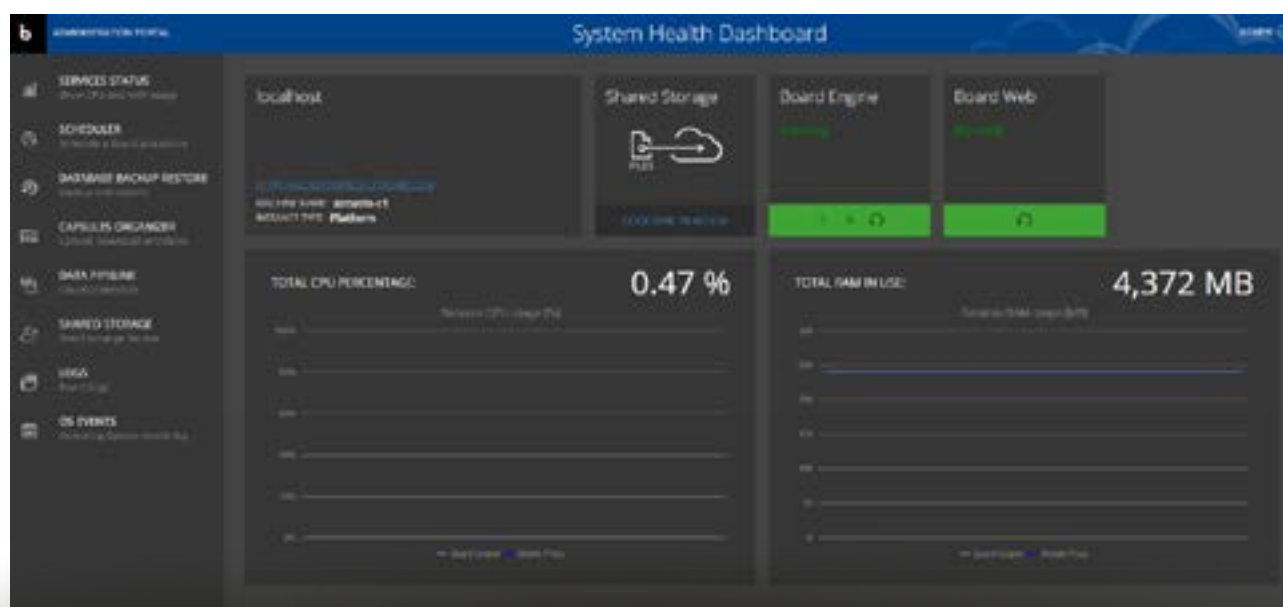
The Subscription Hub makes it easier to manage all your users and ensures a higher degree of efficiency while creating less administration: you can add users one by one, import them in bulk, or by leveraging a federated identity provider already in place within the customer organization.

The Hub also allows you to set up and manage Board's Collaboration services, allowing users to connect, share, and work together on Cloud Platforms in the same, unified interface.

4.1 Cloud Administration portal

The Cloud Administration portal is the heart of Board Cloud: it provides a full overview of each Board Platform and allows customers to manage it in a fully self-sufficient manner.

Cloud Administration Dashboard



The Cloud Administration portal offers many features and options, including:

- **Virtual machine resources consumption monitoring**
- **Scheduling and management of administrative tasks, such as data import via Board Procedures**
- **Complete management of your data backups (preserve, archive and purge)**
- **Management of Capsules files and Folders in the Platform**
- **Managing connections to your data sources and to the Cloud connector**
- **Access to the extensive range of Board logs and the VM level services event log**

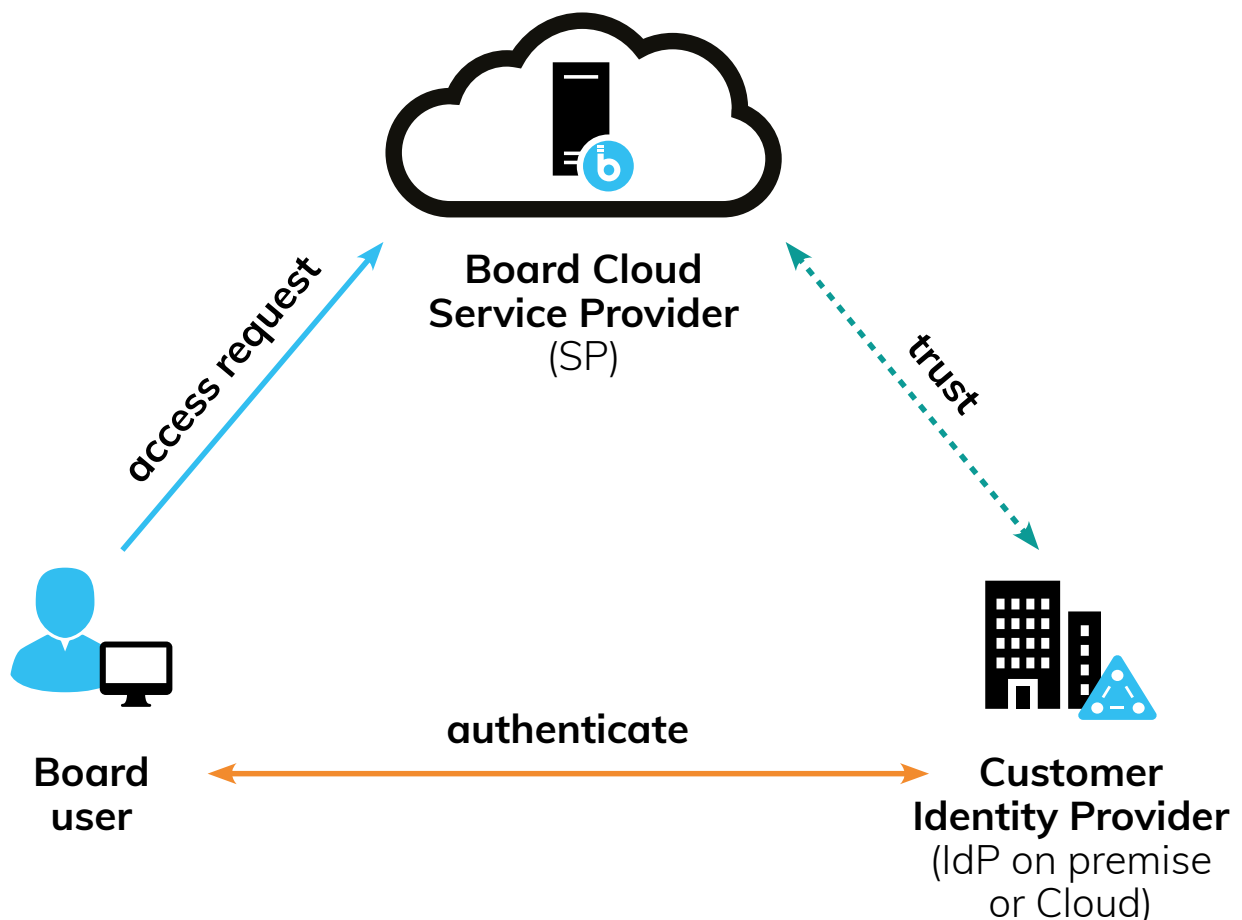
5. Single Sign-On (SSO)

Board Cloud supports various authentication methods through the Subscription Hub. Authentication can be configured to use Board level user accounts or, alternatively, authentication can be delegated to external Identity Providers (IDPs) using industry standard protocols, such as SAML 2.0 and OIDC.

Utilizing external IDPs can simplify deployment, minimize user administration and improve the user experience of Board Platforms with SSO (Single sign-on) capabilities, thanks to direct integration with centralized company authentication systems already in use.

This feature also enables customers to directly manage login options, password policies, lockout policies and other specific settings, right from the Subscription Hub.

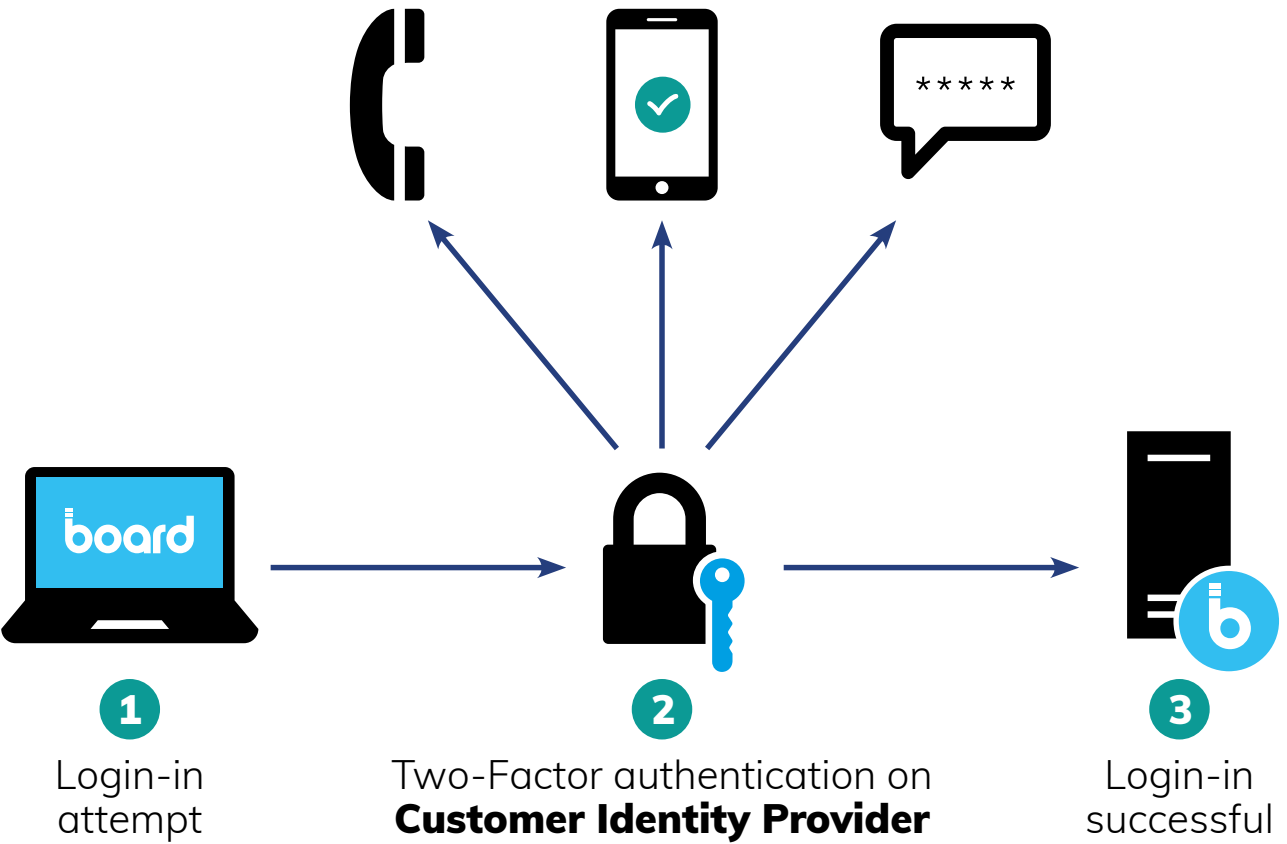
Board Cloud implements Federated Authentication using Security Assertion Markup Language (SAML 2.0) or OpenID Connect (OIDC), as illustrated below.



By enabling the authentication to be handled by an OIDC- or SAML 2.0-based Identity Provider, the two-factor authentication can also be implemented, as shown in the diagram below.

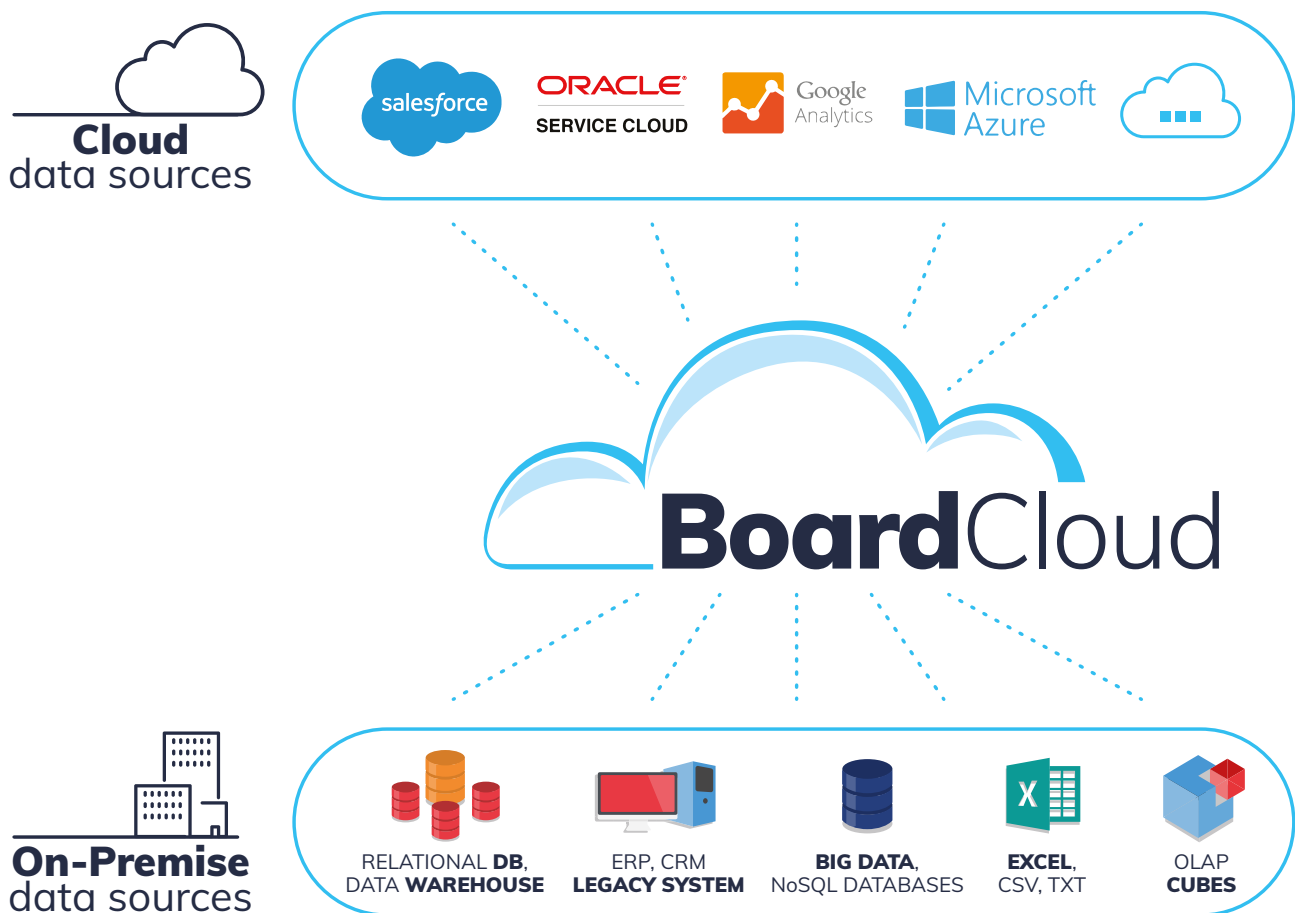
Two Factor Authentication

Verify two factor authentication by phone call,
text message or mobile application



6. Data Integration

Board Cloud is designed to offer a seamless connection to on-premises and cloud data systems, allowing you to deliver planning solutions that fully leverage your existing software investments.



This is achieved through Board's native integration capabilities and through the Board Cloud Connector. Board Cloud integration capabilities enable native external integrations with all major cloud storage systems, such as Amazon S3, Azure File\Blob storage, and Google storage.

The Board Cloud connector enables the most complex integration scenarios since it's specifically designed to allow Board applications to access external data sources, both on-premises or in the cloud.

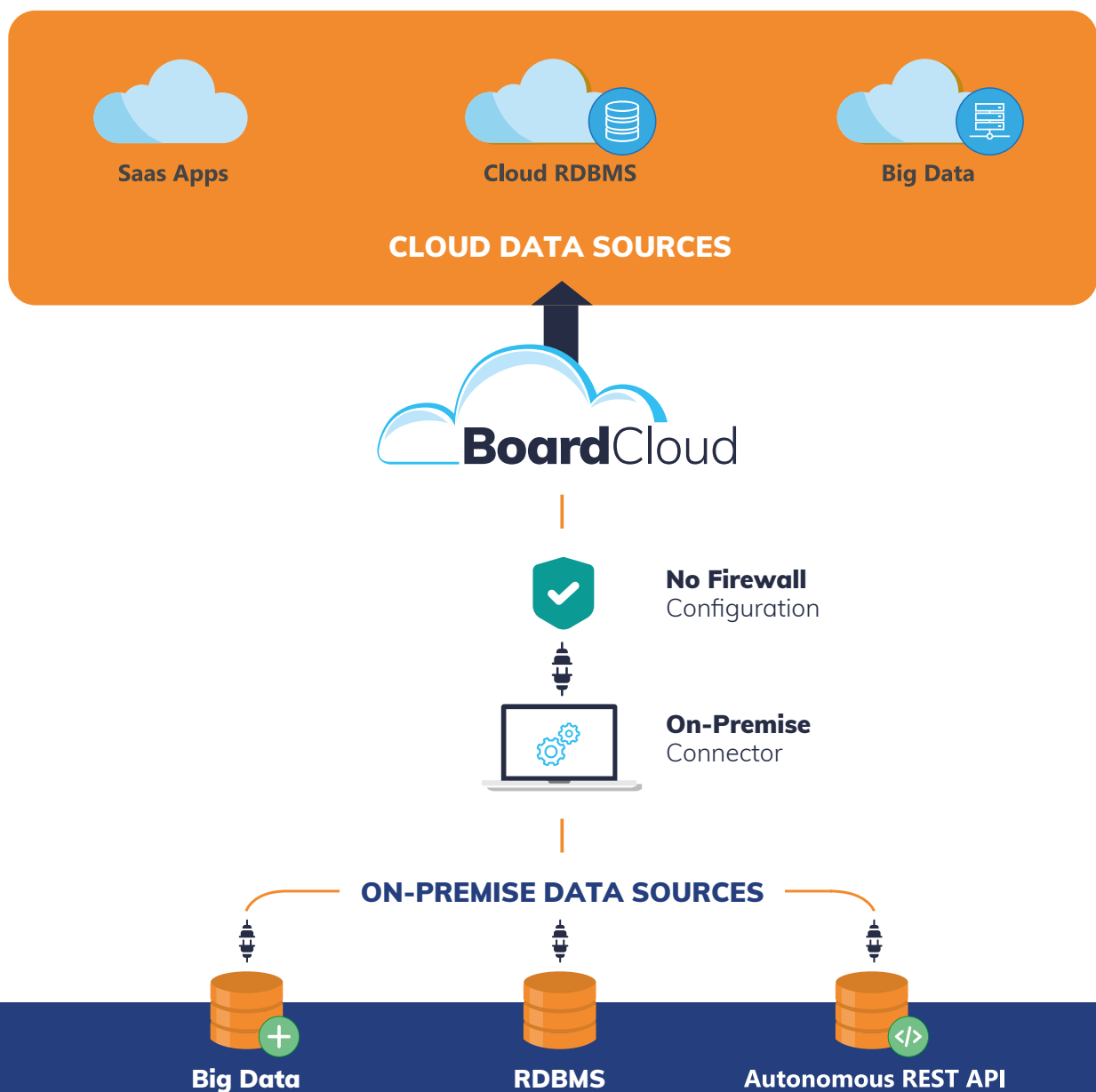
The Board Cloud connector consists of two components:

- Hybrid Data Pipeline Cloud Service
- On-Premises Connector (for those data sources on the customer premise)

Hybrid Data Pipeline Cloud Service

This component is installed in the cloud and is the main component of the Cloud connector. It creates a web portal where the user can configure all needed connections and rules.

Board Cloud Data Pipeline scheme



On-Premises Connector:

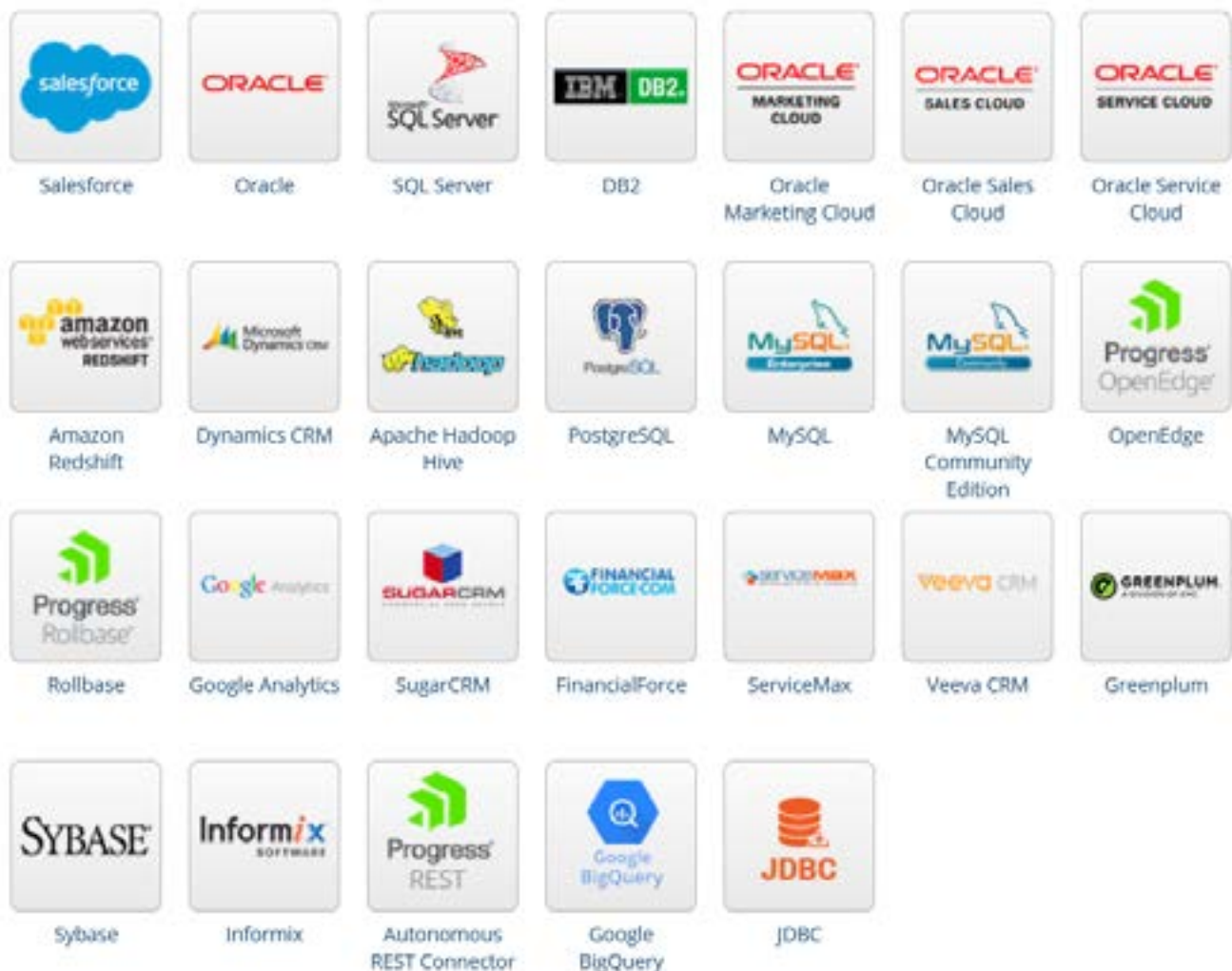
This component is installed remotely to allow Board applications to access source systems that reside behind customer firewalls. It provides the services needed to securely move data from on-premises applications to Board Cloud. This component connects to the Hybrid Data Pipeline Service using a secure HTTPS connection without requiring additional firewall configuration changes.

Unlike other solutions on the market, Board also supports **write-back** from cloud to on-premises through a secure tunneling connection. Using this mechanism, data stored in Board can easily be written back to the original source systems within a customer domain.

Board Cloud provides a wide range of connectors to easily integrate different data sources from third-party systems. The Hybrid Data Pipeline Service supports the data sources shown in the following image:

Data Stores

Pick a data store to proceed.



7. Audit Logs

Board's extensive logging capability provides customers with a comprehensive 360-degree view of their Board Cloud environment. This is achieved through log files that capture an extensive amount of information, such as all user activity, login/ logout/ failed login attempts, Procedure execution, data entry (before and after values), creation or modification of Screens, and many more.

- All log records are time-stamped and capture user IDs as well as other details typically found in verbose level logging mechanisms.
- All logs can be encrypted and downloaded so that customers can upload and process them in other systems or applications.
- All the logs are kept in a secure, tamper-proof area within the customer's environment.

8. Board Cloud Security

Board Cloud has been built from the ground up in accordance with industry best practices and current regulatory requirements. Board Cloud offers the highest level of security by adhering to the following fundamental concepts:

- **Confidentiality**
- **Integrity**
- **Availability**

Those pillars are guaranteed by the security best practices adopted by Board, which also include the following:

- **Compliance:** due to ISO 27001 requirements, the Company must respect the requested confidentiality, availability and integrity of customer data. Board Cloud is also SOC 1® Type II, SOC 2® Type II and SOC 3® compliant. (For additional details please see "Board Cloud Security Overview" Par. "Regulatory Compliance & Certification")
- **Business Continuity:** business continuity is guaranteed by Board through Disaster Recovery protocols, Backup Procedures and Geo Redundancy. (For additional details please see "Board Cloud Security Overview" Par. "Business Continuity Management")
- **Data Retention:** this is necessary for the performance of services, to securely delete all customer data and to offer the needed support to customers during these activities. Only selected Board employees have access to customer data, for maintenance and operational reasons: all access is tracked and logged automatically.

8. About Board

Board's Intelligent Planning Platform delivers solutions that help over 2,000 organizations worldwide plan smarter - enabling actionable insights and better outcomes. Board helps leading enterprises discover crucial insights which drive business decisions and unify strategy, finance and operations through more integrated and intelligent planning to achieve full control of performance.

Partnering with Board, global enterprises such as H&M, BASF, Burberry, Toyota, Coca-Cola, KPMG, and HSBC have digitally transformed their planning processes.

Founded in 1994, and now with 25 offices worldwide, Board International is recognized by leading analysts including BARC, Gartner, and IDC.

www.board.com

