



Sisense



Company information

Sisense is the fastest growing Business Analytics software for companies with large, complex or scattered data, offering an end-to-end software that lets users easily analyze complex data sets from multiple sources. Sisense handles the full cycle of BI, from data preparation to dashboard reporting and visualization--all in single stand-alone solution or as embedded analytics.

Four thousand customers are already using Sisense, including Nasdaq, Airbus, Orion, Intuit and eBay, with the business more than doubling every year over the last five years. Using proprietary "in-chip" software technology that utilizes the CPU and RAM of commodity computers, Sisense crunches 100x more data and supports 10x the number of users that in-memory analytics. Awards for our powerful technology include: Gartner Cool Vendor 2014, Take the H.E.L.M, World Technology Award, and Audience Award at Strata Conference, positioned for ability to execute in the Visionaries Quadrant 2018.

Product Presentation

Sisense's BI software makes it easy to instantly reveal business insights from complex data – any data source, any size.

Sisense simplifies business analytics for complex data by providing a complete solution for preparing, analyzing and visualizing big or disparate datasets. We believe that BI can be agile, flexible and produce actionable results for companies within days, rather than months; and that business users and analysts should be able to freely explore their data, without relying on a patchwork of tools or extensive IT assistance – even, and especially, in complex scenarios.

Because Sisense also utilizes disk, RAM and CPU so efficiently, we're able to provide a centralized database on commodity hardware that serves more queries, more users and more data than any other BI tool on the market. By removing limitations of data size and speed imposed by in-memory and relational databases, Sisense enables any business to deliver fast, terabyte-scale analytics across their entire organization.



Sisense's intuitive drag-and-drop user interface and rich data visualizations make it easy to do the difficult tasks of combining, visualizing and analyzing data in dashboards and reports. Sisense is a flexible, self-service BI solution that was built to empower non-technical business users to be able to quickly and easily design dashboards and perform ad-hoc analytics on their data.

Our interactive dashboards are among the most beautiful and polished in the BI world, as Sisense comes full circle by providing both a robust back-end to consolidate data, as well as a front-end with powerful data visualization capabilities. Collaborate across your entire organization by sharing web-based dashboards in one click, and query on-the-go directly from any mobile.

Sisense Detailed Product Overview

Sisense dramatically simplifies business analytics for complex data to empower users, regardless of technical expertise. As data volume and sources' variety continue to increase exponentially, Sisense easily scales to ingest complex data eliminating the need to remodel it.

Thousands of organizations leverage the most powerful analytics engine in the market and benefit from a 10x to 100x performance boost with Sisense's groundbreaking In-Chip™ technology. The visualizations, notifications, interactions and sharing capabilities unleash instant insights that significantly impact organizations.

Key components of the open Single-Stack™ platform include:

- **Mash-Up:** Connecting, mashing, cleansing and managing your data is the starting point for all business analytics, and a lot of effort is spent just on that. Sisense ElastiCube Manager takes the data mash-up nightmare away with smart and suggestive technologies that help you visualize your data-scape. As a result, you turn into a true data expert.
- **Analyze:** Self-service, modern analytics delivers an intuitive UI with interactive visualizations and dashboards, empowering smarter and faster data driven decisions. With the best analytics engine in the market, you'll



experience 10x to 100x better performance with Sisense's revolutionary In-Chip™ technology.

- **Impact:** Drive broad impact across the entire organization by revolutionizing the way users interact with data. The next generation business analytics no longer requires you to be anchored to a screen or static reports. Share, collaborate and alert on what's important, immediately reaching every corner of your business no matter where you are.
- **Govern:** Benefit from a robust and flexible security architecture that provides fine grain control across all interfaces and users. Ensure security processes are enforced while scaling to enterprise deployments – secure dashboards and data as well as implement custom security requirements that suit your organization.
- **Embed:** Sisense's embedded analytics solution is an end-to-end, single stack BI solution embedded within your application or stand-alone offering. Deliver increased value to your customers with fully customizable analytics offering where they who will be able to seamlessly interact and visualize data.
- **Deploy:** Sisense delivers you the full flexibility to choose how to deploy your BI and Analytics solution. A single code base can be deployed on premise, in a public cloud or private cloud.

Mash-Up

Connect Data

Rapidly and securely connect to any of your enterprise or online data sources without any pre-aggregations from applications, databases, flat files, machine data and custom written scripts. Only location and login credentials are required to connect to sources.

For a full list of supported data connectors, see:

<https://www.sisense.com/data-connectors/>

Mash-up Data

Intuitively combine your data sources in the ElastiCube Manager - a smart, suggestive, visual environment that anyone can use and understand, regardless of technical expertise and without the need for scripting or technical mark-up language.

Simply drag and drop to join large data sets from multiple sources to create one centralized repository of all your data.

Cleanse Data

Easily and quickly cleanse your data for error free, ready for analysis data. Manage how values and fields from each data source appear and apply settings to rename, delete, hide and control data import settings.

Transform Data

Use Sisense visual schemas to rapidly develop data models for analysis. Quickly map out and manage all data sources, relationships and enrichment steps.

Sisense has robust built in functions to help enrich and transform any data in the ElastiCube. Available functions are described in the following table:

Function	Description
Mathematical	Convert, order, apply trigonometric functions and calculate numeric data
Date and Time	Convert, edit and extract information from time-date fields
String and Text	Convert, replace, edit, remove and extract information from text fields
Logical	Compare and evaluate data using logical conditions
Web	Extract and compare data from URLs
Miscellaneous	Various functions to extract data

If needed, add custom tables and columns to combine data from different data sources, and cleanse and prepare any data in the ElastiCube. New tables and fields provide dashboard designers with additional fields to use for even more advanced calculations and visualizations. Use built-in functions or SQL to structure data within the custom tables and fields.

Manage Data

Instantaneously change, add or remove data sources. Synchronize the import and transformation of data on scheduled basis determined by time of day, day of week, day of month and specific time intervals.

All activity is logged. View details on previous updates to an ElastiCube and logs on data imports and errors.

Plugins run predefined code before or after data is imported into an ElastiCube. Add custom functionality with pre and post execution plugins to determine what must happen before or after data imports. Use .Net or Python to easily create your own plugin.

Secure Data

Sisense provides governance controls precisely where and how you need them including data-level security. Receive granular control over exactly what data within the data source(s) is viewable by certain users.

Analyze

Dashboards

Easily build interactive dashboards, drill into details, filter or perform ad-hoc analysis.

Sisense dashboards are fully interactive with all dashboard components such as visualizations, filters and drill downs enabled to refine the analysis and determine what view of data is presented.

Core functionality includes:

- **Visualizations:** Graphically represent data to communicate large data sets clearly and efficiently. Sisense offers out-of-the-box data visualizations delivered on the web including Pivots, Table, Bar, Line, Area, Gauges, Pie, Maps, Scatter, Calendar Heatmap, Bubble Chart, Tree map, Sunburst and Polar.

- **Custom formulas:** Combine any data in an ElastiCube with rich functions to create custom formulas on the fly, to accurately analyze data and express business logic. Users can work with raw data without the need to summarize data sets before creating formulas, which is useful when needing to drill down into granular data.
- **Filters:** Filters act to refine data based on a selected value or criteria. Filters can be applied on a dashboard or visualization. The primary filter types are include/exclude, text, numeric, time-date and ranking filters.
- **Custom dashboard design:** Each visualization can be customized including colors, labels, number formats and layouts. Color palettes can be set and instantly applied. Visualizations can be readjusted and sized using an easy drag and drop.
- **Collaboration.** Dashboards can be shared for viewing, and further data exploration and design. A dashboard is shared via a web accessible link.

Dashboard designers can define the access rights for each collaborator. Each recipient can schedule to receive email notifications at specified time intervals. In addition, offline access is available with dashboards and visualizations that can be exported as either a PDF or as image file.

Award Winning In-Chip™ Technology

The most powerful analytics engine provides unrivaled query processing to provide you with high performance analytics. Leveraging a modern columnar database in conjunction with cache memory located next to the CPU offers a 10x to 100x performance gain over existing in-memory systems.

Advanced Analytics

Use a growing library of built-in statistical functions to quickly run statistical methods on complex data. Leverage Sisense R integration to access a rich library of statistical techniques and models and implement advanced analytics within a Sisense dashboard.

Widget Library

Extensive widget library is provided out of the box as well as a broad set of user community shared visualizations. Moreover, you can easily connect to D3, review, select and import any one of hundreds of visualization types.

Pulse Machine Learning

Augment your data driven intelligence with machine learning anomaly detection. Let Sisense learn what it normal behavior for your KPIs and allow it to alert you when something out of the ordinary is detected in your data.

Impact

Pulse Alerting

Receive automate alerts on your most important KPIs using dynamic thresholds you define and advanced machine learning anomaly detection.

Sisense Mobile

Consume insights on the go in a mobile or tablet device whenever and wherever they happen - either through any HTML5 compliant browser or a native iPhone or Android app.

Bots

Ask questions and get instant answers on your Sisense analytical data via text or image through popular 3rd party applications such as Slack or Skype.

IoT

Connect your smart light bulb IoT devices to your KPIs to make you smarter with data driven insights through dynamic changing lighting color.

Amazon Echo

With a single voice command, make your data come to life by asking questions and hearing real-time results. Conversational analytics allows everyone to become well versed in data insights.

Sisense Narratives

Apply Sisense's natural language generation (NLG) capability using advanced machine learning technology and allow it to narrate your data. Automatically add text to your visualizations providing an easy to understand description of each widget. Control the placement of the text, verbosity level and look and feel for maximum impact on your users.

Zapier/Write-back

Why perform manual tasks when automation can do it for you? Automate your workflows to maximize performance using Zapier if-this-than-that recipes or



leverage our broad set of REST webhooks to allow you to writeback data into your systems.

Govern

Security

System-level security encompassing security features for role-based settings and integration options. This includes user and server management, connection to an active directory, Single Sign-On (SSO) implementation, and use of the security REST API.

Object control and security defining access rights for different users and groups to various components. Specifically, tightly control your organization's dashboards and ElastiCubes.

Data access provides data to people only to the extent that they need to complete their jobs. Data-level security provides the necessary control to enforce varying degrees of data visibility and access to support the separation of duties. A single dashboard can be shared with many users, but each viewer sees only data relevant to their needs. This reduces both development time and provides for airtight security.

With row-level security, control user and group permissions to specific rows in the data. For each ElastiCube, you can apply multiple rules to enforce granular access control.

Environment Management

Implement Sisense and maintain copies of your dashboards locally or across multiple environments. With multiple instances of Sisense, you can test and verify your data's accuracy before publishing dashboards to a production environment where accuracy is critical. Moreover, these external copies of dashboards will become invaluable in case of disaster recovery.

Audit Trails

Sisense creates a detailed audit trail for interactions including logins, dashboard and widget usage and data imports tagged with user IDs and timestamps. This information is available to you using a set of pre-built dashboards called Sisense Analytics. Compared to just providing log files, this allows easy consumption of the information and ensures you are always in control, now and in the future.

Embed

Seamlessly integrate Sisense with your current interface and branding. Manage data, reporting and visualization. Integrate SSO and Active Directory. Govern user and data security. Support high availability and disaster recovery.

iFrames

Use iFrames to embed Sisense dashboards and widgets in non-Sisense environments, such as in your own websites or applications by concatenating parameters to the URL of your dashboard or widget. You can customize what aspects of the dashboard and widget are displayed in your environment.

Sisense.JS

Embed Sisense components in web pages without the use of iFrames using our Sisense.JS JavaScript library. By embedding the Sisense.JS library into your webpage, you can load Sisense runtime anywhere, load dashboards in runtime and render all/part/new widgets in any DOM container.

REST API

For advanced users and developers, we offer a complete set of RESTful web API to most of Sisense's server functionalities, from user management to manipulating dashboards and widgets. A web API allows you to use Sisense data in your application or website such as implementing a widget in your own corporate website that takes data from Sisense. You can also easily automate a process such as adding multiple users from a CSV file, using the user's API. Finally, we provide you with the full flexibility to implement your own UI on top of Sisense if you choose so.

Deploy

On-Premise

Deploy Sisense in your on-premise environment in less than an hour using off the shelf equipment. No expensive hardware needed, no special OS configuration required. Sisense will deliver value to you whether you install it on your personal laptop or your data center heavy duty servers.

Cloud

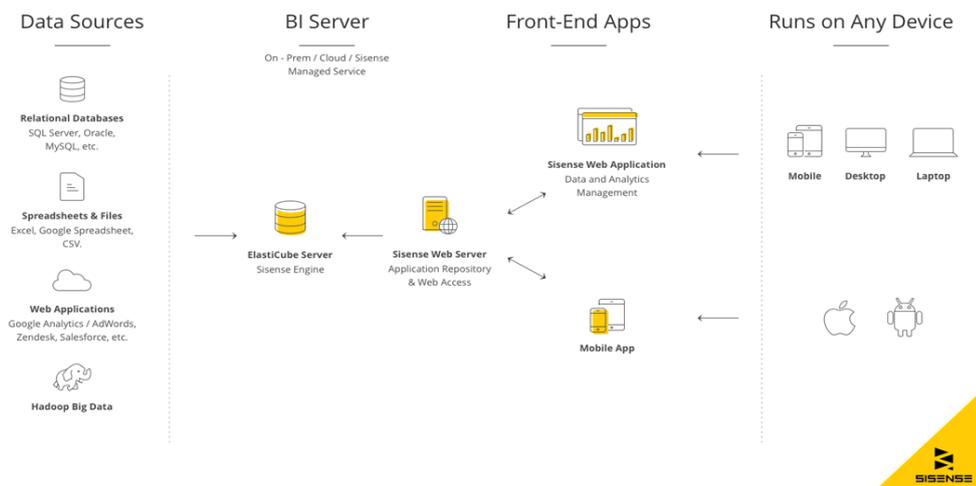
Choose your cloud provider of choice, be it AWS, Azure, GCP or others and Sisense will deploy there seamlessly. Whether you prefer to bring your own license (BYOL) to the public AWS cloud, run Sisense in your own private cloud on Azure, or hop between several providers, Sisense will work smoothly and support your ever-growing data needs.

Managed Cloud

Sisense managed cloud service gives you the analytics and insights you need, without worrying about hardware or IT. Securing your precious data, providing you with 24x7 monitoring and high availability and disaster recovery models allowing you to sleep well at night. Now you can focus on what really matters: giving your business users, analysts and customers the data they want to see, analyze and visualize, when and where they need it.

Technical Overview - Solution Description

Sisense Architecture



Sisense supports a full stack solution from data, such as transaction details, user information, and machine-generated data, to dashboards accessible by viewers.

The Sisense Server is responsible for managing data. Before you can begin to manage data however, Sisense communicates with remote servers for importing data sources, licensing information, tracking and similar activities.

The Sisense Server manages data and supports the Sisense Web Server, which hosts the Sisense Web Application. In a Single deployment, the Sisense Server resides locally on your machine. In a Clustered deployment, the Sisense Server can reside on one of your machines or across many machines depending on your needs. For example, if you want to support a high availability environment, you may install the ElasticCube Server on one machine, the Application Server on another, and the Multi-Node Orchestration server on another machine.

Sisense Server

The Sisense Server is comprised of the following components:

1. **Web Server:** The Sisense Web Server is installed locally on your computer and hosts the Sisense Web application. It provides access to Sisense dashboards and Sisense Admin screens for user management. Each dashboard created is maintained within the Web Server catalog and application database, which contains metadata regarding users, groups, dashboards and system settings. The Web Server is comprised of many additional services required by the Sisense front-end, including a Proxy service for routing application requests, plug-in management, and more. There are three main client applications that communicate with the Application Server:
 1. **Sisense Web App:** This Sisense Web Application is the client application for dashboard creation and access, and system administration.
 2. **Sisense Mobile App:** This Sisense Mobile Application is an Android and Apple-device compatible application for viewing dashboards across devices.
 3. **REST API:** The Sisense REST API provides programmatic access to the Sisense Application Server functionality including managing ElastiCubes, user and group management, white labeling, user roles, reporting, and security.
2. **ElastiCube Server:** The ElastiCube Server supports the management of ElastiCubes and the data they contain. The Sisense Server also supports the Application Server, which queries the ElastiCube Server where the ElastiCubes are hosted. Within the ElastiCube Server are the following main components:
 1. **ElastiCube Catalog:** The catalog maintains a list of ElastiCubes contained within the ElastiCube server.
 2. **Data Connectors:** The Data Connectors service is responsible for managing both native and 3rd party connectors.

3. Client Applications:
 1. Sisense ElastiCube Manager: A Windows client application for managing data sources. The ElastiCube Manager provides the GUI for creating ElastiCubes, including importing data sources, preparing them, and building the ElastiCubes.
 2. Sisense Shell (PSM.exe): A command line interface for managing ElastiCubes, such as building an ElastiCube, attaching and detaching ElastiCubes from a server, updating data sources, etc. The Sisense Shell can also be controlled programmatically.
 3. Sisense Server Console: A Windows application that controls Sisense servers, including attaching ElastiCube folders to Sisense servers and starting and stopping ElastiCubes.
4. Licensing: This service checks and validates licensing information.
5. Multi-Node Orchestration: The Sisense Orchestrator Service is an automated service that can be configured to synchronize builds across the ElastiCube Set.
6. Remote Support Analysis: This service is responsible for controlling logging, monitoring and automatic software updates.
7. Message Bus: The Message bus is a module responsible for transporting events across Sisense components.

Sisense Remote Servers

Sisense remote servers are used for license management, monitoring and software updates.

Data Sources

Data sources may be files or databases located on servers on a local network, or remote locations and web services such as Salesforce and Google AdWords. Sisense supports a variety of data sources through native connectors, customer REST connectors, and ODBC drivers. These connectors are used to import data into the ElastiCube Server.

Supported Operating Systems

ElastiCube Server and ElastiCube Manager can be installed on the following 64-bit operating systems:

- Windows 7 and higher
- Windows Server 2008 R2 through Windows Server 2016

Note: While Sisense supports Windows 7, it is highly recommended that production environments use Windows Server 2008 and later.

Capacity and Hardware Requirements

Sisense easily scales up to billions of records with typical query response times of split seconds.

This section suggests system requirements for various performance capacities of the ElastiCube Server. Actual capacity requirements are provided after consultation with a Sisense technical representative at support@Sisense.com. Extreme scenarios may require additional resources.

Sisense Dashboard viewers only require an HTML5 compliant Web browser.

These hardware requirements are also true for cloud deployments. Whether you are using AWS/Azure/Rackspace/etc., you must choose a machine that meets the recommended hardware configuration.

* Users are defined as concurrent users of the system regardless of licenses.

# of rows	< 10 users		10s of users		100s of users	
	RAM (GB)	Logical Cores	RAM (GB)	Logical Cores	RAM (GB)	Logical Cores
Up to 100K	8	4	8	4	16	8
up to 500K	8	4	16	4	16	8
up to 1M	8	4	16	4	32	8
up to 10M	16	4	16	8	32	8
up to 50M	16	8	32	8	64	16
up to 100M	25	8	32	8	64	16
up to 200M	32	8	32	8	64	16
up to 300M	32	8	64	16	64	16
up to 500M	64	16	128	16	256	32
up to 600M	128	16	128	32	256	32
up to 700M	128	16	128	32	512	32
up to 800M	128	16	256	32	512	32
over 800M	256	16	256	32	512	32

Sisense Security Architecture

Sisense is built around a robust and flexible security architecture that is both comprehensive and intuitive. This architecture has been designed to ensure security

processes are enforced while scaling to enterprise deployments of Sisense. Security is based on three levels associated with sets of security features: System Level, Object Level, and Data level. More details can be found here: <https://documentation.sisense.com/security/>

Security is based around three levels associated with sets of security features. The diagram below maps this security architecture on a system, data and object level.

System Level Security

System-level security encompasses security features for role-based settings and integration options. This includes user and server management, connection to an active directory, Single Sign-On (SSO) implementation, and use of the security REST API.

Object Level Security

Object security defines access rights for different users and groups to various components within Sisense. The two main objects are dashboards and ElastiCubes.

Data Level Security

Data access must provide data to people only to the extent that they need to complete their jobs. Data Level Security provides the necessary control to enforce varying degrees of data visibility and access to support the separation of duties. A single dashboard can be shared with many users, but each viewer sees only data relevant to their needs. This reduces both development time and provides for security.

REST API

The REST API provides the ability to automate and customize system security settings to fit a particular environment and security policies. The API can be used to integrate and automate restrictions and access control based on rules and standards, as well as to specify access rights and security to dashboards, ElastiCubes and data. The API can also be used in user management to create, edit and assign new users or groups.



Encryption

The Sisense web interface fully supports encryption using standard SSL to ensure privacy and security. Sisense encryption is compliant with the Federal Information Processing Standard (FIPS 140-2).

Sisense encrypts sensitive information such as account credentials and authorization profiles for Sisense and for data source connections before writing to disk. Sisense uses the following encryption algorithms: SHA-256, Triple DES, AES-256.

Operating System based disk encryption, Windows file system encryption -

Transparent Data Encryption (TDE), can be used for encrypting data at rest. When using Windows transparent encryption, the key pair (private/public) is bound to the user identity.

Data imported into and retrieved from Sisense can also be encrypted. For data import into Sisense, the import protocol depends on the protocols supported by the data source. Sisense also supports SSL for data movement from the Sisense Web Server into the user's web browser.

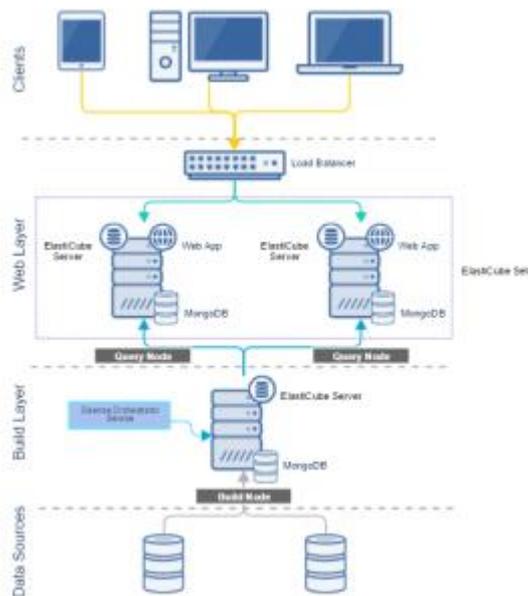
Tracking and Monitoring Data

Upon installation, Sisense collects data for internal and support related purposes such as improving customer experience and resolving technical issues. At no time is any personal information collected and all personal identifiers can be obfuscated. Additionally, tracking and monitoring of data can be turned off at any time.

In addition, Audit information is available, and can be extracted from the local application database by Sisense support.

High Availability in Sisense

While Sisense is fully-functional in an environment without high availability, a multi-node configuration is necessary for scalability to support large amounts of concurrent users and redundancy in case of a failure of one of the Sisense components.



In a multi-node configuration, Sisense components are replicated. Replicating each of these components provides redundancy and fault tolerance against the failure of any single component. The replicated components are combined into nodes. There are two types of nodes, a build node and query nodes. The query nodes, which handle user queries from the Sisense Web Application, are replicated to support high availability. The build node is typically not replicated as its failure only prevents building new Elasticubes not issuing queries from the Sisense Web Application.

Build Node

The build node is responsible for building Elasticubes and distributing the build to query nodes via the Sisense Orchestrator Service. The Sisense Orchestrator Service is an automated service that you configure on the build node to synchronize and distribute builds to the query nodes. For more information, see [Distributing Elasticube Builds to Query Nodes](#).

Query Nodes

Query nodes are responsible for supporting queries from Sisense users. These nodes contain a web server, MongoDB, and an Elasticube server. Elasticubes are distributed by the build node to the query node. The query nodes' Elasticubes are combined into Elasticube Sets to support high availability by separating the web and Elasticube servers across multiple query nodes. If a build node is distributing a build to one Elasticube server, Sisense automatically directs any queries to the other Elasticubes in the Elasticube Set.

The query node can be configured as a single application stack where each node hosts a Sisense Web Application, ElastiCube Manager, and a MongoDB. In this configuration, if the machine hosting the components fails, the whole query node will fail. Queries will then be redirected to the next available query node. Another option is to host each component of the query node separately in a distributed application stack. In this configuration, if a component of the query node fails, the rest of the query node is not affected. For an example of a single application stack, see [Scenario 1](#) and for an example of a distributed application stack, see [Scenario 2](#).

Load Balancer

In addition to query and build nodes, to support a high availability configuration, you must handle load balancing on your side prior to directing traffic to one of your Sisense nodes. Load balancing spreads requests across multiple query nodes according to an algorithm you define and the current status of the query node.

When implementing ElastiCube Sets, Sisense's query nodes operate in active-active mode. This means that each of the query nodes is active and can handle requests when the node is not building, and its components are available. For example, traffic could be spread 50-50 across two web servers and if a component fails, a load balancer should redirect traffic to the other available web server.

The URL of your load balancer should be provided as an Alias in Admin > Settings in the Sisense Web Application. This directs Sisense to send traffic to your load balancer, which then sends the traffic to the relevant server.

Sisense Security Architecture

Sisense is built around a robust and flexible security architecture that is both comprehensive and intuitive. This architecture has been designed to ensure security processes are enforced while scaling to enterprise deployments of Sisense. This includes the ability to secure dashboards and data as well as implement custom security requirements that suit your organization. This section provides a general overview of the main security features.

Security is based around three levels associated with sets of security features. The diagram below maps this security architecture on a system, data and



System Level Security

System-level security encompasses security features for role-based settings and integration options. This includes user and server management, connection to an active directory, Single Sign-On (SSO) implementation, and use of the security REST API.

You can assign access rights to different ElastiCube servers for individual users, groups or to everyone. These settings allow the management of different environments such as a testing and production server, or servers for specific projects or departments. See also [ElastiCube Server](#) and [ElastiCube Security](#).

SSO facilitates seamless integration between Sisense and other systems in your organization while offering standardization of authentication policies across your organization. This can improve user productivity by avoiding password fatigue and reduce support overhead. See also [Configuring SSO](#).

Object Level Security

Object security defines access rights for different users and groups to various components within Sisense. The two main objects are dashboards and models (ElastiCubes).

Dashboards

You can share dashboards on either a user or group level. The sharing options include the configuration of access rights for all users as well as whether users

defined as designers may edit the dashboard. The sharing options also include subscription settings that define which users and groups will receive email reports.

Models (ElastiCubes)

You can define access rights to different ElastiCubes on a user or group level. This enables flexibility to create ElastiCubes for specific user or group needs while offering strict access control.

Data Level Security

Data access must provide data to people only to the extent that they need to complete their jobs. Data Level Security provides the necessary control to enforce varying degrees of data visibility and access to support the separation of duties. A single dashboard can be shared with many users, but each viewer sees only data relevant to their needs. This reduces both development time and provides for security.

You can grant user and group permissions to specific rows in the data. For each ElastiCube, you can apply multiple rules to enforce granular access control.

For more details about our security, click [here](#)

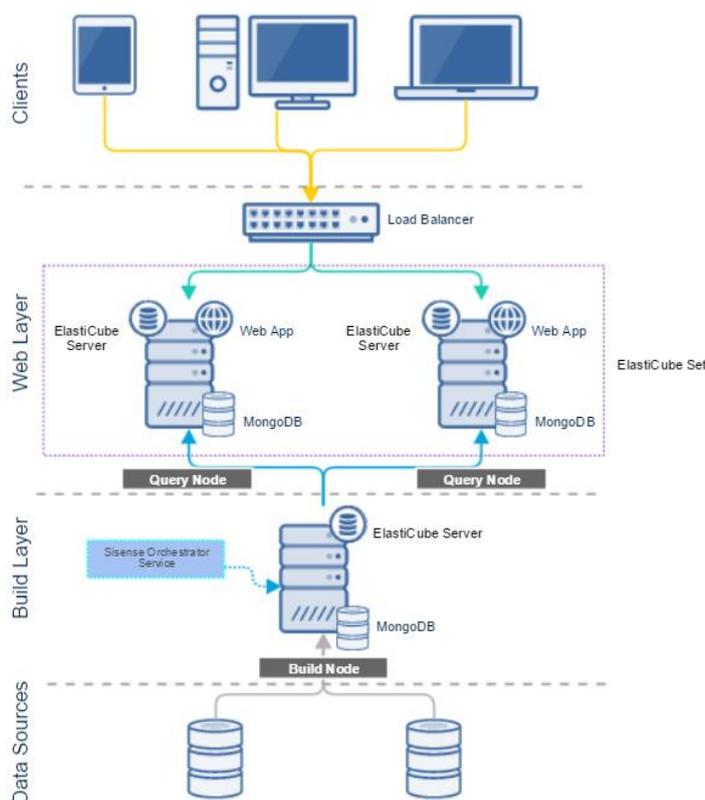
Scalability

Sisense provides flexible design choices for supporting high availability (HA) and scalability for your Sisense configuration. To configure Sisense for high availability or optimized performance by scaling out Sisense servers, you must build in redundancy, thus reducing potential downtime or bottlenecks.

Compared to other tools, Sisense is less limited on the actual data size. The data is stored at a columnar level, so the single biggest table defines the constraint, and you can run several billions of rows on a single machine. a multi-node configuration is necessary for scalability to support large amounts of concurrent users and redundancy in case of a failure of one of the Sisense components.

In a multi-node configuration, Sisense components are replicated. Replicating each of these components provides redundancy and fault tolerance against the failure of any single component. The replicated components are combined into nodes. There are two types of nodes, a build node and query nodes. The query nodes, which handle user queries from the Sisense Web Application, are replicated to support high availability. The build node is typically not replicated as its failure only prevents building new ElastiCubes not issuing queries from the Sisense Web Application.

Example for multi node architecture



SLA

Sisense is obsessed to make sure our clients enjoy positive returns on investment in their business intelligence journey. Our commitment to helping clients accelerate their time to value across each milestone is reflected across three core fundamentals to customer success that we bring to each relationship.



- Customer Support: Dedicated Sisense professionals lead clients through on-boarding and implementation. Our professionals can assist clients with their business and technical requirements.
- Business Intelligence Engagement: Many of our clients are not experts in BI. We have the expertise, people, and processes intended to make product knowledge transfer easy and become self-sufficient quickly across each BI milestone.
- Partnership: We think of ourselves as an extension of – and partner to – each customer, and not just as software providers. We invest significant resources and time to understand your day to day needs, long-term vision and key metrics for your success to make sure you get where you need to go with Sisense.

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