



SENTURUS

ENTERPRISE SECURITY: TABLEAU VS. POWER BI

Compare Approaches to Security Concerns

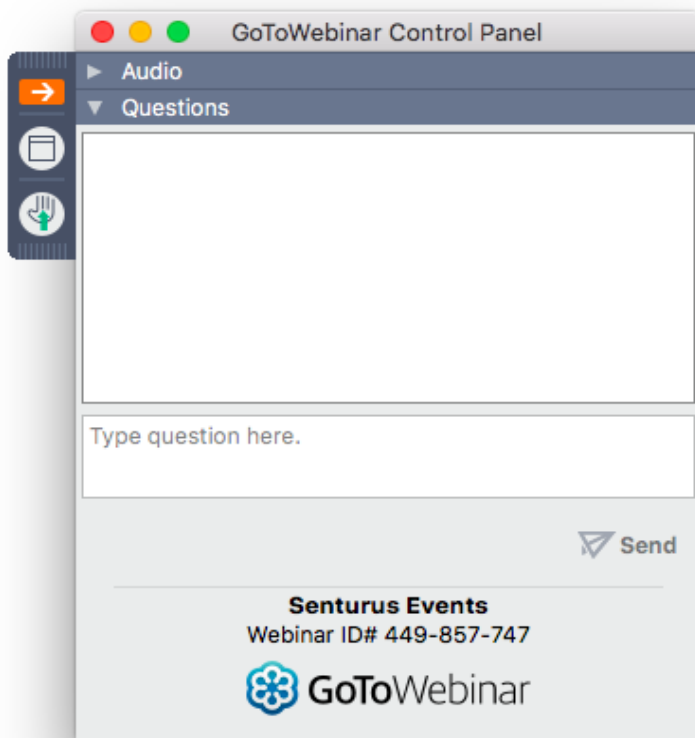


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A COMPARISON OF POWER BI, TABLEAU & COGNOS Differentiators Demo'd	 FEATURES	→

Agenda

- Introductions
- Architecture overview
- Single sign on
- Users & groups
- Permissions & row-level security
- On-premise data access
- Audit logs
- Senturus overview
- Additional resources
- Q&A

Introducing...Today's Presenters



Bob Looney

Sr. Director of Software Engineering
Senturus, Inc.



Michael Weinbauer

Practice Area Director/Solutions Architect
Senturus, Inc.

Poll #1

Which of these platforms do you currently use? (Select all that apply)

- Cognos Analytics
- Power BI
- Tableau
- Other

Poll #2

In what stage is your organization in the deployment of Tableau or Power BI?

- Isolated desktop users, sharing workbook files
- Some departments have adopted & deployed a server/service
- Corporate-wide policy and mature BI processes
- Full migration planned or in process
- No one using/unknown



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ARCHITECTURE OVERVIEW

Components

- **Desktop**

- Power BI Desktop (Windows)
- Tableau Desktop (Windows, Mac)



- **Vendor hosted service**

- Power BI service (app.powerbi.com)
- Tableau Online (online.tableau.com)



Components

- **On-premise server**
 - Tableau Server – (Windows, Linux)
 - N/A
 - Power BI Report Server – subset of Power BI service
- **On-premise data access**
 - Power BI Gateway (Windows)
 - Tableau Bridge (Windows)
- **Mobile apps**
 - Both offer iOS and Android apps

Example Architecture Diagram

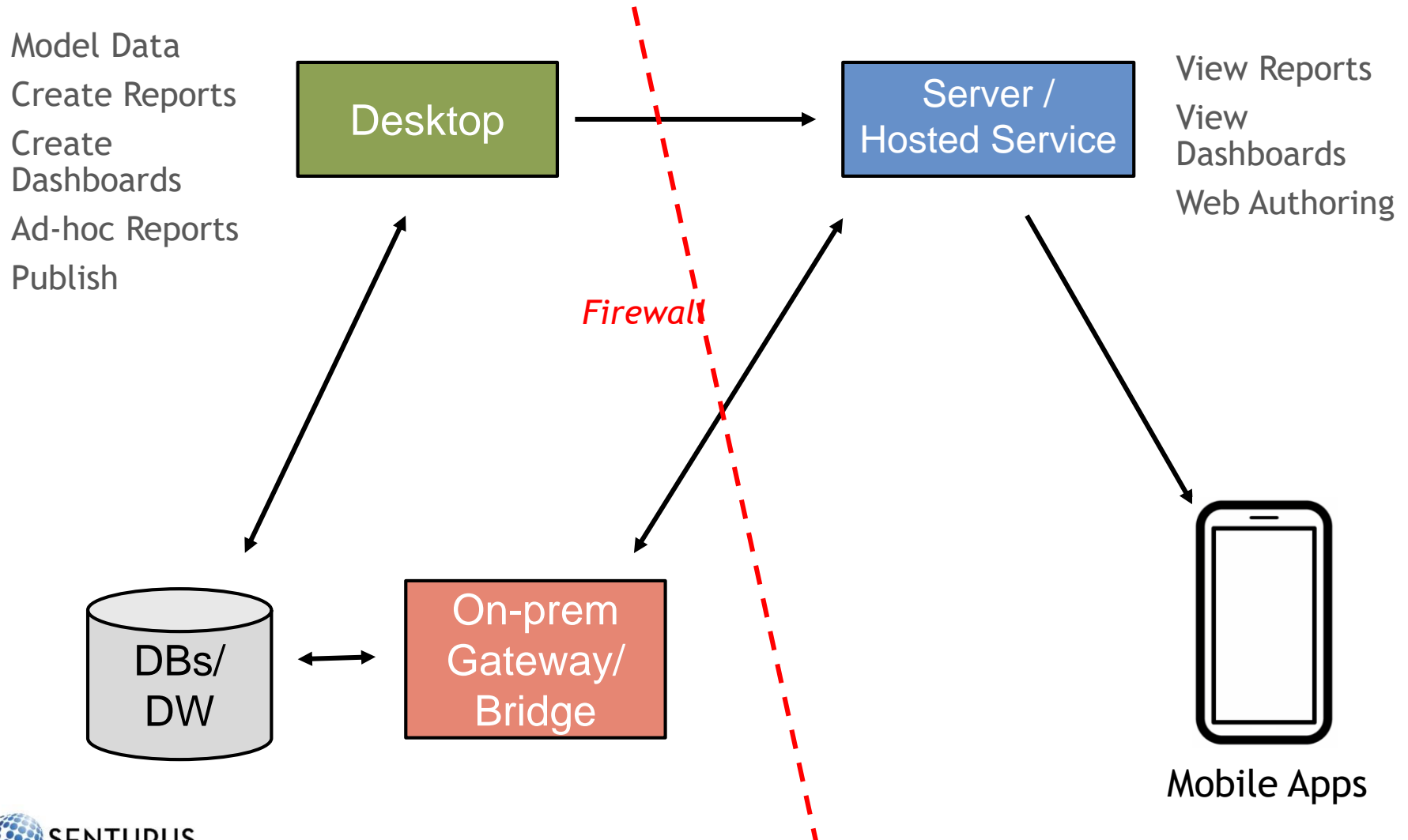
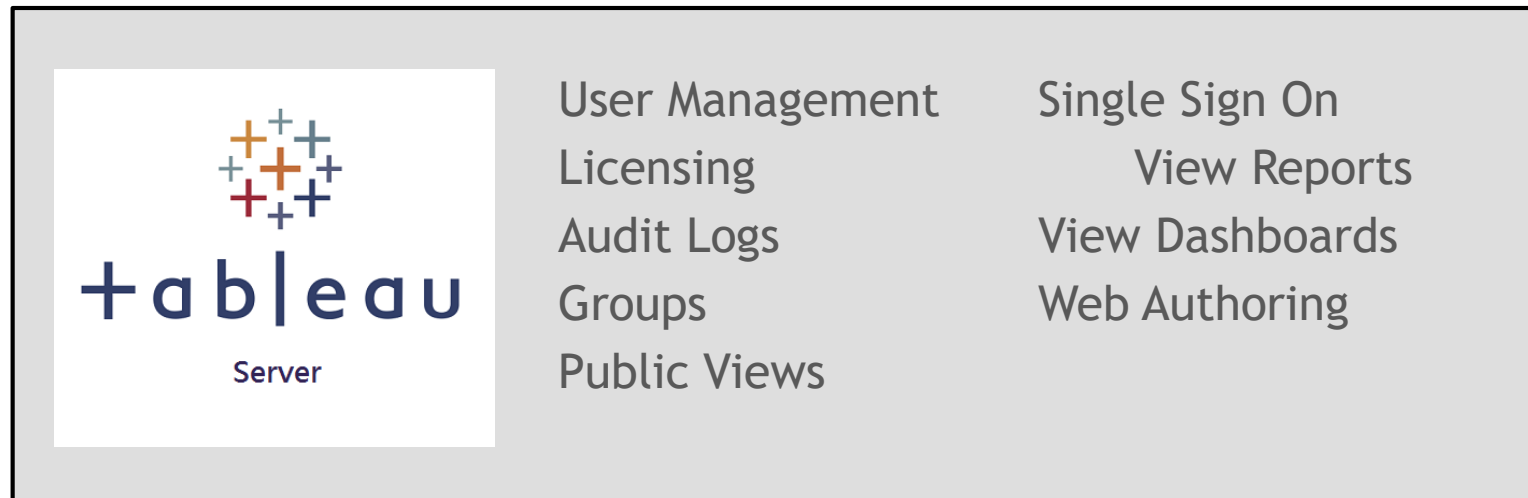


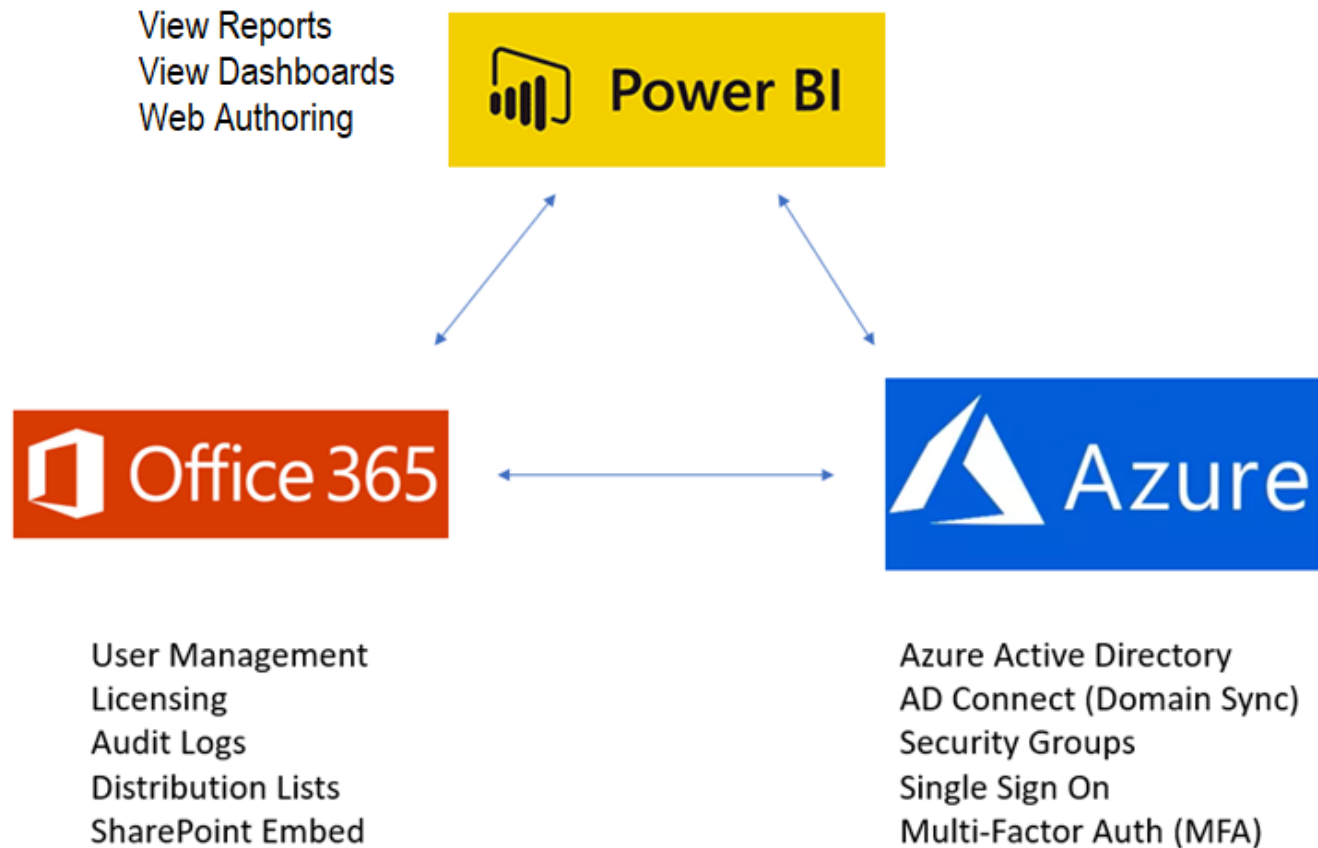
Tableau Server Architecture

- Tableau Server works as a standalone web app like most other on prem or SaaS applications
- Application is installed on a server or VM



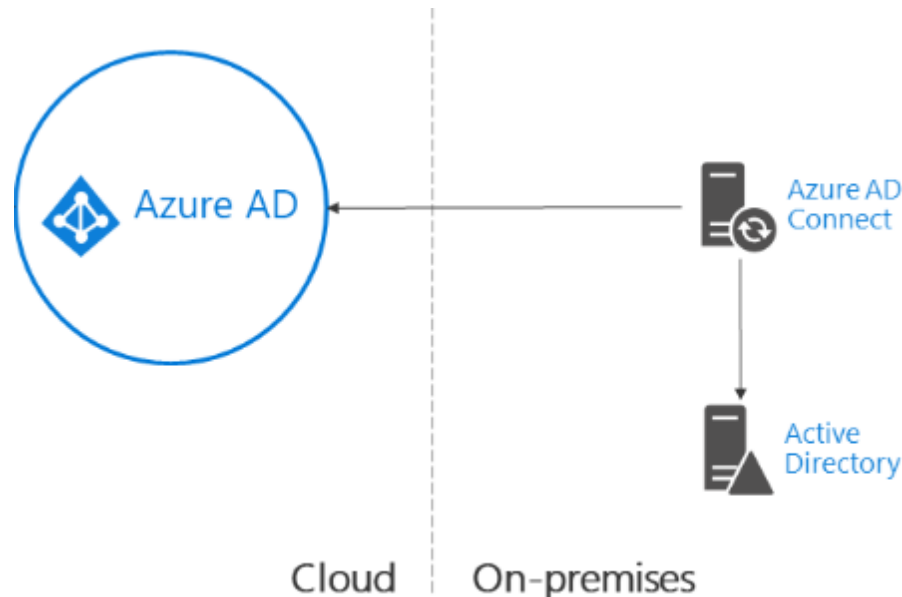
Power BI Service Architecture

Power BI service is designed as a piece of the larger Microsoft Azure cloud architecture...



Azure AD Connect

- On-premise Active Directory domains need to be synced to Azure Active Directory
- This is done using a Microsoft utility called AD Connect
- If you're using other Office 365 applications (Exchange Online, SharePoint Online) with Active Directory, this step has already been completed by your IT department



Component Overview Summary

- Largely the same core components and features
- Tableau has a few unique strengths
 - Mac desktop/Linux server
 - On-premise server
- Power BI is strong when an organization is already implementing Office 365/Azure
 - IT will already be managing users and groups





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SINGLE SIGN ON

Single Sign On - Overview

- Enterprises use single sign on to increase security



- Multi-factor authentication (MFA) at the SSO level
 - SMS text messages
 - Authentication mobile apps/security tokens or keys

Single Sign On - Tableau Server

- Works like most other SaaS applications
- Default authentication is the user's own username and password database
- Supports SAML and OpenID Connect (Google) for SSO



okta

PingOne®

onelogin

 SECUREAUTH

 OpenID
Connect

...and more

Single Sign On - Tableau Setup

- Similar to other SaaS applications

Authentication types [Learn more](#)

- ☒ **Tableau**
This is the default authentication type for Tableau Sites, and is always enabled.
- ☒ **Enable an additional authentication method**
 - ☐ **Google**
This allows you to set OpenID as your users' authentication method
 - ☒ **onelogin.com (SAML)**
This allows you to set up your SAML provider to work with Tableau so your users can sign in to (i.e. Okta, OneLogin, etc.)
[Edit Connection...](#)

- Several options are well documented and supported by Tableau

Site Authentication

[Access Sites Directly from Connected Clients](#)

[SAML and How it Works](#)

[SAML Requirements for Tableau Online](#)

[Enable SAML Single Sign-On for a Site](#)

[Configure SAML with Azure Active Directory](#)

[Configure SAML with AD FS](#)

[Configure SAML with OneLogin](#)

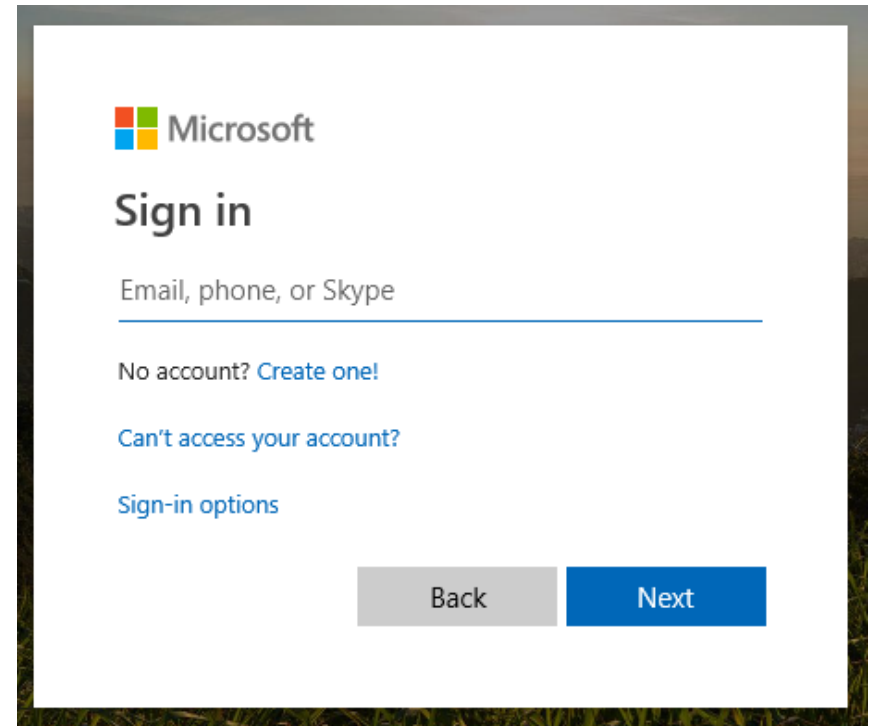
[Configure SAML with PingOne](#)

[Configure SAML with Okta](#)

[Troubleshoot SAML](#)

Single Sign On - Power BI

- Unlike most other SaaS applications
- Power BI does not maintain a separate database of usernames and passwords
- Power BI uses Azure Active Directory to authenticate users
- Azure AD's default authentication is Microsoft's own identity provider (IdP)



Single Sign On - Power BI

- You *can* replace Azure's authentication step with another identity provider (IdP)



- Supports WS Federation, WS-Trust and SAML-P protocols
- If your IT group sets this up, it is replaced for all Microsoft authentication calls (Office 365, Azure login, connected apps, etc.)

Single Sign On - Power BI

Using a third party IdP is possible, but...

- Microsoft points you to your IdP if you have questions
- Microsoft doesn't provide any IdP specific setup steps
- Microsoft no longer tests and validates IdPs

If your organization uses a third-party federation solution, you can configure single sign-on for your on-premises Active Directory users with Microsoft Online services, such as Office 365, provided the third-party federation solution is compatible with Azure Active Directory. For questions regarding compatibility, please contact your identity provider. If you would like to see a list of identity providers who have previously been tested for compatibility with Azure AD, by Microsoft, click [here](#).

ⓘ Note

Microsoft no longer provides validation testing to independent identity providers for compatibility with Azure Active Directory. If you would like to test your product for interoperability please refer to these [guidelines](#).

Single Sign On Summary

- Both platforms support single sign on

- Are you already using Office 365?

- Power BI SSO setup will be faster
- Tableau SSO Setup is still possible



- Are you using an organization wide IdP (Okta, onelogin, etc) not tied to Azure?

- Tableau SSO setup will be faster
- Power BI SSO setup is still possible





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USERS & GROUPS

Tableau Users - Manual

- Manual, bulk options are well supported

Add Users to this Site

Enter Email Addresses

Add one or more users by email

Import From File

Import users from a CSV file.

Add Users

☐

Add users for onelogin.com (SAML) authentication

Users will receive an invite email that contains a link to the site.

☒

Add users for Tableau authentication

Users will receive an invite email that contains a link to the site and instructions to set up their Tableau ID.

Enter email addresses

Click here and type email addresses separated by semicolons

Site role

Explorer (can publish)



Tableau Groups - Manual

- Adding and assign groups manually
- Users are typically placed in one or more groups
- Best practice: use groups to assign permissions

The screenshot displays the Tableau Groups management interface. On the left, a list of groups is shown under the heading 'Groups 14'. The list includes a '+ New Group' button and a dropdown indicating '0 items selected'. The groups are sorted by name and include checkboxes for selection. The groups listed are Training, Sales, Marketing, IT, and Finance. An arrow points from the 'IT' group in this list to the right-hand panel, which shows the details for the 'IT' group. The right panel has a header with a group icon, the name 'IT', and a tab indicator 'T'. Below this, it says 'GROUP • Domain: local'. The 'Members' tab is active, showing '1' member. There is an '+ Add Users' button and another '0 items selected' dropdown. The member list shows a checkbox and a user card for 'BL Bob Looney'.

Groups 14	
+ New Group ▼ 0 items selected	
↓ Name	
<input type="checkbox"/>	T Training
<input type="checkbox"/>	S Sales
<input type="checkbox"/>	M Marketing
<input type="checkbox"/>	I IT
<input type="checkbox"/>	F Finance

IT T	
GROUP • Domain: local	
Members 1 Details	
+ Add Users ▼ 0 items selected	
Display name	
<input type="checkbox"/>	BL Bob Looney

Tableau Users & Groups - API

- Tableau provides REST APIs for managing users and groups programmatically

https://help.tableau.com/current/api/rest_api/en-us/REST/rest_api_ref.htm

Users and Groups	Create Group
	Add User to Group
	Add User to Site
	Get Users in Group
	Get Users on Site
	Query Groups
	Query User On Site
	Update Group
	Update User
	Remove User from Group
	Remove User from Site

Tableau Users & Groups - IDP

- New feature allows the configured IdP to maintain users
 - Only Okta and OneLogin supported currently

System for Cross-domain Identity Management (SCIM) [Learn more](#)

Allow a third-party identity provider to manage users on this site.

☐ Enable SCIM

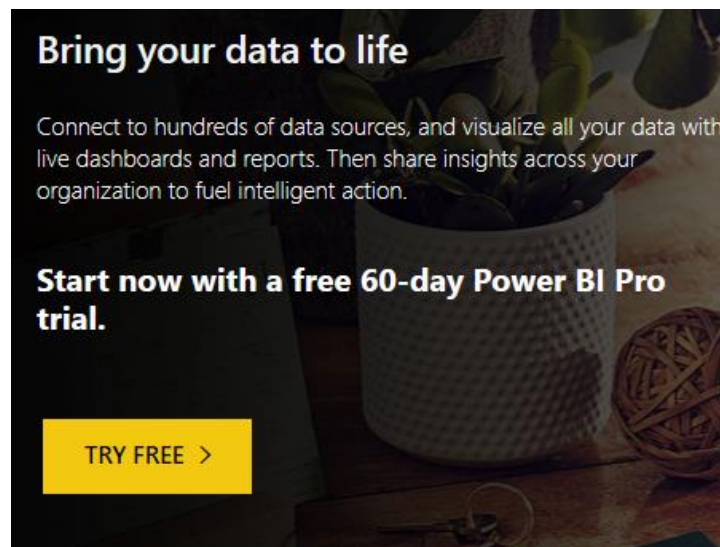
Base URL

https://

Generate New Secret

Power BI Users

- Anyone can download and install Power BI desktop (no license needed (just machine permissions to install))
- Publishing or using data sources on Power BI service requires a Power BI Pro license



- An end user could install and start using Power BI service without IT involvement until that trial expires

Power BI Users - Manual

- You cannot make a user specifically inside Power BI
- IT typically controls this process
 - On prem AD, Azure AD or Office 365

Add user

● Basics

○ Product licenses

○ Optional settings

○ Finish

Set up the basics

To get started, fill out some basic information about who you're adding as a user.

First name

Last name

Display name *

Username *

@

senturus.com

▼

Password settings

☒ Auto-generate password

☐ Let me create the password

Example:
admin.microsoft.com

Power BI Groups - Manual

- You cannot make a group specifically inside Power BI
- Again, IT typically controls this process

N

New Group
Office 365

×

Add a group

Type

Office 365

Office 365

Distribution list

Mail-enabled security

Security

@

senturus.com

Description

Privacy *

Public - Anyone can see group content

Owner *

+ Select owner

Office 365 groups (recommended) are a great way for teams to collaborate by giving them a group email and a shared workspace for conversations, files, and calendar events.

Distribution lists send email to all members of the list. You can even allow people outside your organization send email to a list.

Mail-enabled security groups can be used to control access to OneDrive and SharePoint as well as to send email to all members of the list.

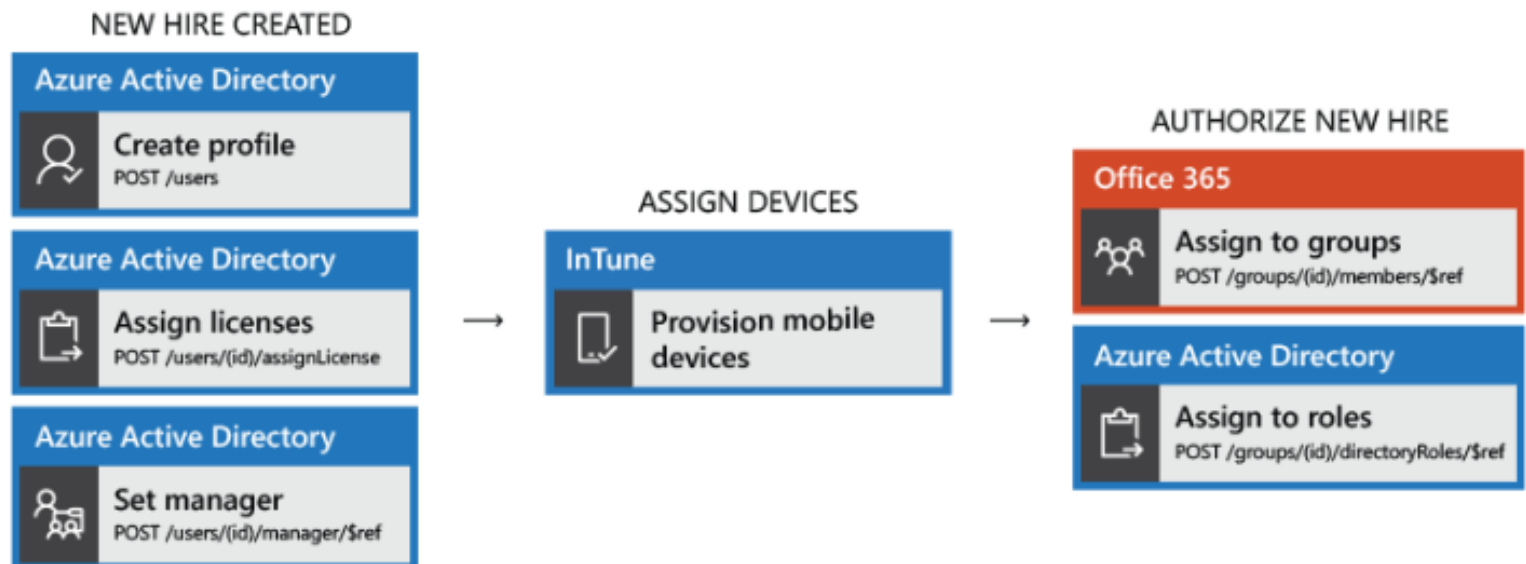
Security groups control access to OneDrive and SharePoint and are used for Mobile Device Management for Office 365.

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Example:
admin.microsoft.com

Power BI Users & Groups - API

- The Microsoft Graph API allows programmatic creation and maintenance of directory objects
- <https://developer.microsoft.com/en-us/graph>
- Also allows for some fancy employee onboarding workflows



Users & Groups Summary

- Both platforms support users and groups
- Both platforms support automation features

- Power BI will leverage users and groups from Azure AD—AD connect can sync or prem AD to the cloud



- Tableau will need a method/process to create users and groups prior to SSO login—enterprises will likely want to automate this process





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PERMISSIONS & ROW-LEVEL SECURITY DEFINED

Permissions & Row-Level Security

- **Permissions** enforce which folders, reports and data sources users can access and to what extent (View, Edit, Create, Delete)
 - “Which reports can a user see or edit?”
 - Always enforced at the BI tool level
- **Row-Level Security (RLS)** is a pattern that restricts access to slices of your data (aka **Entitlements**)
 - “What data rows can a user see in a report?”
 - Enforced at the DW or BI tool level
- The combination of **Permissions** and **Row-Level Security** enforce your company’s data governance policies

Permissions - Example



Executives Group

- Can View All Folders



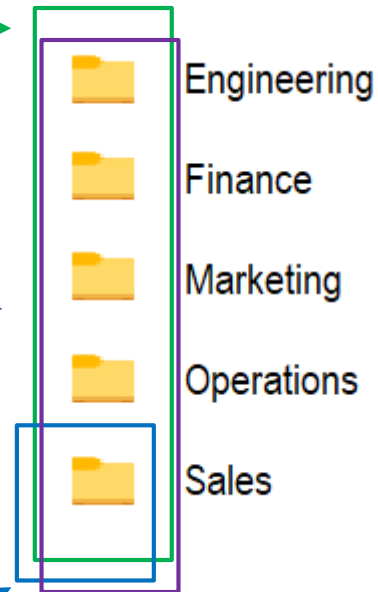
Business Analyst Group

- Can View, Modify, Create, & Delete All Folders



Sales Associates Group

- Can View Sales Folder

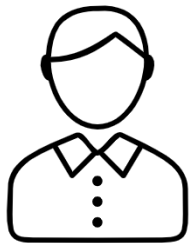


Row-Level Security - Example

Two people in an organization have **permission** to view the same report. When they view the report, they see different slices of the data.

Company Policy:

- A **store manager** should only have access to their store
- A **corporate manager** should have access to all stores



Store Manager

DAILY SALES	
Store	Sales
101	\$1,234

DAILY SALES	
Store	Sales
101	\$1,234
102	\$787
103	\$982
104	\$881



Corporate Manager



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PERMISSIONS

Tableau Permissions

- Typical folder (“project”) structure where permissions cascade down
- Nested folders are possible
- Assign/restrict a user or group at the project, workbook and data source levels
- Project level view of permissions

Permissions

Edit permissions for the project “Finance”.

<input type="text" value="Search for a user to view their permissions"/>				
User / Group	Project ▶	Workbooks ▶	Data sources ▶	
		Managed by the owner	Managed by the owner	
All Users (13) ...	Publisher	Custom	Custom	
Finance (0) ...	Publisher	Editor	Editor	

Tableau Workbook Permissions

Workbook level permissions

Permissions

Edit permissions for the workbook "Book1".

Search for a user to view their permissions

Permissions for views are controlled independently

User / Group			Permissions	View					Interact/Edit				Edit				
			Managed by the owner														
All Users (13)	...	Custom		✓	✓	✗	✓	✓	✓	✓	✓		✓				
IT (1)	...	Custom		✓	✓	✓	✗	✓									

+ Add a user or group rule

User Permissions

IT (1)

Bob Looney	Administrator		•	•	•	•	•	•	•	•	•	•	•	•	•	•
------------	---------------	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Tableau Data Source Permissions

Data Source permissions

Permissions

Edit permissions for the data source "Training Data Source (Online)".

Search for a user to view their permissions

User / Group	Permissions	Use	Edit
	<div><div></div><div>Managed by the owner</div></div>	<div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>
<div><div></div><div>All Users (13)</div><div>...</div></div>	Custom	<div><div></div><div></div></div>	<div><div></div><div></div><div></div><div></div><div></div><div></div></div>


Power BI Workspace Permissions

- Power BI calls folders “Workspaces”
- Nested folders are not possible
- Use the new/upgraded workspace experience

Create a workspace

YOU'RE CREATING AN UPGRADED WORKSPACE
Enjoy new features, better sharing options, and improved security controls.
[Revert to classic](#) | [Learn more](#)

Workspace image

 [Upload](#)
[Delete](#)

Workspace name

NAME	PERMISSION
Bob Looney	Admin
Michael Weinbauer	Member
Xuesong Gao	Contributor
Executives	Viewer

Power BI Report Permissions

- Permissions are assigned at the folder level, not the report level (unlike Tableau)
- You can control some “interactions” at the report level, but for all users using Report Settings

Export data

Choose the type of data you allow your end users to export.

Summarized data ▼

Filtering experience

Enable the updated filter pane, and show filters in the visual header for this report



Allow users to change filter types



Cross-report drillthrough

Allow visuals in this report to use drillthrough targets from other reports



Comments

Allow users to add comments to this report.



Power BI Dataset Permissions

- Datasets have a specific set of permissions
- Inherited from the workspace, overridden at the dataset level

 airports

Related content

DASHBOARDS

No related content

REPORTS







airports

WORKBOOKS



No related content

Showing 4 recipient(s) [Add user](#)

<input type="checkbox"/>	USERS AND GROUPS WITH ACCESS	EMAIL ADDRESS	PERMISSIONS
<input checked="" type="checkbox"/>	 Bob Looney	rlooney@senturus.com	Admin (Owner)
<input checked="" type="checkbox"/>	 Michael Weinbauer	mweinbauer@senturus.com	Member (Ow...
<input type="checkbox"/>	 Xuesong Gao	xgao@senturus.com	Contributor ...
<input type="checkbox"/>	 Executives	N/A	Viewer ...

[Add reshare](#)
[Add build](#)

Permissions Summary

- Both applications cascade permissions from the project/workspace (folder) down to the reports, dashboards and datasets
- Power BI has broader user permission settings at the folder level 
- Tableau offers nested folders and deeper fine tuning of user permissions 



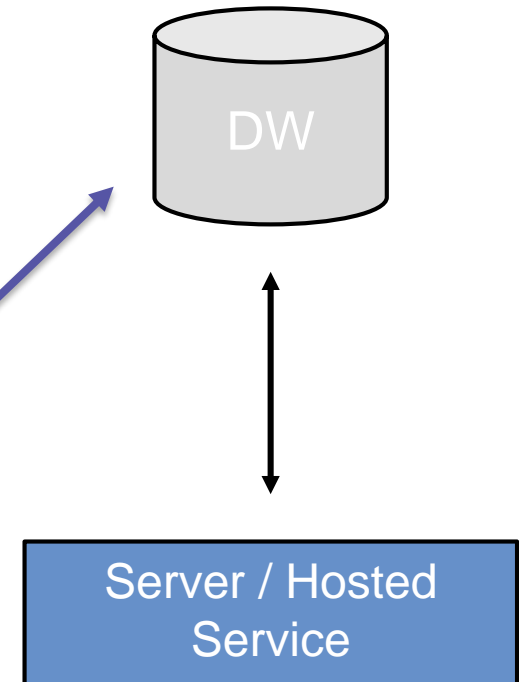
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ROW-LEVEL SECURITY

Where Do You Implement RLS?

In an enterprise environment, you have a choice of where to implement RLS

- **Option 1:** Data warehouses can implement RLS at the model layer. Power BI and Tableau can then be configured to pass the logged-on user info to the DW to enforce RLS.
- **Option 2:** Power BI and Tableau can implement RLS at the server application layer. They use the logged-on user and enforce RLS using logic at the dataset and workbook level.



Power BI Passing The DW The Logged-on User

Option 1: Implement RLS in the DW (Power BI)

- Works really well with Analysis Services
- Supports a limited set of other DW/DBs using Kerberos delegation

We currently support the following data sources:

- SQL Server (Kerberos)
- SAP HANA (Kerberos and SAML)
- SAP BW (Kerberos)
- Teradata (Kerberos)
- Spark (Kerberos)
- Impala (Kerberos)

Tableau Passing The DW The Logged on user

Option 1: Implement RLS in the DW (Tableau)

- Initial SQL feature can pass logged on user
- Impersonation command executes for each session / query

- SQL Server

```
EXECUTE AS USER = [TableauServerUser] WITH NO REVERT;
```

- Oracle

```
DBMS_SESSION.SET_IDENTIFIER([TableauServerUser]);
```

- Also supports a limited set of DW/DBs via Kerberos delegation

Tableau supports Kerberos delegation with the following data sources:

- Specific SAP HANA and SAP BW support as well
- Tableau Online not supported

- Cloudera: Hive/Impala



- Denodo



- Hortonworks

- MSAS



- Oracle



- PostgreSQL

- Spark

- SQL Server

- Teradata



Only Tableau

Implementing Row-Level Security in Power BI

Option 2: Implement RLS in the Application (Power BI)

Power BI Desktop:

- Create roles
- Test roles - view as roles

Power BI Service:

- Assign users and groups to roles
- Test roles
- Deliver reports to users that enforce RLS

Power BI Desktop - CREATE Roles

Static Role - manage RLS with BI groups

Manage roles

The screenshot displays the 'Manage roles' interface in Power BI Desktop. It is divided into three main sections: 'Roles', 'Tables', and 'Table filter DAX expression'. In the 'Roles' section, a role named 'Houston Employee' is listed with a three-dot menu icon to its right. Below this list are 'Create' and 'Delete' buttons. In the 'Tables' section, two tables are listed: 'Sales' and 'Users'. The 'Sales' table is selected, indicated by a yellow highlight and a funnel icon with a three-dot menu. In the 'Table filter DAX expression' section, the expression '[Store] = "Houston"' is entered.

Dynamic Role - manage RLS with a data table

The screenshot displays the 'Manage roles' interface in Power BI Desktop for a dynamic role. It is divided into three main sections: 'Roles', 'Tables', and 'Table filter DAX expression'. In the 'Roles' section, a role named 'User Filter' is listed with a three-dot menu icon to its right. Below this list are 'Create' and 'Delete' buttons. In the 'Tables' section, three tables are listed: 'Sales', 'Stores', and 'Users'. The 'Users' table is selected, indicated by a yellow highlight, a dashed border, and a funnel icon with a three-dot menu. In the 'Table filter DAX expression' section, the expression '[User] = USERPRINCIPALNAME()' is entered.

All based on the DAX language

- `USERPRINCIPALNAME()` = *user@company.com*

Power BI Desktop - Test Roles DESKTOP

Use View as Roles to test a role as a user in desktop

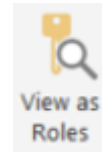
View as roles


☐ None

☒ Other user

houston@senturus.com

☒ User Filter



 Now viewing report as: User Filter, houston@senturus.com [Stop viewing](#)

Houston	21189
Total	21189

User	Store
houston@senturus.com	Houston

Power BI Service - Test Roles ONLINE

Roles can also be tested online against published reports

Row-Level Security

Chicago Employee (0)
Houston Employee (1)
San Francisco Employee (0)

Members (1)
People or groups who
Test as role

Now viewing as: Houston Employee ▾

File ▾ View ▾ Edit report | Explore ▾ Refresh

Store	Sales
Houston	21189
Total	21189

Static Filters allow you to specify which role to view the report with

Row-Level Security Now viewing as: User Filter ▾

SELECT PERSON

houston@senturus.com ✕

OR SELECT ROLE

☐ User Filter (0)

Apply

Dynamic Filters allow you to specify which user to view the report with

Implementing Row-Level Security in Tableau

Option 2: Implement RLS in the Application (Tableau)

Tableau Desktop:

- Create roles
- Assign users and groups to static filters
- Test roles

Tableau Server/Online:

- Assign users to groups
- Deliver reports to users that enforce RLS

Tableau Desktop - Create Roles (Filters)

Create a **Static Filter** and Map users and groups

Define all mappings

- Tableau group assigned to a value for the selected field

Dynamic Filters can use built in functions in a calculated field

- USERNAME()
- ISMEMBEROF()
- USERDOMAIN()

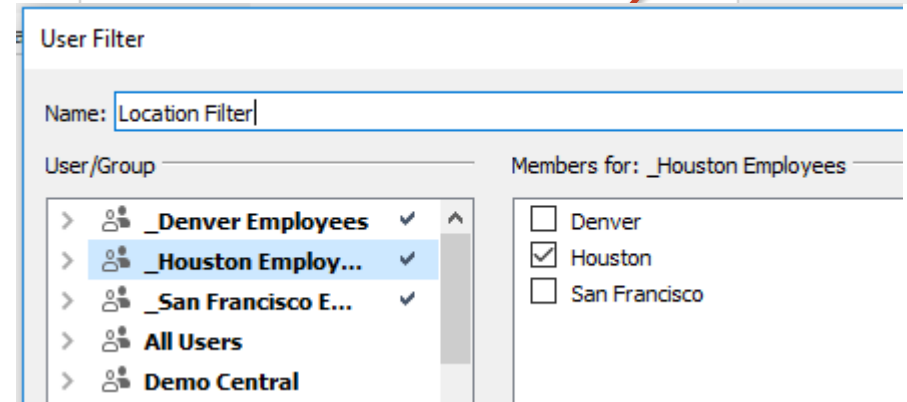
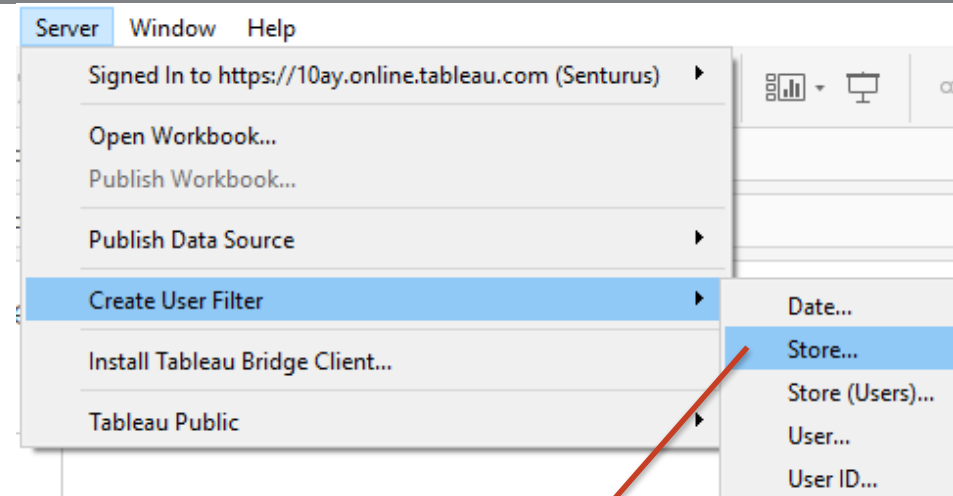


Tableau Desktop - Implement and Test Filters

RLS Filter becomes a set that can be added as a filter on the worksheet

Test RLS with the dropdown of groups and users from Tableau Server

Note: Cannot test RLS on the server, only in desktop

The screenshot shows the Tableau Desktop interface. In the 'Filters' shelf, a 'Location Filter' is added, indicated by a green arrow. The 'Marks' shelf shows 'SUM(Sales)' as the aggregation. The 'Columns' shelf is empty, and the 'Rows' shelf contains 'Store'. The main view displays a table with the following data:

Store	Sales
Denver	19,809

Below the main view, the 'Filter as User' dropdown menu is open, showing a list of users and groups. The list includes:

- _Denver Employees
- _Houston Employees
- _San Francisco Employ...
- All Users
- Demo Central
- Demo East
- Demo North
- Demo South
- Demo West
- Finance
- IT
- Marketing
- Sales
- Training

The status bar at the bottom shows '19,809'.

Row-Level Security Summary

- Enterprises with an existing DW with RLS should assess if the BI tool is compatible
 - Tableau supports a wider variety of DWs
- Enterprises without a DW or with incompatible DW technologies can enforce RLS at the BI tool level
 - **Static Filters**—maintain groups in the BI tool to enforce
 - **Dynamic Filters**—maintain entitlement data table, leverage BI tool USER functions to enforce





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ON-PREMISE DATA ACCESS

On Prem Data Access Overview

- Companies often store data in a data warehouse or databases in an on-premises data center
- Tableau and Power BI can be hosted online
 - Power BI service is only available as a vendor hosted service
 - Tableau Server running in a cloud (AWS, Azure, etc.) or Tableau Online will also need this
- When deployed like this, a gateway or bridge is needed to securely access data

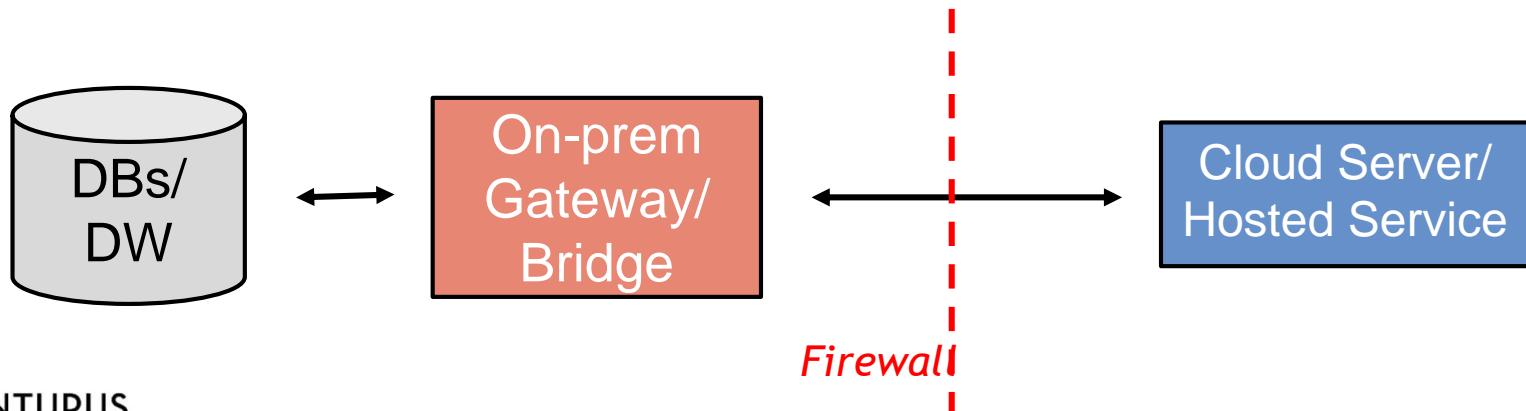


Tableau Bridge

- Tableau Bridge is the Tableau product that provides access to on-premises data




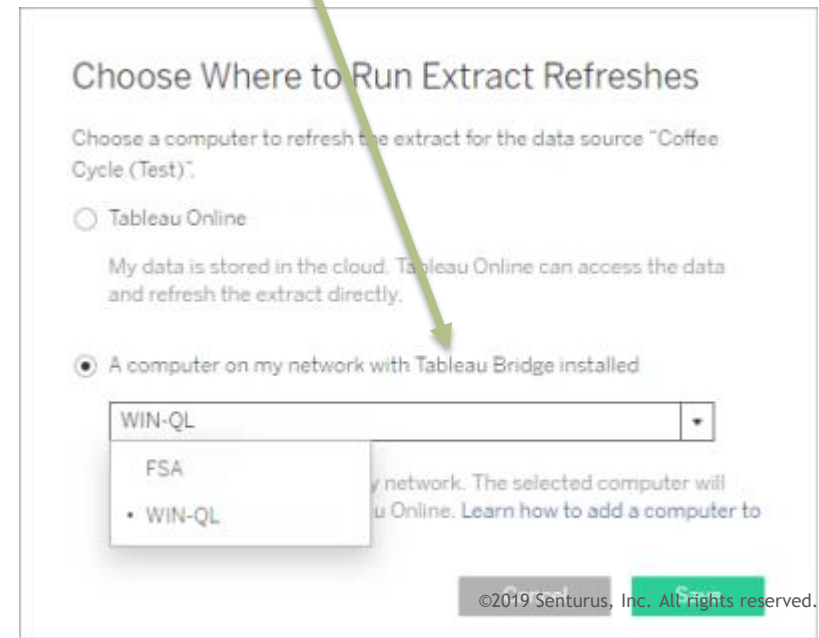
Tableau Bridge - DESKTOP-NRFL6MP	
Status:  Connected 	Senturus 
Cognos 11 Senturus Connector Bridge	Live
MicroStrategy 10.6 Connector	Live
MY_EMPLOYEE_DETAILS (KING)	Live
Opportunity Fact (SenturusTraining)	Live
Salesforce Security Demo	Live
Mode: Application	

Tableau Bridge

- Provides both live and extract data access
- Can be run as a Windows service (always on)
- Centralized, web-based administration
- No clustering support
- No Kerberos support
- Minimum Specs:

OPERATING SYSTEMS

- Microsoft Windows 7 or newer (64-bit)
- Microsoft Server 2008 R2 or newer
- Intel Pentium 4 or AMD Opteron processor or newer
- 2 GB memory
- 1.5 GB minimum free disk space



Choose Where to Run Extract Refreshes

Choose a computer to refresh the extract for the data source "Coffee Cycle (Test)".

☐ Tableau Online

My data is stored in the cloud. Tableau Online can access the data and refresh the extract directly.

☒ A computer on my network with Tableau Bridge installed

WIN-QL

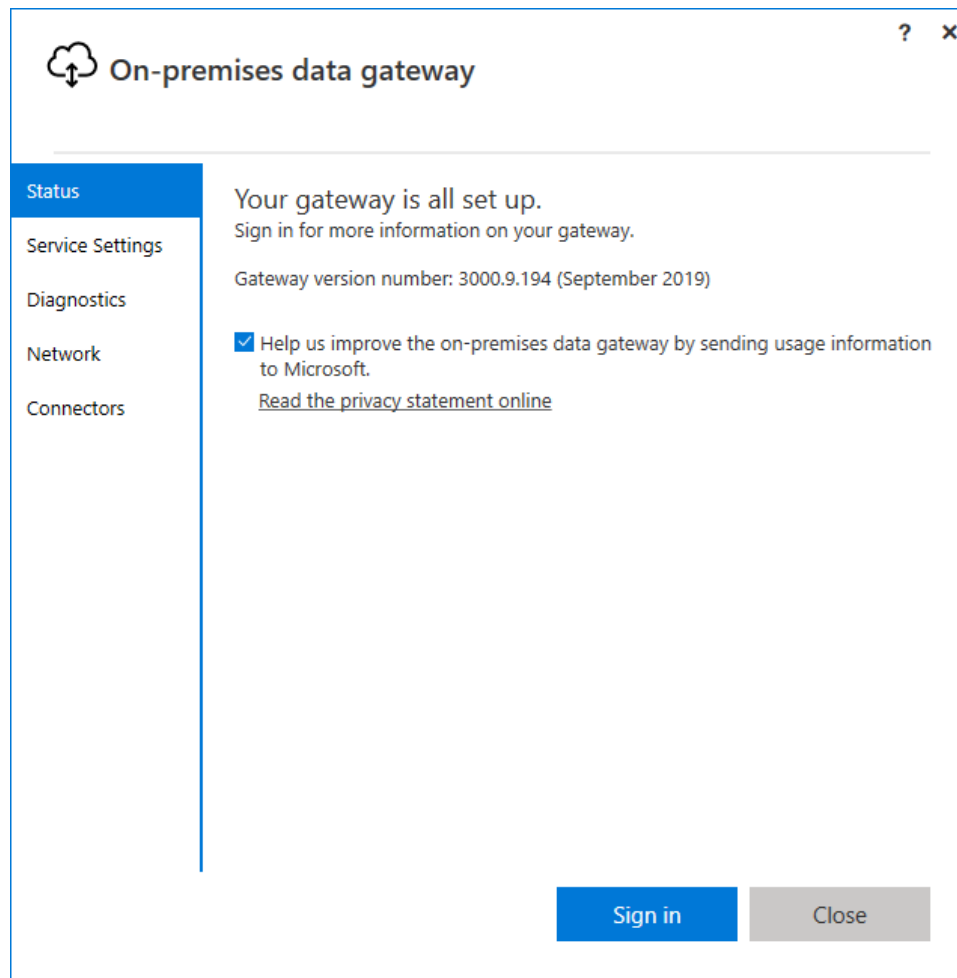
FSA

WIN-QL

network. The selected computer will be used to refresh the extract. Learn how to add a computer to

Power BI Gateway

Power BI Gateway is the Microsoft product that provides access to on-premises data



Power BI Gateway

- Provides both DirectQuery and extract data access
- Can be run as a Windows service (always on)
- Centralized, web-based administration
- Clustering support
- Kerberos support
- Recommended Specs:

Recommended

- An 8-core CPU
- 8 GB of memory
- A 64-bit version of Windows Server 2012 R2
- Solid state drive (SSD) storage for spooling.

ADD DATA SOURCE

GATEWAY CLUSTERS

▼ Azure PBI Gateway

Cognos Connector

> PBITraining

Test all connections

Azure PBI Gateway

✓ Connected

ADD DATA SOURCE

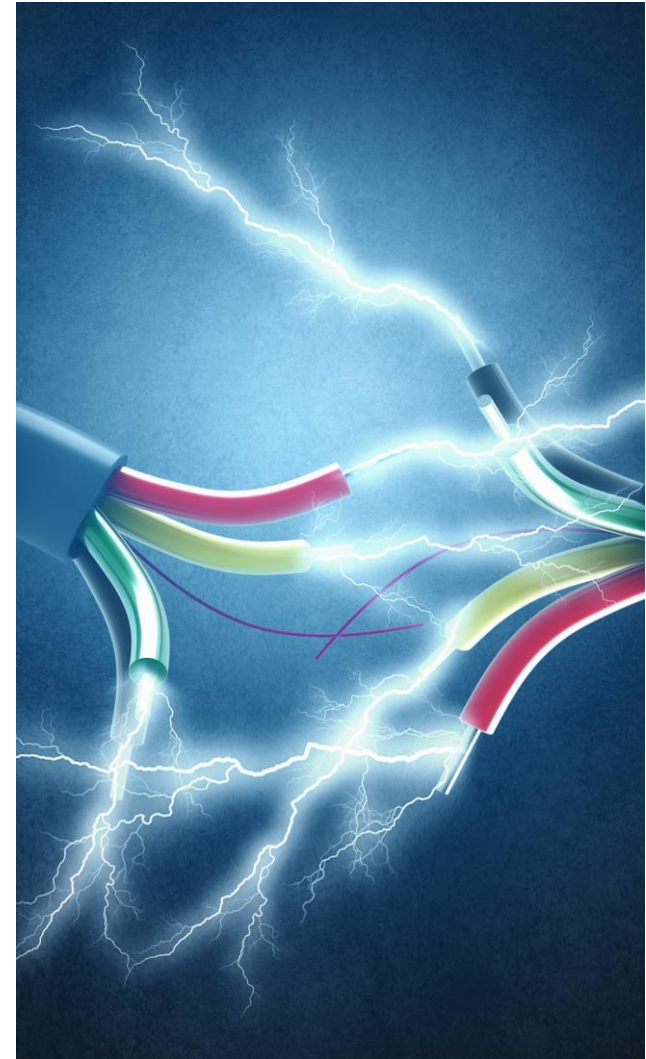
REMOVE

ADD DATA SOURCE

Azure PBI Gateway: There is a newer gateway that you can benefit from the latest features. You can download the latest gateway [here](#).

Best Practices

- Place the bridge/gateway “near” the data sources to reduce latency when possible
 - Same subnet and switch on physical hardware
 - Same virtualized hosts/minimize physical network traffic
- Minimize WAN hops and ensure appropriate bandwidth
- Plenty of RAM, multi-core CPUs and fast disks
- Monitor network and OS for resource bottlenecks



On Prem Data Access Summary

- Both platforms offer similar products to securely access on-premise data
- Gateway/Bridge components only runs on Windows (64 bit)
- Power BI takes a clustering approach which should translate to higher availability and redundancy
- Tableau does not support Kerberos (passing user for RLS) via the Tableau Bridge





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AUDIT LOGS

Power BI Audit Logs

Office 365 Security & Compliance

- Leverages the Office 365 Security and Compliance portal
 - Combined with Exchange, SharePoint and office data
- Search and download audit log activity
- Send alerts based on activity log events

New alert policy

Name *:

Dashboard Shared Alert

Description

Alert type

Custom ▾

Send this alert when... *

Activities *:

Shared Power BI dashboard ▾

Users:

Bob Looney ✕

Send this alert to... * ©2019 Senturus, Inc. All rights reserved.

Power BI Admin Portal - Audit Logs

Office 365 Security & Compliance

[Home](#) > [Audit log search](#)

Audit log search

Need to find out if a user deleted a document or if an admin reset someone's password? Search the Office 365 audit log to find out what the users and admins in your organization have documents, permissions, directory services, and much more. [Learn more about searching the audit log](#)

Search

 Clear

Activities

Show results for all activities ▼

Start date

2019-06-26



00:00 ▼

End date

2019-07-04




00:00 ▼

Users

Show results for all users

File, folder, or site ⓘ

Add all or part of a file name, folder name, or URL.

 Search

+ New alert policy

Results

Date ▼

IP address

User

Activity

Run a search to view results

Tableau Audit Logs

- Reports found under the Site Status tab
- Data stored in the Tableau database drives Tableau reports and dashboards
- Use Dashboard Alert feature to build custom notifications on user activity
- Filter and/or download underlying data

Summary

Full data

Showing first 14 rows.

[Download all rows as a text file](#)

☐ Show all columns

Action	comment	Created At	created_at_local	Item Name	Name (Hist Datasources)	Name (Hist Flows)	Name (Hist Views)	Name (Hist Workbooks)	Site	User
Login	Null	10/1/2019 6:49:29 PM	10/1/2019 11:49:29 AM	-	Null	Null	Null	Null	Senturus	rlooney@
Login	Null	10/1/2019 6:49:28 PM	10/1/2019 11:49:28 AM	-	Null	Null	Null	Null	Senturus	rlooney@
Login	Null	10/1/2019 6:49:37 PM	10/1/2019 11:49:37 AM	-	Null	Null	Null	Null	Senturus	rlooney@
Redeem Refresh Token	Null	10/1/2019 6:49:37 PM	10/1/2019 11:49:37 AM	-	Null	Null	Null	Null	Senturus	rlooney@

Tableau - Audit Logs

▼ < Selected Data... Actions by All Users Actions by Specific User Actions by Recent Users Background Tasks for Extracts Bridge Tasks for Extracts Back >

What Actions Have Users Taken on this Site Recently? (Click to filter)

User Status

(All) ▼

Active

1

Recently Active

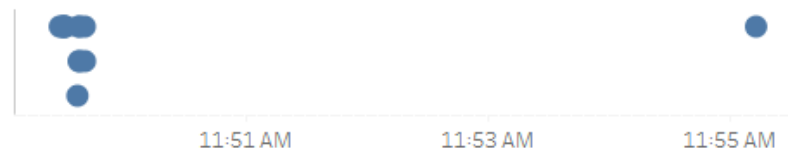
1

1. Who Was Most Recently Active?

User Name	Site Name	Last Activity Time	
rlooney@senturus.com	Senturus	10/1/2019 11:56:36 AM	Active
rlooney@senturus.com	Senturus	10/1/2019 11:49:37 AM	Recently Active
rlooney@senturus.com	Senturus	10/1/2019 11:49:40 AM	Recently Active
rlooney@senturus.com	Senturus	10/1/2019 11:49:29 AM	Recently Active

2. What Actions Were Recently Performed?

User Name	Item Name	Site	Action
rlooney@senturus.com	-	Senturus	Login
rlooney@senturus.com	-	Senturus	Redeem Refresh Token
rlooney@senturus.com	-	Senturus	Logout



Audit Log Summary

- Both platforms offer similar audit capabilities
- Both platforms offer alerts based on user activity





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RECAP

Recap

Reviewed

- Architecture overview
- Single sign on
- Users & groups
- Permissions & row level security
- On-premise data access
- Audit dogs

Your organization's unique systems and business requirements will drive your platform choice.

Detailed Platform Comparison: 150+ Attributes

Summary Feature/Function Inventory

Caliber & Completeness of BI/Analytics Tools	Database / Data warehouse
	ETL Tools
	Metadata Modeling Tools
	Query Tools
	Reporting Tools
	Dashboarding Tools
	Data Exploration Tools
	Data Mining Predictive Tools
	Data Governance Capabilities
	Audit Tools
	Infrastructure Connectivity & Security
	Overall
Product Improvements & Company Investment	Full Stack
	Front-end Tool(s)
	Partner Enablement
	Reporting Tools
	Dashboarding Tools
	Data Exploration Tools
	Data Mining / Predictive Tools
	Infrastructure Connectivity & Security
	Overall
On-Premise (e.g ERP)	
Cloud / SAAS systems	

Detailed Feature/Function Inventory

Visualization	Immediate Data Preview
	3 rd party custom visualization & features marketplace
	Developer Access to create custom visuals or extend features
	Prebuilt workbooks for popular operational systems
	RAVE/D3 Support
Report Functionality	Filtering
	Advanced Filtering
	Slicers
	Create Calculations
	Create Complex Calculations
	Copy Report to Clipboard
	Drill through Definitions
	Drill up/drill downs
	Variable Support
	Parameterized Reporting
	Dynamic Layout Based on Parameters
	Complex nesting and row selection
	Tuples/Intersections
	Layout Control
	Tooltip text formatting

Full Tool Comparison

- Our consultants walk you through the 150+ ratings in our interactive comparison grid
 - Explain our rationale and context for the ratings
 - Provide guidance and focus on capabilities most important to your company priorities
- \$4999
 - Entire cost credited against any future services or training

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888 601 6010

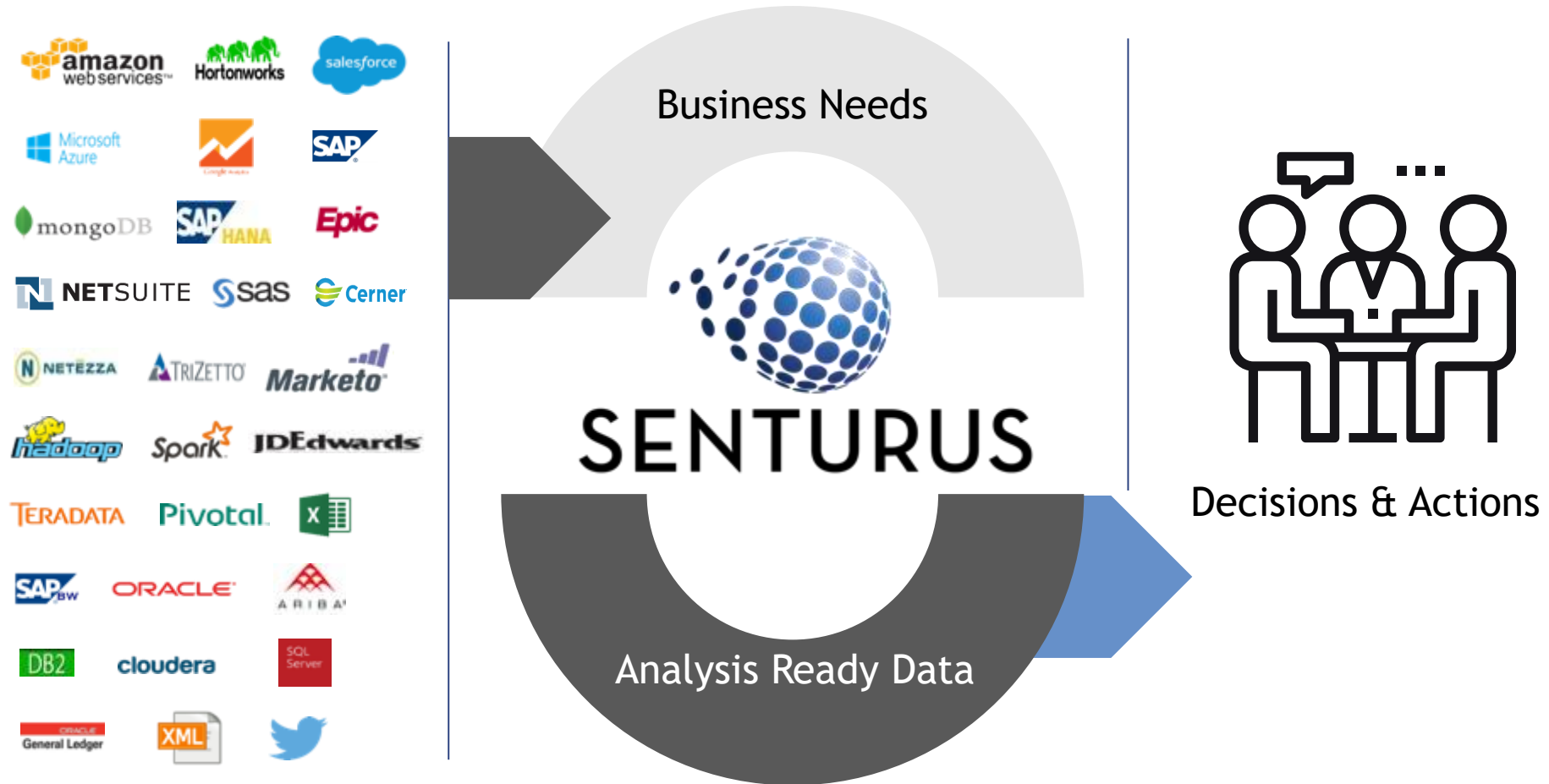


SENTURUS

WHO WE ARE

Full Spectrum of Services for BI

Bridging the Gap between Data & Decision Making



Full Spectrum of Services for BI

- Dashboards, reporting and visualizations
- Data preparation and modern data warehousing
- Hybrid BI environments (migrations, security, etc.)
- BI support retainer (expertise on demand)
- Software to enable bimodal BI and platform migrations
- Training and mentoring



Power BI



1300+ Clients, 2500+ Projects, 19+ Years



KORBEL[®]
CALIFORNIA CHAMPAGNE



KELLY-MOORE[®]
PAINTS

NETGEAR[®]



SEPHORA



intuit[®]



patagonia[®]



Genentech
A Member of the Roche Group



TRINCHERO
Family Estates





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ADDITIONAL RESOURCES

Upcoming Event

www.senturus.com/events



WHAT'S NEW IN COGNOS ANALYTICS 11.1.4

SNEAK PEEK

Thursday, October 31, 2019 - 11am PT (2pm ET) - 60 minutes

[DETAILS](#)



NORTHERN CALIFORNIA COGNOS USERS GROUP MEETING

NOVEMBER 5 IN SAN FRANCISCO

Tuesday, November 5, 2019 - 9:30am – 2:30pm -



BIMODAL SUPERHERO: SENTURUS ANALYTICS CONNECTOR

HOLY SUPER POWER! COGNOS WITH TABLEAU &
POWER BI

Thursday, November 7 - 11am PT (2pm ET) - 60 minutes



OUR FAVORITE NEW FEATURES IN TABLEAU 2019.3

DATA AND SERVER MANAGEMENT GET A BIG BOOST

Thursday, November 21 - 11am PT (2pm ET) - 60 minutes

Free Resources

www.senturus.com/senturus-resources/



UPCOMING EVENTS



RESOURCE LIBRARY



BLOG

Webinar recording

[Comparison of Power BI, Tableau & Cognos](#)

Training for Power BI, Tableau and Cognos

<https://senturus.com/training/>



CORPORATE TRAINING



SELF-PACED LEARNING



MENTORING



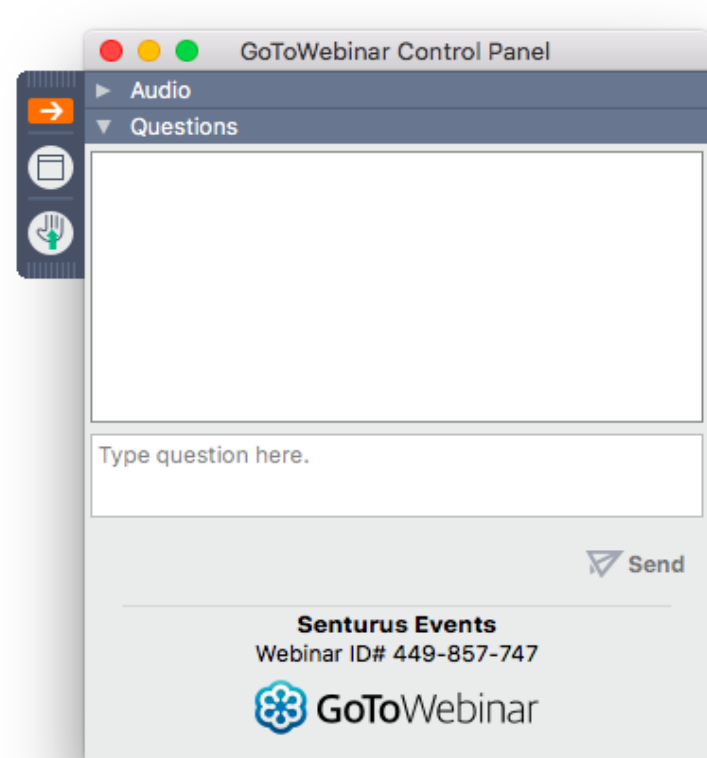
INSTRUCTOR-LED, ONLINE COURSES

Q&A

If your question or issue is broader than what can be answered today, contact us at

info@senturus.com

and we will set up a free consultation.



Thank You!

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