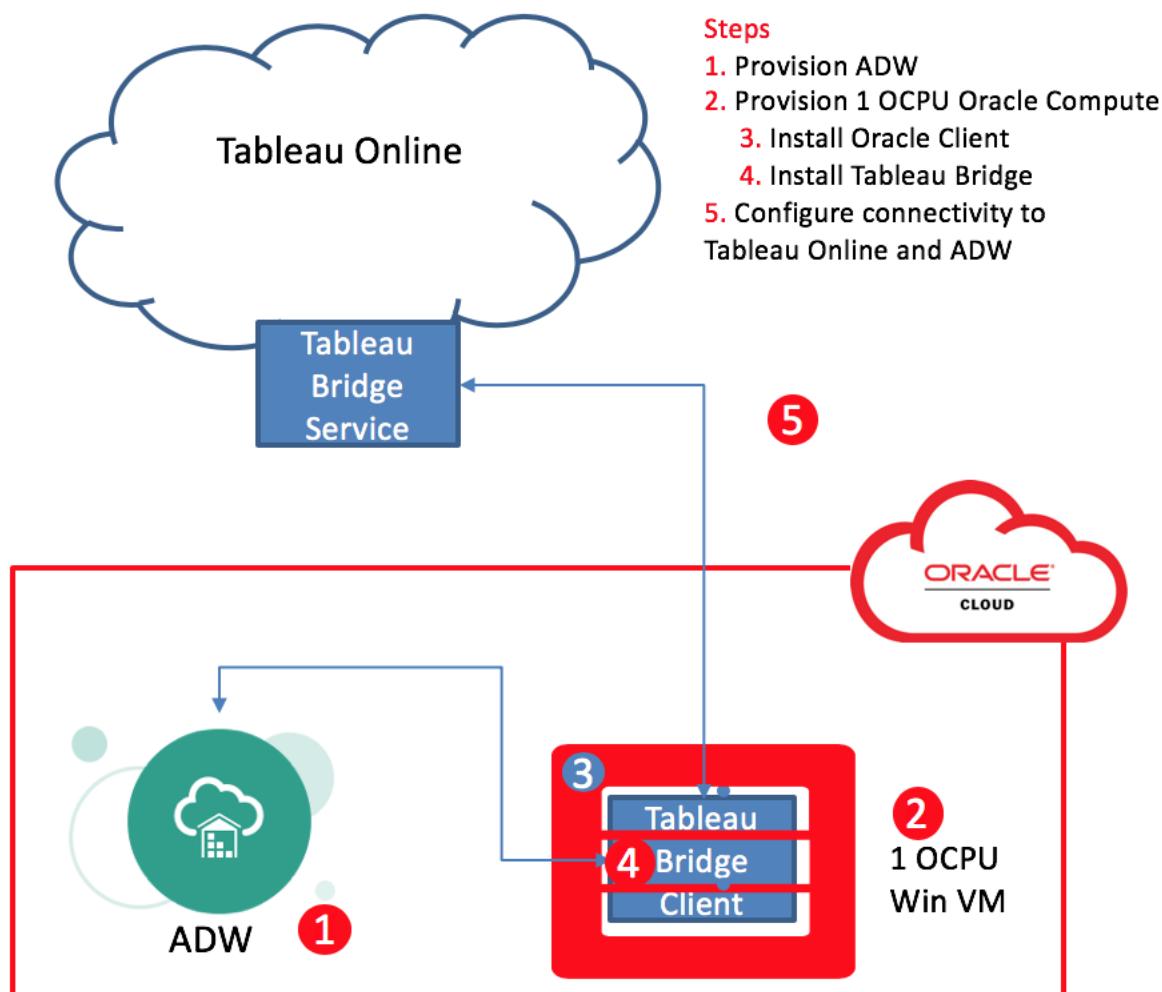


## Creating a connection from Tableau Online to Oracle Autonomous Data Warehouse

Oracle Autonomous Data Warehouse (ADW) is a fully managed cloud data warehouse. In order to connect to ADW, analytic tools need to use standard database drivers like JDBC, ODBC, or OCI (Oracle Call Interface). For security purposes, the connection will need to support Wallets and SSL encryption.

This document generally describes how to setup connectivity between Tableau Online and the Oracle Autonomous Data Warehouse. The Tableau Online architecture uses a Tableau Bridge Service and a corresponding Tableau Bridge Client software to connect to ADW.



Certification Matrix	Version
Tableau Online	Current version
Tableau Desktop	2018.1 (April 2018)
Tableau Server	2018.1 (April 2018)
Tableau Bridge	2019.1 (April 2019)
OCI Driver	Oracle Instant Client/Client version 12.1.0.2 and higher

### Step 1: Provision ADW

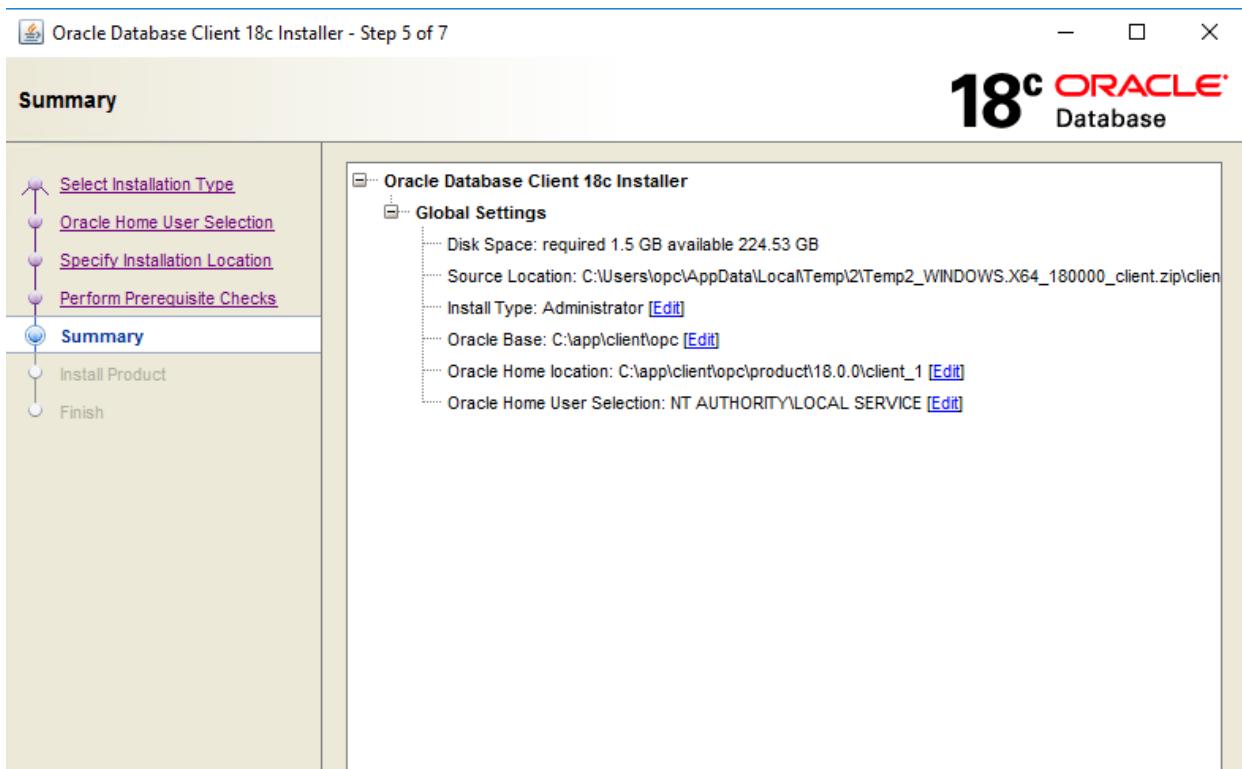
- Provision an Autonomous Data Warehouse instance in the Oracle Cloud. For the Oracle documentation to provision ADW please check [here](#).

### Step 2: Provision a 1 OCPU, of Oracle Compute Infrastructure

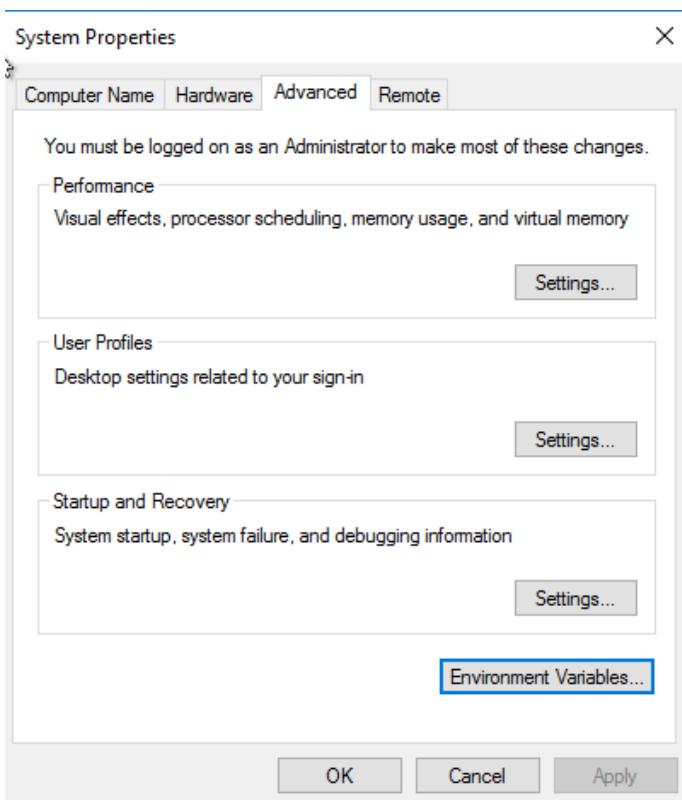
- To connect ADW to the Tableau Online, a Tableau Bridge software needs to be installed and configured on a 1 OCPU Oracle Compute Infrastructure. You will need to create a Windows Version x.x Virtual Machine. Please follow instructions from [Oracle Doc] to create this VM.

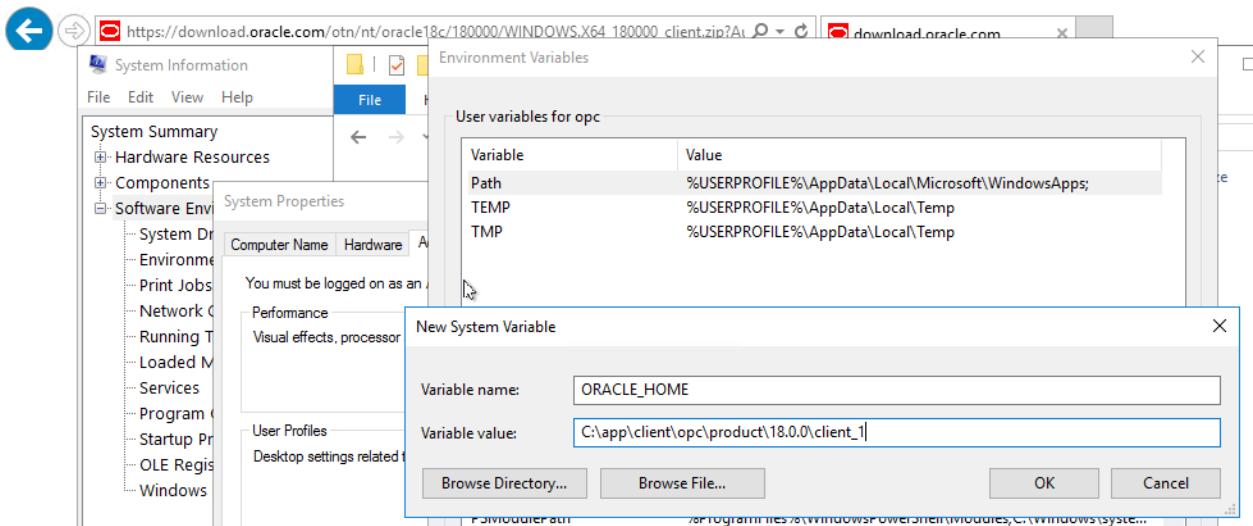
### Step 3: Install and configure the Oracle Database Client Library on the VM

- Before you install the Tableau Bridge Client on the VM that you just created. Make sure to install and configure the Oracle Client library. This will be required for the bridge to connect to ADW
- Download the Oracle [Instant/Full] Client Library from OTN. [Please add link], make sure you download version 12.1.0.2 and higher as indicated in the support matrix above.

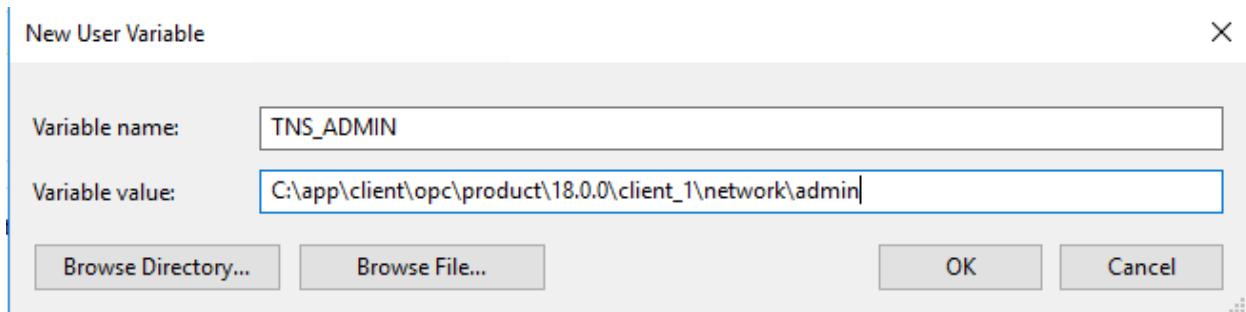


Once you have installed the Oracle client software, please set the environment variable  
ORACLE\_HOME





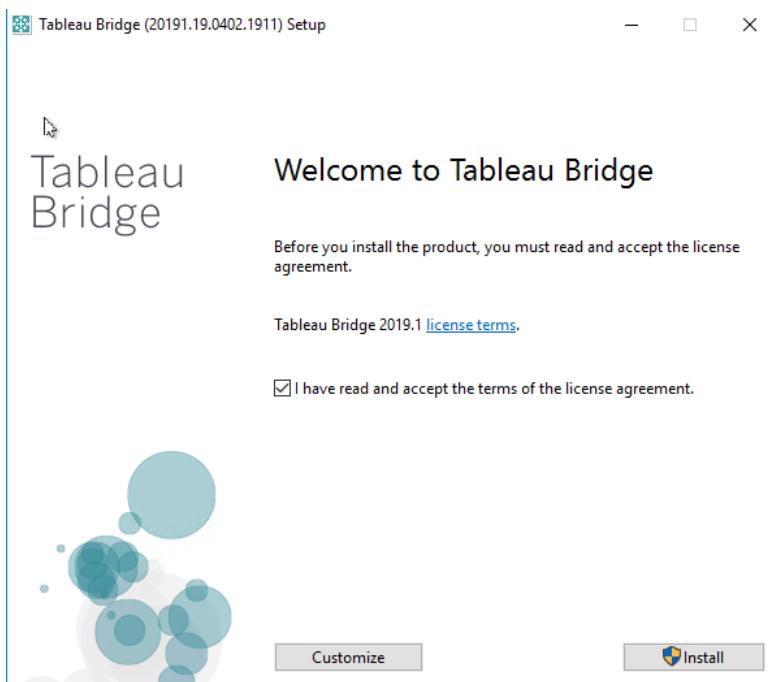
Set TNS\_ADMIN to directory where the wallet file is going to be unzipped. The default location is \$ORACLE\_HOME/network/admin



- Download the wallet into the TNS\_ADMIN directory using the instructions at [Downloading Client Credentials \(Wallets\)](#).

#### Step 4: Install and configure the Tableau Bridge Client on the VM

- Download the Tableau Bridge from the Tableau website [provide link] and install and configure it using the following steps:
  - Install Tableau Bridge Client



- b) Start Tableau Bridge and log into your Tableau Online domain account.



- c) A screen will pop-up and show all the data sources that are available. These data sources are generally published from the Tableau Desktop to Tableau Online using the optional steps detailed in the section below. [Hyperlink to Step 5] The bridge will now download all the data source configurations. Depending on if the data source is in Live or Extract mode, the bridge will push data from ADW to Tableau Online.

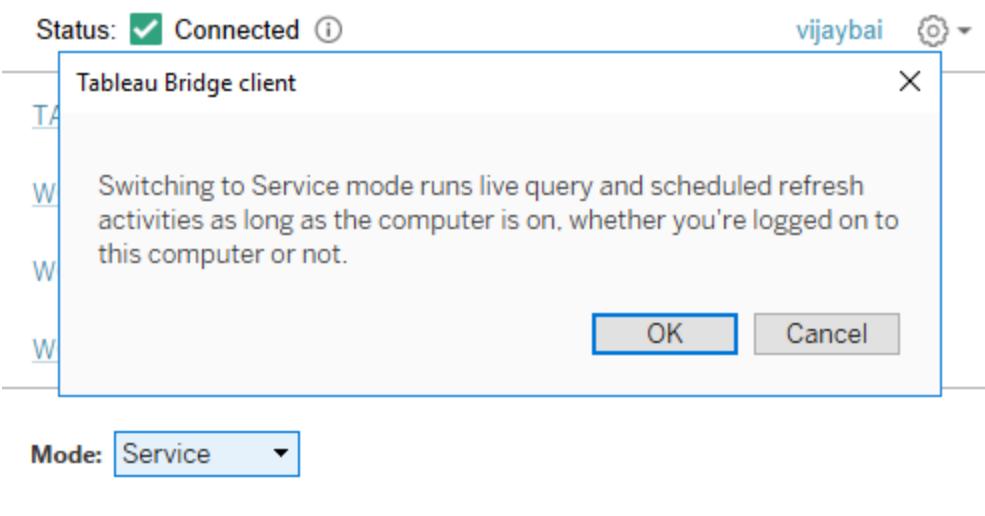
## Tableau Bridge - VJ-Tableau

Status:  Connected <a href="#">(i)</a>	vijaybai
<a href="#">TABLEAU_LIVETAB (ADMIN)</a>	Live
<a href="#">WORKSHOP_LIVE (ADMIN)</a>	Live
WORKSHOP_LIVE2	Live
<a href="#">WORKSHOP_TAB (ADMIN) (2)</a>	Live

Mode: Application ▾

- d) Switch from Application mode to service mode. This way, as long as the bridge Windows server is up and running, the Bridge software will continue running.

## Tableau Bridge - VJ-Tableau



Mode: Service ▾

Tableau Bridge



To finish switching to Service mode, you must log on to Windows as a local administrator.

VJ-TABLEAU\opc
*****

OK

Cancel

© 2003-2018 Tableau Software. All Rights Reserved

## Step 5: (Optional) Develop dashboards on Tableau Desktop and Publish to Tableau Online

This document is focused on connecting Tableau Online to ADW using the Tableau Bridge. However, if you are also interested in establishing connectivity between a Tableau Desktop and ADW, please refer to the following document. [Add link to Oracle website].

From Tableau Desktop server, publish the Data Source and Workbooks to Tableau Online by signing in with the Domain account.

Publish Workbooks

Tableau - Book2 - Tableau license expires in 5 days

File Data Worksheet Dashboard Story Analysis Map Format Server Window Help

Signed In to https://us-east-1.online.tableau.com (vijaybai)

Data Analytics TABLEAU\_LIVETAB (AD...)

**Dimensions**

- Abc Duplicated
- Abc Edition Name
- Abc Editable
- Abc Generated
- Last Ddl Time
- # Object Id
- Abc Object Name
- Abc Object Type
- Abc Oracle Maintained
- Abc Owner
- Abc Secondary
- Abc Sharded
- Abc Sharing
- Abc Status

**Measures**

- # Created Appid
- # Created Vsnid
- # Modified Appid

Pages

Filters

Marks

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

SUM(Number ...)

Object Owner

Object Owner	Count
ADMIN	4
APPQOSSYS	6
AUDSYS	49
C##CLOUD\$SERVICE	123
C##OMLIDM	5
DBSFWUSER	8
DBSNMP	55
GSMADMIN_INTERNAL	188
LBACSYS	239
ORACLE_OCM	6
OUTLN	10
PUBLIC	5,995
REMOTE_SCHEDULER_A..	13
SH	9
SSB	14
SYS	15,238

Choose a name for your Published workbook.

Tableau - Book2 - Tableau license expires in 5 days

File Data Worksheet Dashboard Story Analysis Map Publish Workbook to Tableau Online

Data Analytics TABLEAU\_LIVETAB (AD...)

**Dimensions**

- Abc Duplicated
- Abc Edition Name
- Abc Editable
- Abc Generated
- Last Ddl Time
- # Object Id
- Abc Object Name
- Abc Object Type
- Abc Oracle Maintained
- Abc Owner
- Abc Secondary
- Abc Sharded
- Abc Sharing
- Abc Status

**Measures**

- # Created Appid
- # Created Vsnid
- # Modified Appid

Pages

Filters

Marks

- Automatic
- Color
- Size
- Text
- Detail
- Tooltip

SUM(Number ...)

Project Default

Name Tableau object\_count

Description

Tags Add

Sheets All Edit

Permissions Same as project (Default) Edit

Data Sources 1 embedded in workbook Edit

More Options  Show sheets as tabs

Click **Publish**

The Workbook is now published online. You will need to publish the Data sources as well to Tableau Online so that the information can be pushed to the Bridge server.

The screenshot shows the Tableau Online interface. At the top, there's a navigation bar with links for Content, Users, Groups, Schedules, Tasks, Status, and Settings, along with a search icon. Below the navigation bar, the URL is https://us-east-1.online.tableau.com/#/site/vijaybai/views/Tableauobject\_count/Sheet1?iid=1. The main content area displays a chart titled "object count by owner". The chart is a horizontal bar chart where each bar represents a database owner and its corresponding object count. The data is as follows:

Owner	Object Count
ADMIN	4
APPQOSSYS	6
AUDSYS	49
C##CLOUD\$SERVICE	123
C##OMLIDM	5
DBSFWUSER	8
DBSNMP	55
GSMADMIN_INTERNAL	188
LBACSYS	239
ORACLE_OCM	6
OUTLN	10
PUBLIC	5,995
REMOTE_SCHEDULER_A..	13
SH	9
SSB	14
SYS	15,238
SYSTEM	466
XDB	39

## Publish the Data Source

The screenshot shows the Tableau desktop application window. The menu bar includes File, Data, Worksheet, Dashboard, Story, Analysis, Map, Format, Server, Window, and Help. The Server menu is open, showing options like Signed In to https://us-east-1.online.tableau.com (vijaybai), Open Workbook..., Publish Workbook..., Publish Data Source (which is highlighted in blue), Create User Filter, and Tableau Public. On the left side of the interface, there are data exploration panels for Data, Dimensions, and Measures. The Data panel shows a tree view with a node for TABLEAU\_LIVETAB (ADMIN). The Dimensions panel lists various dimensions like Duplicated, Edition Name, and Generated. The Measures panel lists Object Id, Object Name, and Object Type. The right side of the interface shows a preview of the published data, which is identical to the one shown in the previous screenshot.

## Choose Live connection

Publish Data > Source to Tableau Online X

Project  
Default

Name  
TABLEAU\_LIVETAB (ADMIN)

Description

Tags  
Add

Permissions  
Same as project (Default) [Edit](#)

Authentication  
None [Edit](#)

Tableau Bridge required for on-premises data

Create an extract and schedule a refresh

Maintain connection to a live data source

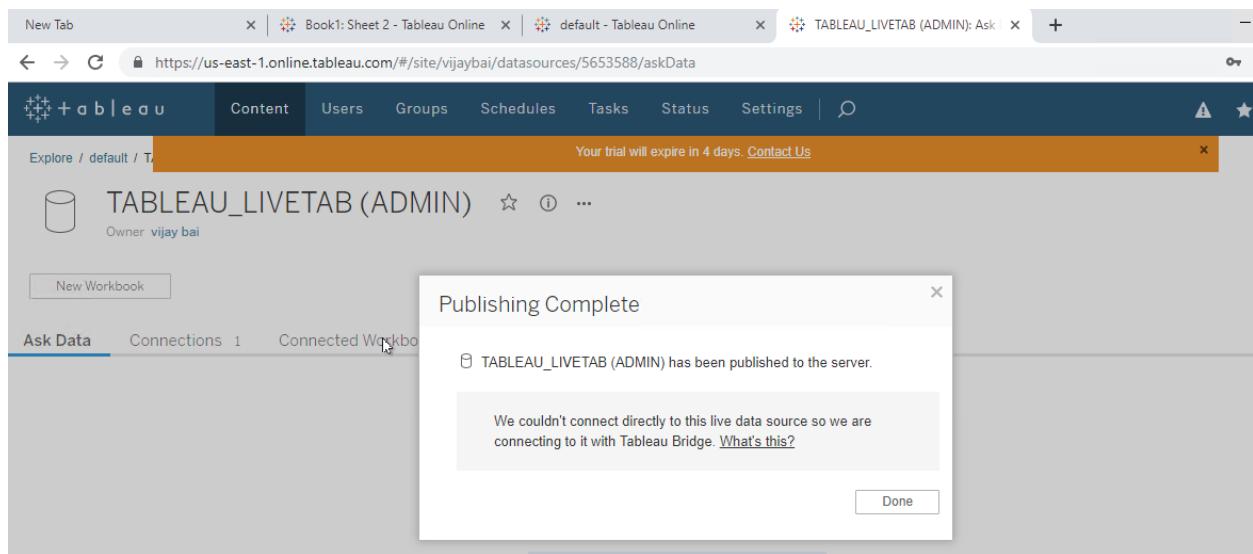
[Learn more](#)

More Options

Update workbook to use the published data sour

Click Publish

In the online browser, you will see this published.



Once you have published the Data sources and workbooks to Tableau Online you will be able to see the data sources on Tableau Bridge.