



# join



# looker.com/hol

Select the **5 Steps to Embedding Looker** lab in the drop-down



# Hands-on Lab: 5 Steps to Embedding Looker



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# Agenda

What is private embedding?

Why embed data

How embedding works

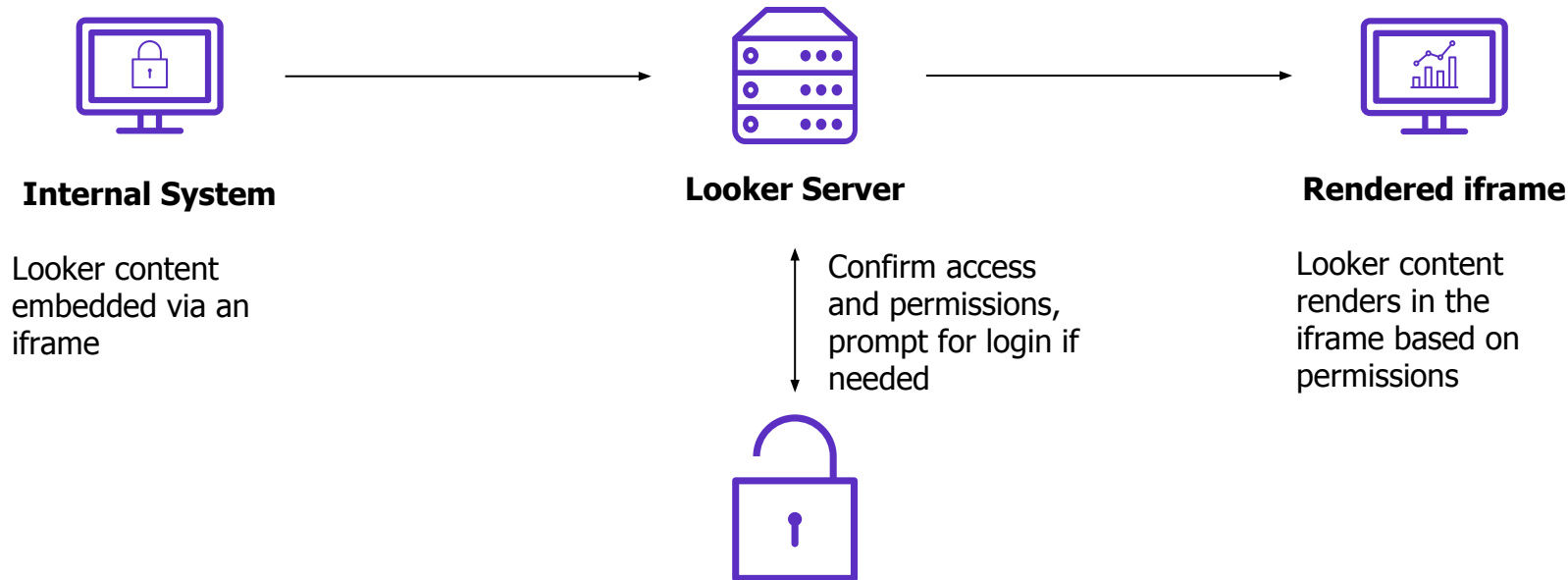
Try it out

Use cases

Bonus: SSO embedding

# What is private embedding?

Bring Looker reports and dashboards into the tools people use the most



# Why embed data?

The background features a series of thin, light-green lines radiating from a central point, creating a sunburst or star-like effect. Scattered around the center are several small, stylized icons representing data: a vertical bar chart, a grid of dots, and a series of vertical bars of varying heights.

# Why embed data?

Connect disparate data and tools into a single workflow

- Reduces the number of different tools an employee needs to use (most use at least 8 different SaaS tools today)
- Consolidates workflows and puts data at the forefront which promotes data literacy
- Connects data with actions that should be taken based on the data



# How does it work?



# Private embedding

## Technical setup

1. Embed a Look, dashboard, or Explore by adding **/embed/** to the URL:

<https://mycompany.looker.com/dashboards/4>

Becomes

<https://mycompany.looker.com/embed/dashboards/4>

2. The embedded content can be added to any web page in an iframe:

```
<iframe  
src="https://mycompany.looker.com/embed/dashboards/4"></iframe>
```

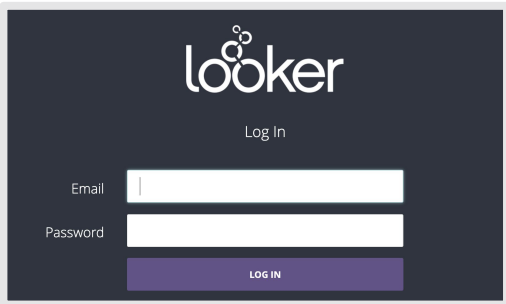
# Private embedding

## URL Customization

Add the parameter `allow_login_screen=true` to an embed URL to display a login screen to users who aren't logged in to Looker.

```
<iframe  
src="https://mycompany.looker.com/embed/dashboards/4  
?allow\_login\_screen=true">  
</iframe>
```

Excluding this parameter will result in a 401 error for non-authenticated users.

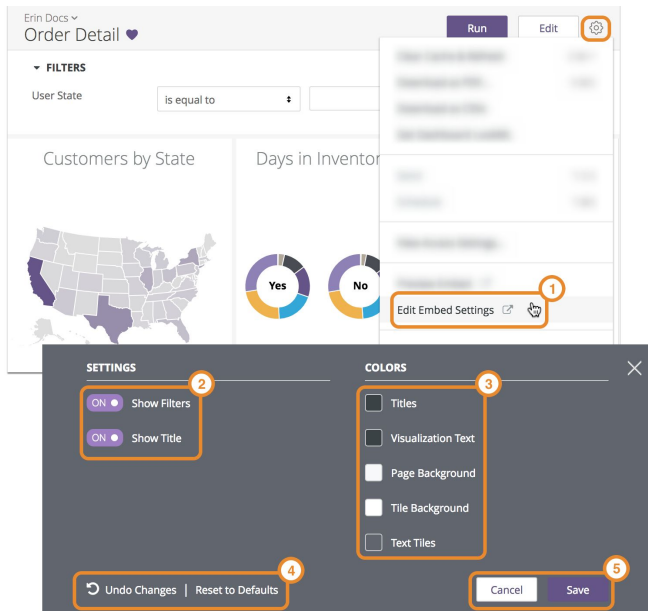


You are not authenticated to view this page.  
401

# Private embedding

## Customization

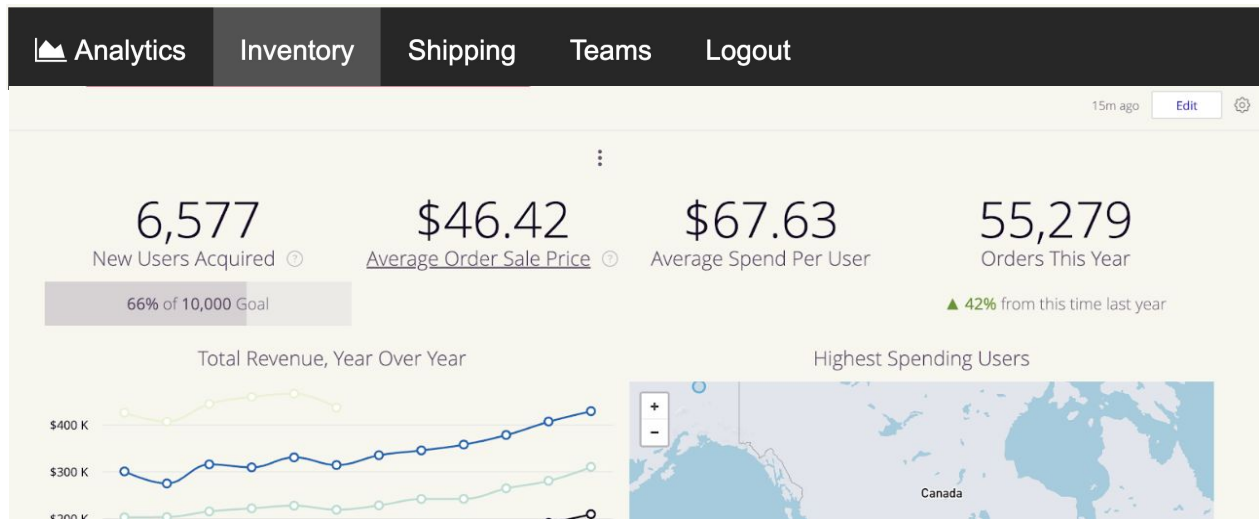
Embedded dashboards can be customized to better fit with the page in which they are embedded. Options can be found within the **Edit Embed Settings** menu.



1. Click the dashboard's gear menu and select **Edit Embed Settings**.
1. Choose to show or hide the dashboard's title or filters.
1. Click on the color boxes to adjust the color of the dashboard elements.
1. Optionally, you can click **Undo Changes** to go back to the last saved embed settings for the dashboard.
1. Click **Save** to save your changes or **Cancel** to close the window without saving changes.

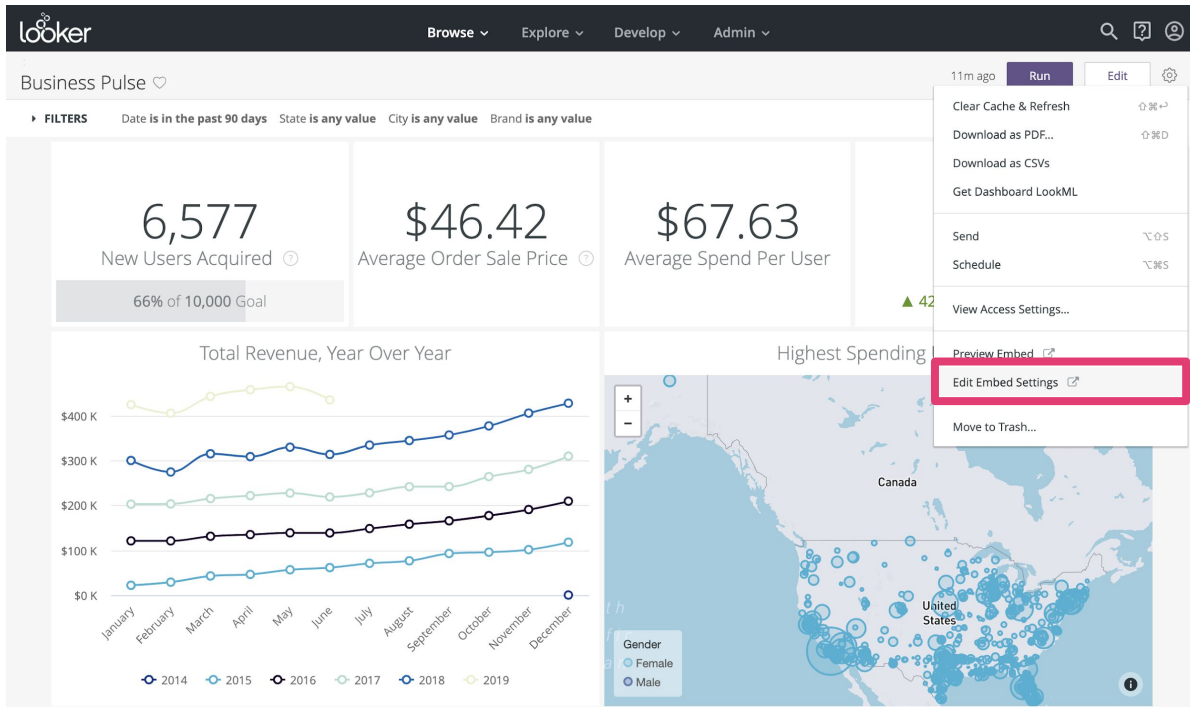
# Private embedding example

## Custom analytics page



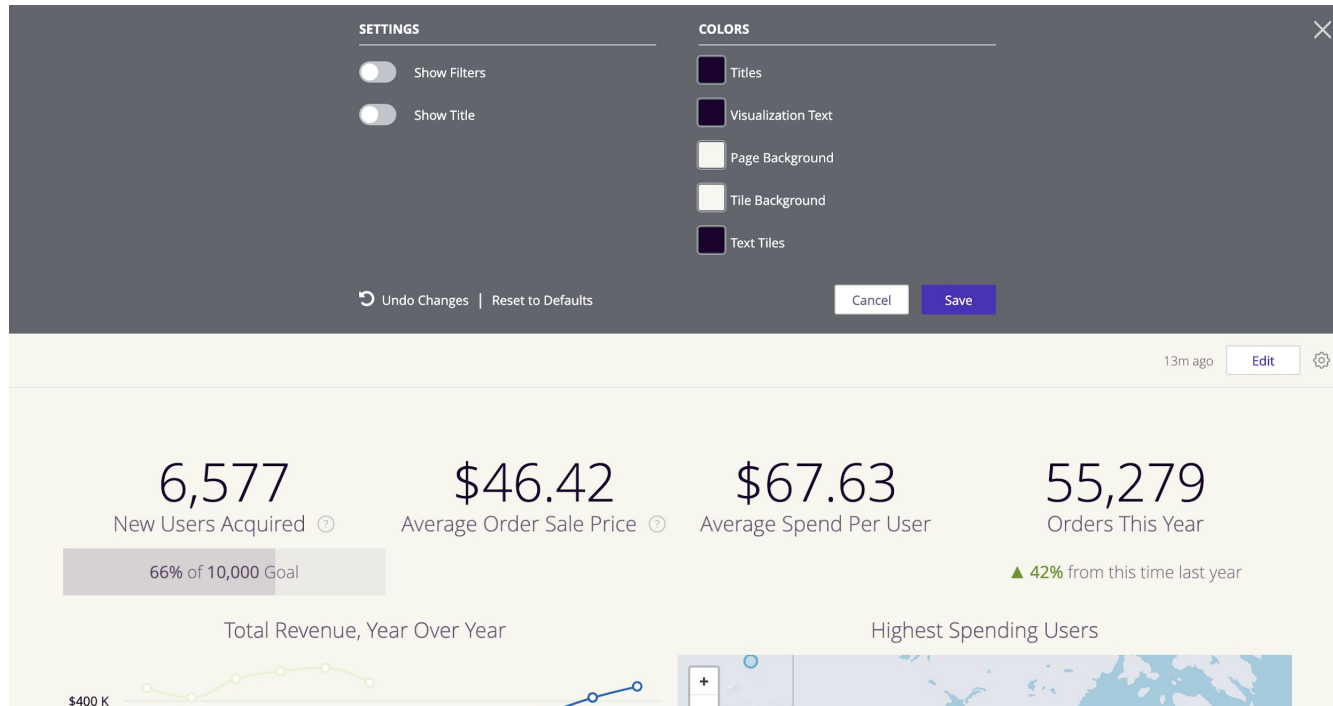
# Private embedding example

## Edit embed settings



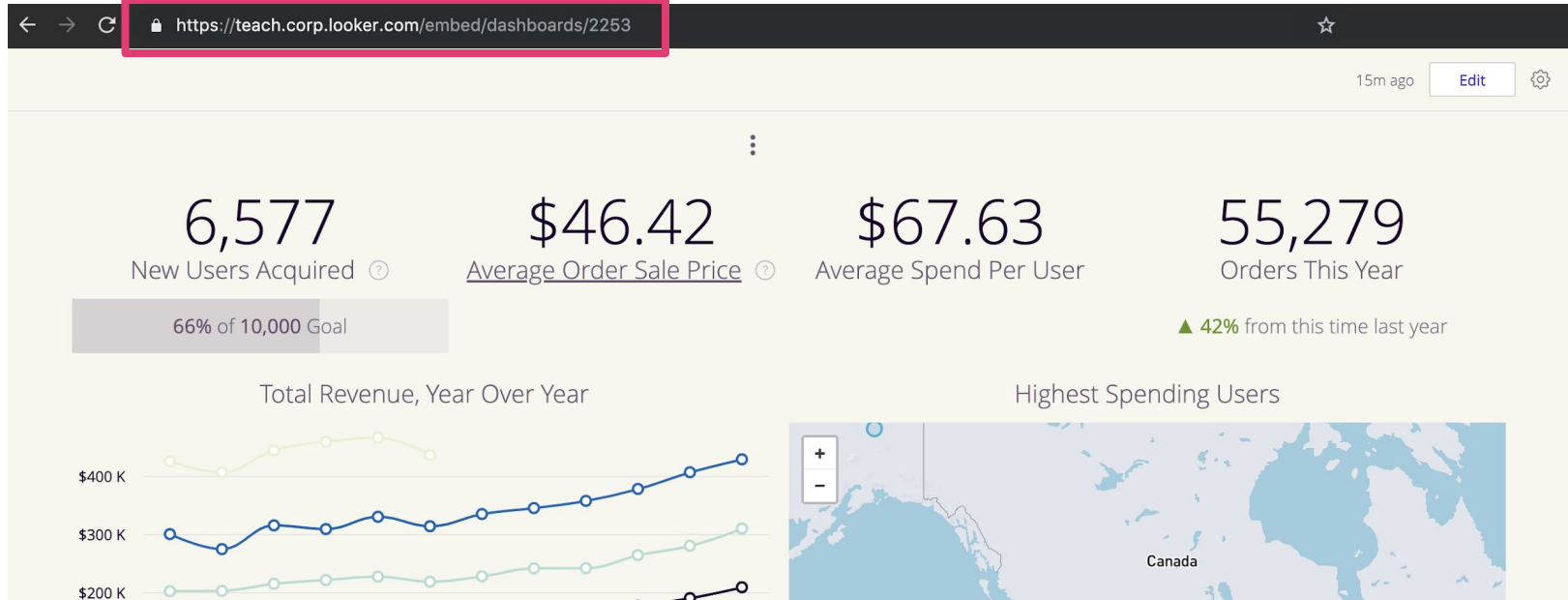
# Private embedding example

## Edit embed settings



# Private embedding example

Copy embed URL





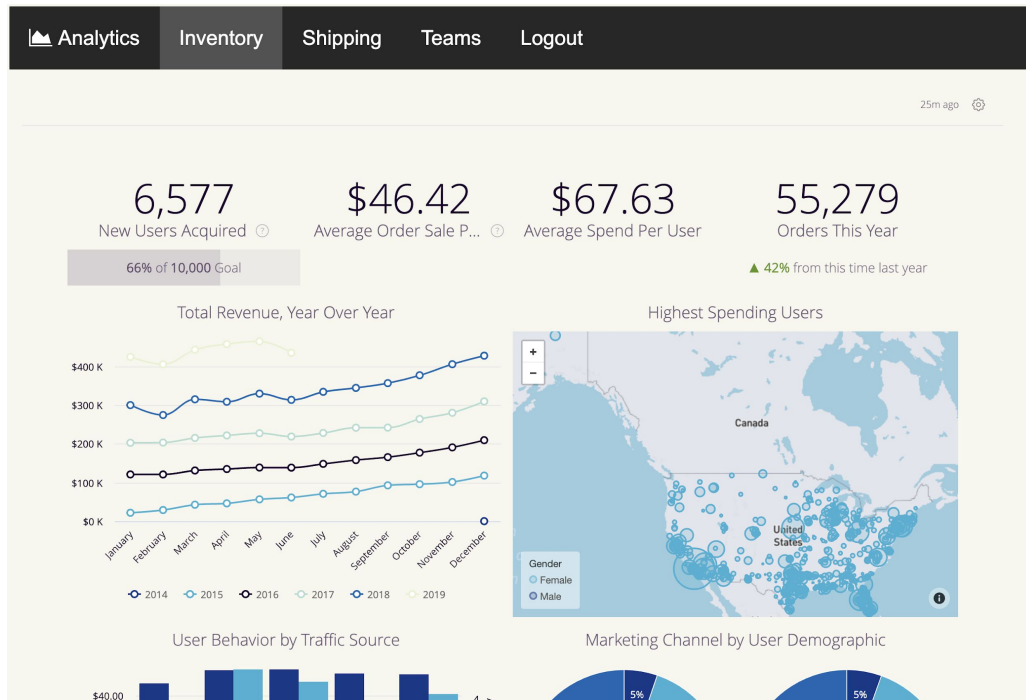
# Private embedding example

Place URL within HTML iframe tag

```
<iframe src='https://join2019.looker.com/embed/dashboards/18'>  
</iframe>
```

# Private embedding example

[See embedded page](#)



The background features a series of thin, light green lines radiating from a central point, creating a sunburst effect. There are also several abstract, light green shapes: a small square at the center, a cluster of horizontal bars on the left, a grid of dots on the right, and a series of vertical bars at the bottom right.

# Try it out

# Private embedding exercise

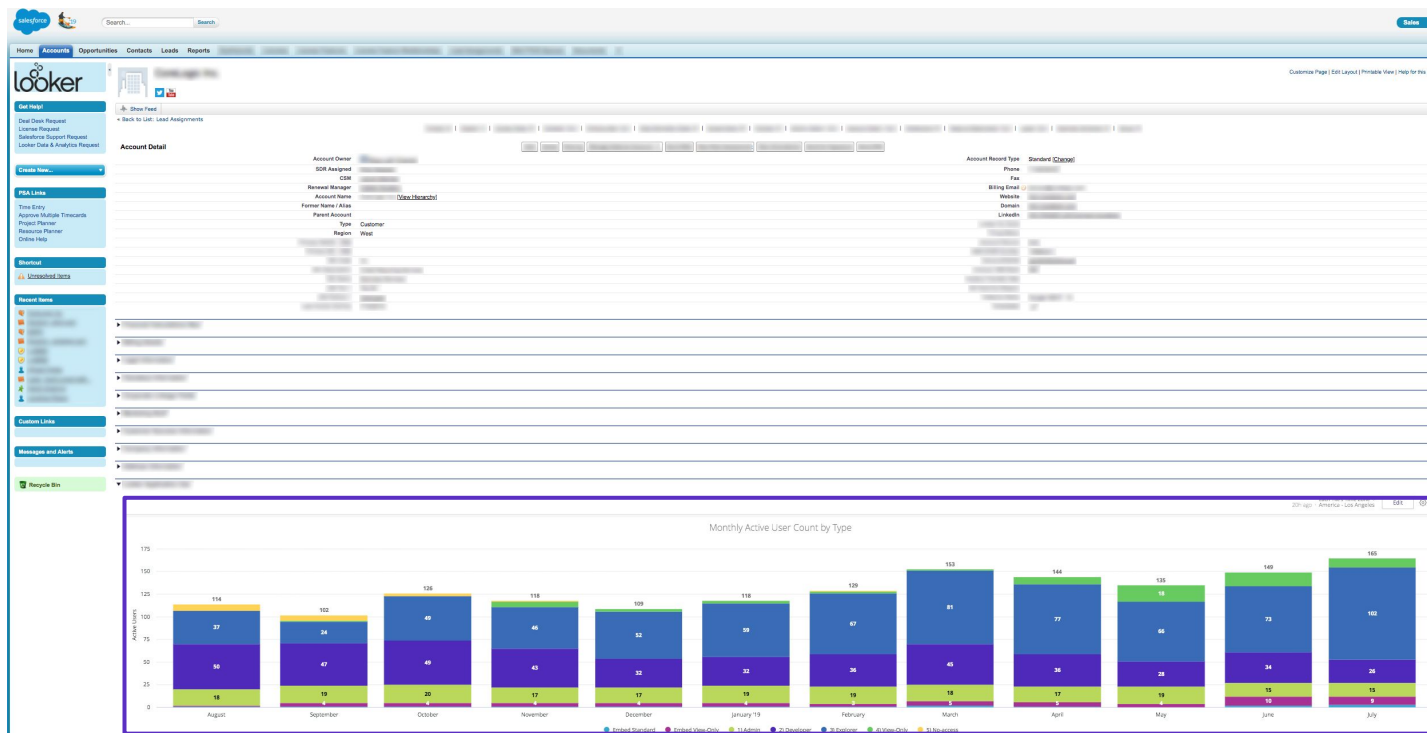
## Embedding Looker inside a custom intranet webpage

1. Navigate to the **eCommerce Dashboards** folder at join2019.looker.com.
2. Copy the dashboard **Business Pulse** into your personal folder.
3. Navigate to that copied dashboard.
4. Under the gear menu, select **Edit Embed Settings**.
5. Edit the dashboard settings, and play around with the visualization options.
6. Navigate to JSFiddle, and add the HTML code found here:  
[https://github.com/looker/join2019\\_labs/blob/master/analytics\\_webpage.html](https://github.com/looker/join2019_labs/blob/master/analytics_webpage.html)
7. Navigate to the bottom of the file and replace the **Insert Dashboard URL Here** text with your embedded dashboard URL.
8. Run the HTML.

# Where can Looker be privately embedded?

The background features a central square from which numerous thin, light-green lines radiate outwards across the entire slide. Additionally, there are three distinct clusters of small, light-green squares: a vertical column of five squares on the left, a horizontal row of ten squares on the right, and a horizontal row of eight squares positioned below the right-side cluster.

# Salesforce



# Zendesk

Looker Data Sciences

Brecht

SOLVED Incident #

>

Apps

Assignee

take it

DCL Analy.../Desiree

CCs

cc me

search name or contact info

Form

Support Request

Priority\*

Low

Next step owner\*

None

Notes, Issue Links

Reason\*

Other

Topic

Issue complexity\*

N/A

Self assessment

Chat with Brecht

Tuesday 09:04 am • Brecht

Via Chat

(change)

Public reply

Internal note

Preview

Your comment is visible to agents only

GURU

Attach file

Conversations

All 3

Public 1

Internal 2

Brecht

Tuesday 09:32 am (assign)

Chat ended:

Name: Brecht

Email:

Phone: -

Notes:

Version

License

Client Name

User

User Role Admin, User, Brecht Testing, standard\_user\_chat, developer

Tech Contacts

Apply macro

DCL Toolbox

Organization Notes

That's us!

Chatter Popular Hours

This customer's primary region is APAC.

Recently Filed Helitool Issues

No recent issues found.

Open Salesforce

Tag Locker

Search to add a tag...

Current Tags

Close tab

Submit as Solved

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looker

# Company website



edit account sign out 4

- Learn More
- Company Overview

VIEW

- Business Pulse i
- Supplier Overview
- Collapse



## eCommerce Business Pulse

Each Tile's Time Zone ▼  
America - Los Angeles ⚙️

FILTERS Date is in the past 90 days State is any value City is any value User ID is any value

Stop

\$50,793

Year to Date Revenue

72% of \$70,708 Projecte...

\$12.54

Average Order Sale ...

4.5% Repeat Purchase ...

645

New Users Acquired

3% of 20,000 Goal

4,307

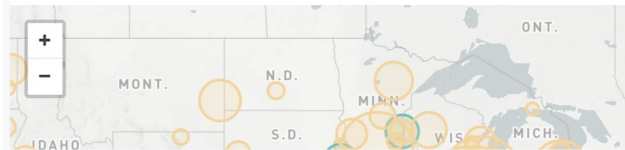
Orders This Year

▲ 48% vs Same Period ...

### User Behaviors by Traffic Source



### Highest Spending Users ?



Powered by **looker**



# Other methods of embedding?

# SSO embedding

SSO embedding allows you to integrate Looker content via iframes into other applications

User authentication to Looker is handled through the SSO URL

Embed user never has to log in to Looker

Richer in-frame experience

# Powered by Looker

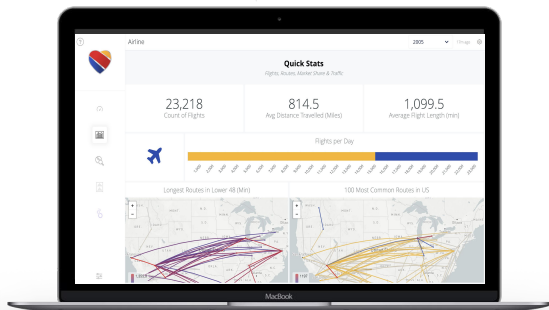
## OEM

Whitelabel of Looker's UI;  
customers log directly into Looker



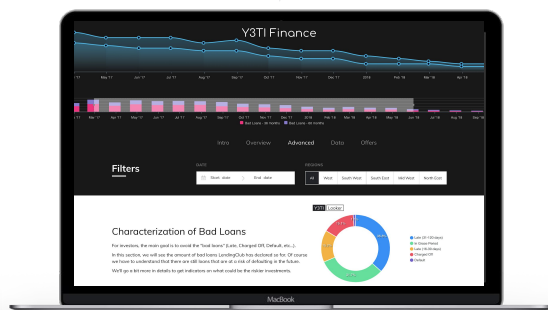
## Embed

Display visualizations from Looker  
using embedded iframes



## API

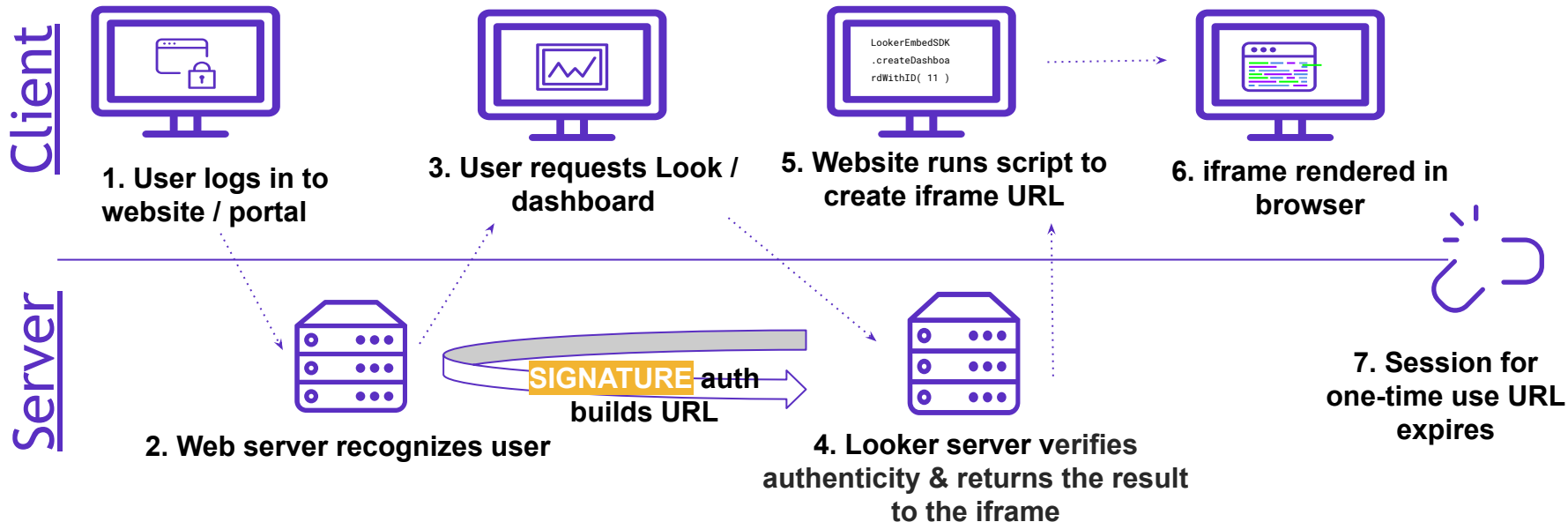
Using Looker's API to deliver a  
custom application with custom  
visualizations



\* Not mutually exclusive. Common to deploy a combination. E.g. Embed + API

# SSO embedding

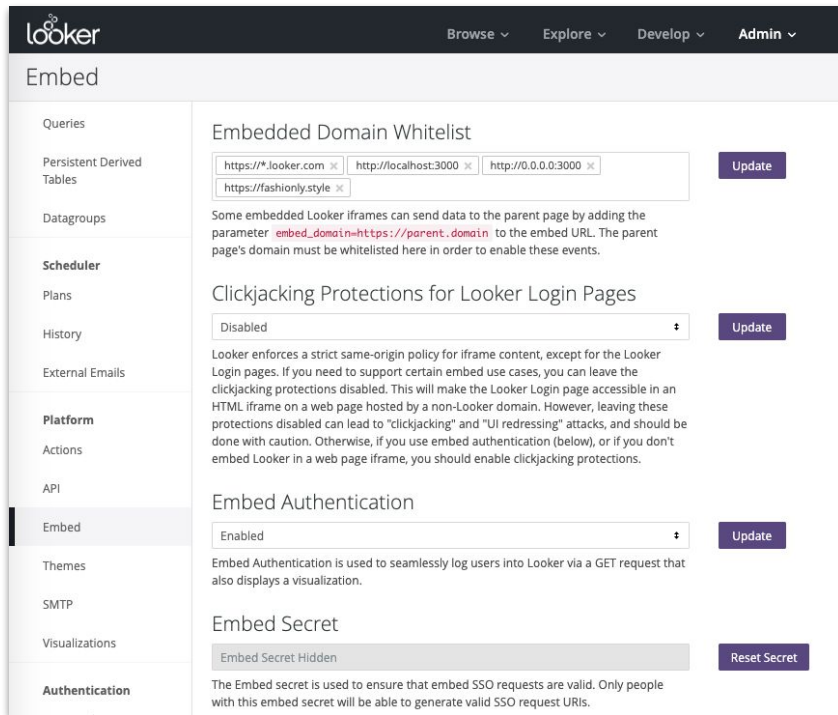
## Communication workflow



# SSO embedding

## Preparing your instance and content for embedding

- 1) Enable embed authentication and generate the embed secret (**Admin > Embed**)
- 2) Create content and saved content URL (e.g., /embed/dashboards/12, /embed/looks/4)
- 3) Determine user access level
  - a) [Permissions](#)
  - b) [Models](#)
  - c) [User attributes](#)
  - d) [Content access](#)



# SSO embedding

## Components of a SSO embed URL

`https://HOST/login/embed/CONTENT_PATH?PARAMETERS&signature=SIGNATURE`

### An embeddable URL:

`https://yourcompany.looker.com/login/embed/%2Fembed%2Fdashboards%2F78?nonce=%22pVbKkWWTR2hLLkff%22&time=1540831983&session_length=600&external_user_id=%2255%22&permissions=%5B%22access_data%22%2C%22see_looks%22%5D&models=%5B%22sme_survey%22%5D&group_ids=%5B%5D&external_group_id=%22%22&user_attributes=%7B%7D&access_filters=%7B%7D&first_name=%22John%22&last_name=%22Smith%22&force_logout_login=true&signature=XF%2FZsgRZTeZWBSdY1kyd3eEKgE4%3D`

# SSO embedding

## Important parameters

### session length

/ʃeSHən leNG(k)TH/

*noun*

1. The amount of time a user can interact with an embedded Looker page before being forced to log in again

### nonce

/näns/

*noun*

1. A one-time-use code that ensures uniqueness of the URL

### signature

/ʃignəCHər,ʃignəÇHöör/

*noun*

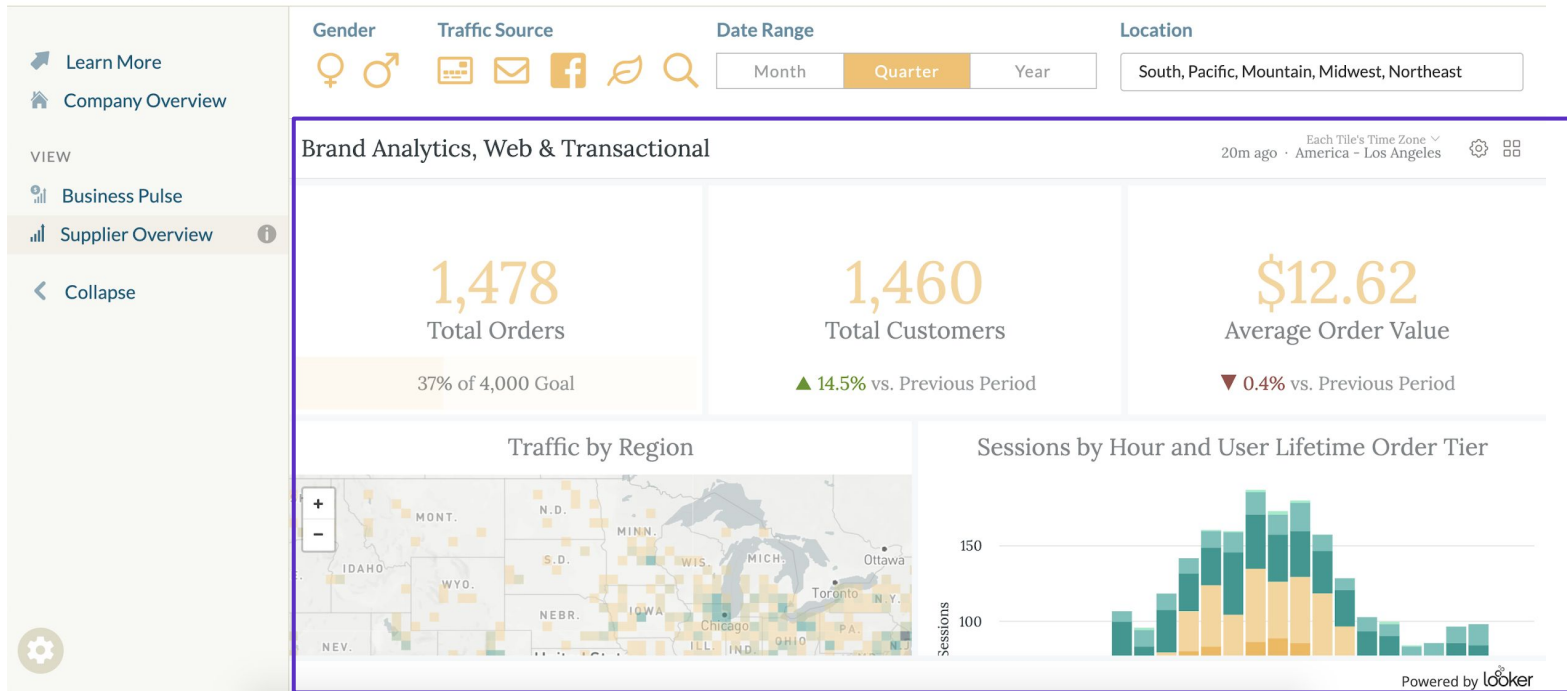
1. A piece of the embed URL that verifies the validity of the entire URL
  - a. To prevent a nefarious user from changing elements of the URL (filters, user attributes) to access data they shouldn't have access to, the URL is SIGNED

# SSO embedding

## Example



edit account sign out 4





# Summary

- Embedding Looker analytics in iframes allows you to quickly integrate the use of data into the application, or applications your people use most.
- Quick setup and customization help you put data into the path of people when and where they need it most.
- Don't make people hunt for what they need, take the data to the people!

# Questions?

The background is a solid purple color. A central point from which numerous thin, light-purple lines radiate outwards across the entire frame. There are three distinct clusters of small, light-purple squares: one on the left side, one in the upper right quadrant, and one in the lower right quadrant.



looker





# Thank you

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