Free Training Transcript: Data Security with User Filters

Welcome to this video on Data Security with User Filters. There are four main components of Tableau Server and Tableau Online security: authentication, authorization and permissions, data security, and network security. This video focuses on the third piece, data security.

Tableau Approach to Data Security

Data security ensures that the appropriate data is seen by the appropriate people. For example, a doctor seeing only her patients' data or a sales manager only seeing information about his territory.

There are a few ways data security can be implemented with Tableau Server or Tableau Online. This can be done solely in the database, solely in Tableau, or a hybrid approach, where user information in Tableau Server or Tableau Online corresponds with data elements in the database

This video will focus on the latter two approaches. For more information on how Tableau leverages existing data security implemented in the database, please refer to the online help.

Here we're connected to the Global Superstore dataset, but we've joined the people tab to the orders tab to bring in Manager information. These managers should only see their regions, rather than the entire world. It's important to note that they are also users in Tableau Server or Tableau Online.

User Filters – Tableau Only

If we publish this workbook to Tableau Server or Online, the same experience will carry through – when a given manager signs in, they'll only see their region.

The user filter can also be used across multiple worksheets, or embedded in the data source. Let's embed. We'll remove the user filter that's already on the filter shelf. Right click on the data source, choose "edit data source filters", we'll click Add, and choose the filter we created. The filter now applies for everything using this data source. And if we publish the data source to Tableau Server or Tableau Online, the user filter will be leveraged across all connections.

User Filters – Hybrid

Let's look at an example of a hybrid approach to data security in Tableau using calculated fields. We'll right click, select Create Calculated Field. And we'll name this Manager Verification. We'll create a simple formula that checks if the Tableau username matches the Manager field: USERNAME() = [Manager]. This is different than the user filter we created before, because the data itself contains the relationships of which manager should be able to see which regions.

Once this calculated field is created, we can use it in a similar fashion to the user filter in the previous example. It can be dragged to the filter shelf, and select only True, or it could be embedded as a data source filter.

The benefit of this calculated field approach is that no maintenance has to be done to the workbooks as new users or data is added to the system. As long as the users exist in Tableau Online or Tableau Server, and the data source contains their user names, this calculation will continue to function.

Conclusion

Thank you for watching this data security video. We invite you to continue with the Free Training videos to learn more about using Tableau.