



# 2.2 Release Notes

February 2015

## Release date: February 2015

The ThoughtSpot 2.2 release includes features focused around the search experience and new functions for creating formulas.

### What's New in this Release?

#### 1. Phrase boxing in the search bar

The search bar now shows boxes around each search phrase, so you can easily see where it begins and ends. Your search phrases still appear as text when you are typing, but whenever you click out of the search bar, they are boxed. Search phrases have blue boxes, and filters have white boxes.



Figure 1: Search bar with phrases boxed

When you click on a search phrase, it is highlighted, so you can easily delete it or replace it with one of the suggestions.

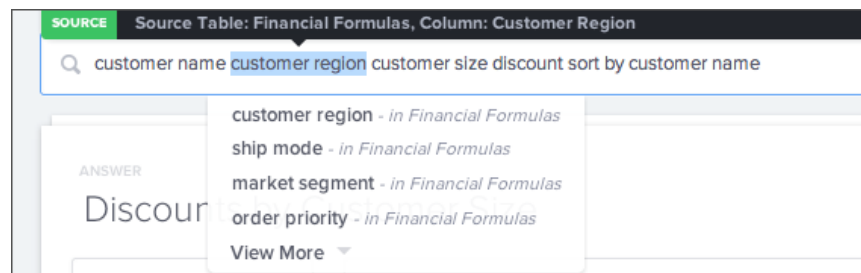


Figure 2: Search suggestions for a boxed phrase

## 2. Spell check in the search bar

The search bar now includes spell check. If you spell or type a term incorrectly, your suggestions will include the correct spelling of the term.

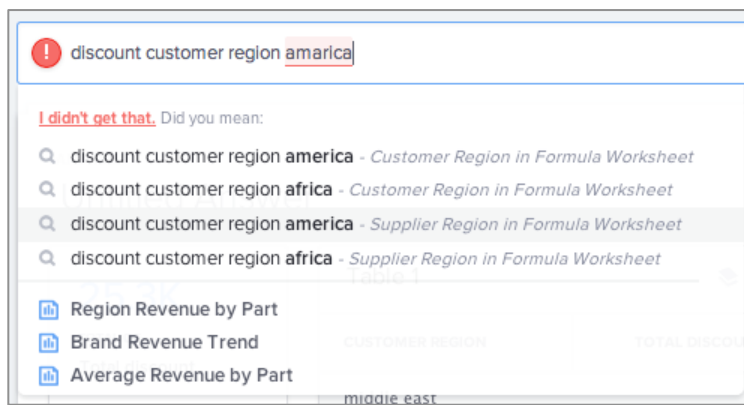


Figure 3: Spell check in the search bar

## 3. New Formula Functions

Build more complex formulas with new formula functions and operators. The Formula Assistant and Administration Guide contain descriptions and examples for all formula functions and operators.

The following new functions have been added in this release:

Operators:

- if...then...else
- ifnull
- isnull

Number Functions:

- random

- round
- sin
- cos
- tan
- asin
- acos
- atan
- atan2
- spherical\_distance

Date functions:

- diff\_days
- now
- year
- add\_days
- day\_number\_of\_week
- day\_number\_of\_year
- hour\_of\_day
- date
- time
- day\_of\_week
- is\_weekend

Text Functions:

- substr
- strpos

#### **4. More date and timestamp formats for data importing**

These date and timestamp formats are now supported when importing a CSV through the data importer in the browser:

- 1/30/2014
- 2014-01-30
- 2014-1-9
- 30-Jan-2014

- 2014-Jan-13
- 2014-01-30 10:32 AM
- 2014-01-30 14:52
- 2014-01-30 10:32:22
- 2014-01-30 10:32:22 AM
- 2014-01-30 10:32:22.0
- 2014-01-30 10:32:22.0 AM
- 2014-01-30 10:32:22.000
- 2014-01-30 10:32:22.000 AM
- 1/9/2014
- 30-Jan-14
- 01-Mar-02 (assumes 2002)
- 3/1/2002 10:32 AM
- 3/1/2002 14:52
- 3/1/2002 10:32:22
- 3/1/2002 10:32:22 AM
- 3/1/2002 10:32:22.0
- 3/1/2002 10:32:22.0 AM
- 3/1/2002 10:32:22.000
- 3/1/2002 10:32:22.000 AM
- 30-Jan-14 10:32 AM
- 30-Jan-14 14:52
- 30-Jan-14 10:32:22
- 30-Jan-14 10:32:22 AM
- 30-Jan-14 10:32:22.0
- 30-Jan-14 10:32:22.0 AM
- 30-Jan-14 10:32:22.000
- 30-Jan-14 10:32:22.000 AM
- Fri Oct 04 2013 3:26 PM
- Fri Oct 04 2013 13:46
- Fri Oct 04 2013 10:32:22
- Fri Oct 04 2013 10:32:22 AM
- Fri Oct 04 2013 10:32:22.0
- Fri Oct 04 2013 10:32:22.0 AM
- Fri Oct 04 2013 10:32:22.000
- Fri Oct 04 2013 10:32:22.000 AM

## 5. Multi-word Search Terms for Contains

You can now use multi-word search terms with the “contains” keyword. The multi-word search term has to be enclosed in single quotes.

For example, to search for values that contain the words “san diego”, you would type:  
contains ‘san diego’

## 6. New “Can Share with All Users” Privilege

The new “Can Share with All Users” privilege enables sharing with anyone who has a ThoughtSpot login. It is granted at the group level, and extends to all group members. By default, this privilege is off, so that users can only share with other people in their own group(s). If a user is a member of more than one group, they’ll have this privilege if any of the groups they belong to has it turned on.

## 7. Show hidden columns

You can see hidden columns by checking the **Show hidden columns** box. This makes it easy to see all the data when exploring data or joining an imported CSV file to another data source. This can be useful when you have an identifier column, such as an id number in a data source. You may want to hide the id number column from searches, but you still want to use for joining an imported CSV file.

## 8. User experience improvements

Other user experience improvements in this release include:

- a. The title “Suggestions from additional sources:” has been added to show when a suggestion comes from a different data source than the one that is active.
- b. Visualization improvements, including thicker line charts, angled chart labels, and better title and label truncation rules.
- c. Custom pinboard sizing is now proportional.

## 9. New Row Level Security Conditions

The following row level security condition operators have been added:

Operator	Description	Logical Example
BW	Between operator	$a < x < b$
BW_INC	Between operator with both boundaries included	$a \leq x \leq b$
BW_INC_MIN	Between operator with the lower boundary included	$a \leq x < b$
BW_INC_MAX	Between operator with upper boundary included	$a < x \leq b$

When using these operators, you'll need to specify two values in the "Value" column of the security file (an upper and a lower boundary). The two values should be separated by the pipe character (|).

## 10. New resource charts

There is a new pinboard called **TS Stats: Resource Usage**, to help you monitor cluster resources. The answers it contains show data for memory and CPU usage per component:

- Service
- Database
- Search
- Host
- Aggregate (cluster-wide)

## 11. New tscli commands for cluster management

The following tscli commands are new in this release:

Command	Description
<code>tscli cluster logs</code>	Extracts logs from the cluster.
<code>tscli alert off</code>	Disables all alerts from the cluster.
<code>tscli alert on</code>	Enables alerts from the cluster.
<code>tscli alert status</code>	Gets the status of cluster alerts.
<code>tscli alert list</code>	Lists all the generated alerts.
<code>tscli alert count</code>	Shows counts of generated alerts by type.
<code>tscli storage gc</code>	Garbage collects unused storage. Accepts these flags: <code>--log_age &lt;number_of_hours&gt;</code> Specifies the number of elapsed hours beyond which logs will be deleted. Default is 24 hours. <code>--localhost_only</code> If used, only the logs on the localhost will be removed. If not specified, the command acts on the entire cluster.

The command `tscli storage gc` frees up storage used by the following:

```

/tmp
/usr/local/scaligent/logs/
/export/logs/orion
/export/logs/oreo
/export/logs/hadoop
/export/logs/zookeeper
cores

```



## Changes in this Release

### 1. Sharing privileges will change upon upgrading

A new “Can Share with All Users” privilege was added in this release. The privilege is granted at the group level. When you upgrade to this release, the privilege will be disabled for all groups. If you want users to be able to share with any users outside of their own group(s), you need to re-enable this after upgrading. The administrator must edit each group after upgrading to set this privilege.

### 2. Changes to `tscli` commands

Some `tscli` commands have been changed or removed:

- a. The command `tscli snapshot start` has been changed to `tscli snapshot create`. The new name is more accurate, since the command creates a snapshot synchronously.
- b. The command `tscli host add` and `tscli host remove` have been removed.
- c. The syntax for the command `snapshot backup` was incorrectly documented as:

```
snapshot backup <snapshot_name> <backup_filename>
```

The correct syntax is:

```
snapshot backup <snapshot_name> <backup_directory>
```

The output of the command is a directory, which must not already exist.

- d. The optional argument `--cluster`, used to designate the cluster to operate on, takes the cluster name rather than the IP address, as previously documented.

### **3. Log file directories have changed**

As of this 2.2 release, all logs have moved to one log directory, with a sub-directory for each subsystem. If you have any scripts that refer to these log files, they must be updated to reflect the new locations.

The pre-2.2 logs were located here:

```
/export/orion/logs  
/export/orion/oreo/logs  
/export/hadoop/logs  
/export/zookeeper/logs
```

The new 2.2 logs are all located under the directory `/export/logs`:

```
/export/logs/orion  
/export/logs/oreo  
/export/logs/hadoop  
/export/logs/zookeeper
```

## **Supported Upgrade Paths**

If you are running a release that begins with one of the following ThoughtSpot version numbers, you can upgrade to this release directly:

- 2.0.5
- 2.0.6
- 2.1
- 2.1.1
- 2.1.2
- 2.1.3
- 2.1.4
- 2.1.5
- 2.1.6