

CLAIMS

What is claimed is:

- 1.—~~A computer implemented method comprising:~~
~~monitoring data usage on a storage allocation in a networked environment, the storage allocation having a number of partitions including at least one partition;~~
~~determining whether the data usage on the at least one partition included in the storage allocation exceeds a specified threshold;~~
~~modifying at least one of a size of the at least one partition or the number of partitions included in the storage allocation;~~
~~directing network traffic associated with the storage allocation away from a portion of the storage allocation associated with the modifying of the at least one of the size or the number; and~~
~~directing the network traffic to the portion of the storage allocation associated with the modifying when the modifying is complete.~~
- 2.—~~The computer implemented method of claim 1, further comprising:~~
~~detecting that a size of a search index for the storage allocation exceeds a specified index size threshold; and~~
~~updating the search index for the storage allocation based on the modifying the at least one of the size of the at least one partition or the number of partitions included in the storage allocation.~~
- 3.—~~The computer implemented method of claim 2, wherein the updating the search index includes rebuilding the search index for the storage allocation to reflect the modifying the at least one of the size of the at least one partition or the number of partitions included in the storage allocation.~~
- 4.—~~The computer implemented method of claim 1, wherein the data usage includes at least one of an amount of data being stored on the storage allocation or a rate at which data is being manipulated on the storage allocation.~~

5. ~~The computer-implemented method of claim 4, wherein the specified threshold includes at least one of a specified amount threshold or a specified rate threshold, and wherein the data usage exceeds the specified threshold when there is an occurrence of at least one of the amount of data being stored exceeds the specified amount threshold or the rate at which data is being manipulated exceeds the specified rate threshold.~~
6. ~~The computer-implemented method of claim 5, wherein the specified threshold is calculated based at least in part on information about historical data usage.~~
7. ~~The computer-implemented method of claim 1, further comprising:
determining that an amount of network traffic directed to the storage allocation is above a specified traffic threshold; and
modifying the storage allocation based on the amount of network traffic.~~
8. ~~The computer-implemented method of claim 7, wherein the network traffic includes search query traffic for searching data stored on the storage allocation.~~
9. ~~The computer-implemented method of claim 7, wherein the modifying the storage allocation based on the amount of network traffic includes at least one of modifying the size of the at least one partition, modifying the number of partitions, or replacing at least one partition included in the number of partitions with at least one partition having different specifications.~~
10. ~~The computer-implemented method of claim 9, wherein the different specifications include at least one of a different CPU power, a different capacity of RAM, a different capacity of hard disk space, or a different capacity of bandwidth.~~
11. ~~The computer-implemented method of claim 1, wherein the modifying the at least one of the size of the at least one partition or the number of~~

~~partitions includes increasing at least one of the size of the at least one partition or the number of partitions, wherein the increasing the size of the at least one partition is performed if the size of the at least one partition is below a maximum partition size threshold, and wherein the increasing the number of the partitions is performed if the size of the at least one partition is at the maximum partition size threshold.~~

~~12. The computer implemented method of claim 1, wherein the modifying the at least one of the size of the at least one partition or the number of partitions includes decreasing at least one of the size of the at least one partition or the number of partitions, wherein the decreasing the number of the partitions is performed if the number of the partitions is greater than one partition, and wherein the decreasing the size of the at least one partition is performed if the number of the partitions is one partition.~~

~~13. The computer implemented method of claim 1, further comprising: determining a CPU usage of the storage allocation, wherein the modifying the at least one of the size or the number is based on at least one of the data usage on the storage allocation or the determined CPU usage of the storage allocation.~~

~~14. The computer implemented method of claim 1, further comprising: modifying a configuration of the storage allocation based on at least one of a configuration associated with the data usage or a user-initiated input.~~

~~15. The computer implemented method of claim 1, further comprising: determining when to perform the modifying of the at least one of the size or the number based on resources available to the storage allocation.~~

1. A computer-implemented method for index configuration for searchable data in a networked environment, comprising:
receiving data, the data including a plurality of data fields;
determining a name associated with each data field in the plurality of data fields;

determining a field type, of a plurality of field types, associated with each data field in the plurality of data fields, the plurality of field types including at least one of an integer type, a literal type, or a text type;

determining whether to enable one or more search options for each of the data fields based at least in part upon the respective field type associated with each of the data fields, the one or more search options including at least one of an option to include a respective data field in a search index to be generated, an option to calculate a facet count for the respective data field, or an option to provide one or more values associated with the respective data field;

automatically generating an index configuration for the data based at least in part on the respective field type of each data field; and

generating a search index for the data using the index configuration, the search index including a portion of the data for each data field for which the option to include the respective data field in the search index is enabled.

2. The computer-implemented method of claim 1, wherein the data is of a first format, further comprising:

converting the data from the first format to a second format, the second format being compatible with the search index; and

storing the data converted to the second format on one or more storage allocations.

3. The computer-implemented method of claim 2, wherein the converting the data from the first format to the second format comprises:

comparing the first format with the second format; and

modifying at least one data field associated with the first format to correspond to at least one data field associated with the second format.

4. The computer-implemented method of claim 2, wherein the second format is a Search Data Format (SDF).

5. A system comprising:

at least one communications transceiver;

one or more storage allocations;

at least one processor; and
a memory device including instructions that, when executed by the at
least one processor, cause the system to:

- receive data via the at least one communications transceiver, the
data including a plurality of data fields;
- determine a name associated with each data field in the plurality
of data fields;
- determine a field type, of a plurality of field types, associated with
each data field in the plurality of data fields, the plurality of field types including
at least one of an integer type, a literal type, or a text type;
- determine whether to enable one or more search options for each
of the data fields based at least in part upon the respective field type associated
with each of the data fields, the one or more search options including at least one
of an option to include a respective data field in a search index to be generated,
an option to calculate a facet count for the respective data field, or an option to
provide one or more values associated with the respective data field;
- automatically generate an index configuration for the data based
at least in part on the respective field type of each data field; and
- generate a search index for the data using the index configuration,
the search index including a portion of the data for each data field for which the
option to include the respective data field in the search index is enabled.

6. The system of claim 5, wherein the plurality of types of data fields
further includes at least one of a geolocation type, a time type, a date
type, or a floating point number type.

7. The system of claim 5, wherein the determining the type of the data field
comprises:

- determining that a value associated with the data field has an amount of
integer characters above a specified integer amount threshold; and
- determining the type of the data field to be the integer type.

8. The system of claim 5, wherein the determining the type of the data field comprises:

determining at least one of a value associated with the data field having an amount of alphanumeric characters above a specified text amount threshold, a number of distinct values associated with the data field being above a specified text distinct amount threshold, a percentage of distinct values being above a specified text distinct percentage threshold, or a length of values being above a specified text length threshold; and

determining the type of the data field to be the text type.

9. The system of claim 5, wherein the determining the type of the data field comprises:

determining at least one of a value associated with the data field having an amount of alphabetic characters above a specified lower literal amount threshold but below a specified upper literal amount threshold, a number of distinct values associated with the data field being below a specified literal distinct amount threshold, a percentage of distinct values being below a specified literal distinct percentage threshold, or a length of values being below a specified literal length threshold; and

determining the type of the data field to be the literal type.

10. The system of claim 5, wherein the one or more search options include at least one of an option to include the data field in the search index to be generated, an option to calculate a facet count for the data field, or an option to provide a value associated with the data field in response to a relevant search query.

11. The system of claim 10, wherein the determining the one or more search options to be enabled comprises deciding to enable the option to include the data field in the search index to be generated, the decision being based at least in part on at least one of receiving a signal included in the data field indicating that the data field is to be included in the search index or determining a type of the data field to be a literal type.

12. The system of claim 10, wherein the determining the one or more search options to be enabled comprises deciding to enable the option to calculate the facet count for the data field, the decision being based at least in part on determining that a quantity for a distribution of a plurality of values associated with the data field is below a specified facet count upper threshold.
13. The system of claim 10, wherein the determining the one or more search options to be enabled comprises deciding to enable the option to provide the value associated with the data field in response to the relevant search query, the decision being based at least in part on at least one of receiving a signal included in the data field indicating that the value associated with the data field is to be provided or determining that a length of the value associated with the data field is below a specified return value length threshold.
14. The system of claim 5, wherein the instructions cause the system to further:
provide at least one of the data, the index configuration, or the index to be searchable by one or more search queries.
15. The system of claim 5, wherein the instructions cause the system to further:
modify the index configuration based at least in part on one or more user-initiated inputs.
16. The system of claim 5, wherein the data is of a first format, and wherein the instructions cause the system to further:
convert the data from the first format to a second format, the second format being compatible with the search index; and
store the data converted to the second format on the one or more storage allocations.

17. The system of claim 16, wherein the instructions cause the system to convert the data from the first format to the second format based on comparing the first format with the second format and modifying at least one data field associated with the first format to correspond to at least one data field associated with the second format.

18. A non-transitory computer-readable storage medium including instructions that, when executed by at least one processor of a computing system, cause the computing system to:
receive data, the data including a plurality of data fields;
determine a name associated with each data field in the plurality of data fields;

determine a field type, of a plurality of field types, associated with each data field in the plurality of data fields, the plurality of field types including at least one of an integer type, a literal type, or a text type;

determine whether to enable, one or more search options for each of the data fields based at least in part upon the respective field type associated with each of the data fields, the one or more search options including at least one of an option to include a respective data field in a search index to be generated, an option to calculate a facet count for the respective data field, or an option to provide one or more values associated with the respective data field;

automatically generate an index configuration for the data based at least in part on the respective field type of each data field; and

generate a search index for the data using the index configuration, the search index including a portion of the data for each data field for which the option to include the respective data field in the search index is enabled.

19. The non-transitory computer-readable storage medium of claim 18,
wherein the data is of a first format, and wherein the instructions cause the system to further:

convert the data from the first format to a second format, the second format being compatible with the search index; and

store the data converted to the second format on one or more storage allocations.

20. The non-transitory computer-readable storage medium of claim 19, wherein the converting the data from the first format to the second format comprises:
comparing the first format with the second format; and
modifying at least one data tag associated with the first format to correspond to at least one data tag associated with the second format.

21. The non-transitory computer-readable storage medium of claim 18, wherein the plurality of types of data fields further includes at least one of a geolocation type, a time type, a date type, or a floating point number type.

22. The non-transitory computer-readable storage medium of claim 18, wherein the instructions cause the computing system to determine the type of the data field to be the literal type based on determining at least one of a value associated with the data field having an amount of alphabetic characters above a specified lower literal amount threshold but below a specified upper literal amount threshold, a number of distinct values associated with the data field being below a specified literal distinct amount threshold, a percentage of distinct values being below a specified literal distinct percentage threshold, or a length of values being below a specified literal length threshold.

23. The non-transitory computer-readable storage medium of claim 18, wherein the one or more search options include at least one of an option to include the data field in the search index to be generated, an option to calculate a facet count for the data field, or an option to provide a value associated with the data field in response to a relevant search query.

24. The non-transitory computer-readable storage medium of claim 23, wherein the determining the one or more search options to be enabled

comprises deciding to enable the option to calculate the facet count for the data field, the decision being based at least in part on determining that a quantity for at least one value associated with the data field is above a specified facet count lower threshold and below a specified facet count upper threshold.

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What is claimed is:

1. A computer-implemented method for index configuration for searchable data in a networked environment, comprising:
 - receiving data, the data including a plurality of data fields;
 - determining a name associated with each data field in the plurality of data fields;
 - determining a field type, of a plurality of field types, associated with each data field in the plurality of data fields, the plurality of field types including at least one of an integer type, a literal type, or a text type;
 - determining whether to enable one or more search options for each of the data fields based at least in part upon the respective field type associated with each of the data fields, the one or more search options including at least one of an option to include a respective data field in a search index to be generated, an option to calculate a facet count for the respective data field, or an option to provide one or more values associated with the respective data field;
 - automatically generating an index configuration for the data based at least in part on the respective field type of each data field; and
 - generating a search index for the data using the index configuration, the search index including a portion of the data for each data field for which the option to include the respective data field in the search index is enabled.
2. The computer-implemented method of claim 1, wherein the data is of a first format, further comprising:
 - converting the data from the first format to a second format, the second format being compatible with the search index; and
 - storing the data converted to the second format on one or more storage allocations.
3. The computer-implemented method of claim 2, wherein the converting the data from the first format to the second format comprises:
 - comparing the first format with the second format; and

modifying at least one data field associated with the first format to correspond to at least one data field associated with the second format.

4. The computer-implemented method of claim 2, wherein the second format is a Search Data Format (SDF).

5. A system comprising:

at least one communications transceiver;

one or more storage allocations;

at least one processor; and

a memory device including instructions that, when executed by the at least one processor, cause the system to:

receive data via the at least one communications transceiver, the data including a plurality of data fields;

determine a name associated with each data field in the plurality of data fields;

determine a field type, of a plurality of field types, associated with each data field in the plurality of data fields, the plurality of field types including at least one of an integer type, a literal type, or a text type;

determine whether to enable one or more search options for each of the data fields based at least in part upon the respective field type associated with each of the data fields, the one or more search options including at least one of an option to include a respective data field in a search index to be generated, an option to calculate a facet count for the respective data field, or an option to provide one or more values associated with the respective data field;

automatically generate an index configuration for the data based at least in part on the respective field type of each data field; and

generate a search index for the data using the index configuration, the search index including a portion of the data for each data field for which the option to include the respective data field in the search index is enabled.

6. The system of claim 5, wherein the plurality of types of data fields further includes at least one of a geolocation type, a time type, a date type, or a floating point number type.

