Additional License Authorizations

For Vertica Analytics Platform software products

MICRO FOCUS

Products and suites covered

Products	E-LTU or E-Media available*	Non-production use category**
Vertica Community Edition	No	N/A
Vertica Express Edition	Yes	Class 4
Vertica External Data Add-On	Yes	Class 4
Vertica Premium Edition	Yes	Class 4
Vertica for SQL on Hadoop	Yes	Class 3

* Any product sold as E-LTU or E-Media shall be delivered electronically regardless of any contrary designation in a purchase order.
** Non-production use rights, if any, can be found at software.microfocus.com/legal/software-licensing.

Definitions

Capitalized terms not otherwise defined in this ALA document are defined in the governing agreement.

Term	Definition
Cluster	Means a group of cooperating Vertica Nodes.
Core	Means a part of a CPU that executes a single stream of compiled instruction code.
CPU	Means a system in a single integrated circuit package with one or more discrete processing Cores.
E-LTU and E-Media	Means products which are electronically delivered only, and as such any reference to FOB Destination or delivery methods that are stated on your purchase order other than electronic shall be null and void with respect to these E-LTU or E-Media products.
External Data Size	Means the size of the data accessed at the source (e.g. HDFS) with the URL path defined by a Vertica external table in Parquet or ORC format.
GB	Means gigabytes which designates the amount of physical capacity that can be managed.
HDFS	Means Hadoop distributed file system.
Instance	Means each implementation of the application installed on a Server.
LTU	Means License To Use.
MP	Means monthly payment for the term LTU and Term Support. When MP is indicated in the product description customer is required to submit a purchase order inclusive of both for the term of the license.
Named User *or* Nmd User	Means a specific individual authorized by you to access the software regardless of whether they are actively using the software.
Node	Means a Server that acts as a single computer system, whether physical or virtual.
ORC File	Means Optimized Row Columnar file format.
Parquet File	Means Columnar data format.
Raw Data Size *or* Vertica Raw Data Size	Means the size of the uncompressed data stored in a Vertica database as if such uncompressed data had been exported from the database in text format. All logical database entities (tables) and all derived and aggregate tables are included in the Raw Data Size measurement. All data stored in external tables in the ORC or Parquet format is included in the Raw Data Size. Data stored in Flex Tables (as defined in documentation on Vertica.com) will be counted as one tenth the capacity stored in a regular table (e.g. 1TB loaded into Flex Tables will count as 100GBs towards the license capacity). The following is excluded from the Raw Data Size measurement: ▪ Multiple projections (underlying physical copies) of data from a logical database entity (table); i.e. data appearing in multiple projections of the same table is only counted once

Term	Definition
	▪ Data stored in temporary tables ▪ Data stored in flattened tables used for de-normalization purposes ▪ Deleted data that remains in the database ▪ Data stored in the Write Optimized Store (WOS) as defined in **documentation** ▪ Data stored in system tables such as monitoring tables, data collector tables, query repository tables, Database Designer work tables, etc. ▪ Views ▪ Copies or adaptations for back-up or archival purposes or when copying or adaptation is an essential step in the authorized use of the Vertica software
Read Optimized Store Format *or* ROS Format	Means the internal columnar format in which the Vertica system stores data for query purposes.
Server *or* SVR	Means any designated computer system in which an Instance or Instances of the software is installed.
TB	Means terabytes which designates the amount of physical capacity that can be managed.
Term License to Use *or* Term LTU	Means a software license to use (LTU) which indicates in its license description that the license is valid for a specific period of time such as One Month (1M), One Year (1Y) etc. Term LTUs are not perpetual licenses.
Term Support	Means a fixed period support offering that is only valid during the time period of the associated Term LTU.
Unlimited *or* Unl	Means without restrictions in terms of number of systems, devices or media, depending on the context.
User	Means a user whose use is restricted to the type of software that is being licensed.

Software specific license terms

Software products with software specific license terms are described below. Software products covered by this ALA document (as listed above) and not covered in this section do not have software specific license terms.

Vertica Community Edition

Vertica Community Edition license terms are the same as the Vertica Enterprise Edition license terms listed below with the following exceptions: a) Raw Data Size is limited to one (1) TB, b) External Data Size is limited to three (3) TB, c) to be used on no more than three (3) Servers or other resources that act as a single system whether physical or virtual and d) cannot be connected to multiple editions of Vertica Community Edition. Vertica Community Edition must be installed on a separate Node from Hadoop when performing queries of the Hadoop native formatted data.

Vertica Express Edition

Vertica Express Edition terms are the same as the Vertica Premium Edition license terms listed below.

The following features and functionality (as defined in the **documentation**) are not included with licenses of Vertica Express Edition:

1. Advanced SQL Functions
   A. Analytical Functions
   B. Patterns Matching Functions
   C. Time Series Functions
2. ROLAP SQL Functions
   A. ROLLUP Aggregate
   B. GROUPING SETS Aggregate
   C. CUBE Aggregate
   D. Pivot

3. R Integration via Vertica pre-built UDX
4. Python Integration via Vertica pre-built UDX
5. Workload Analyzer
6. KV Interface
7. Fault Groups
8. Live Aggregate Projections
9. Text Search
10. FIPS 140-2 Support
11. Flattened Tables
12. Parquet Export
13. Predictive Analytics Functions
    A. Normalization, outlier detection, sampling, imbalanced data processing and missing value imputation functions
    B. Linear regression, logistic regression, k-means, naïve bayes, random forests, singular value decomposition, support vector machines, generalized boost models, neural networks, page rank, k nearest neighbors
    C. Confusion matrix, receiver operator characteristic (ROC), error rate, lift table, mean squared error, r squared, wald statistics

Vertica External Data Add-On

Vertica External Data Add-On for data not stored in the Vertica database, is licensed per TB measured in External Data Size on an unlimited number of central processing units or CPUs and for an unlimited number of Users. The external data formats permitted are ORC & Parquet. External data in non-optimized formats, such as CSV, are not counted towards the per TB license. The Vertica External Data Add-On is only available for Vertica version 8.1.1 or higher.

Vertica for SQL on Hadoop

Vertica for SQL on Hadoop is licensed per Node, on an unlimited number of central processing units or CPUs and an unlimited number of Users. Vertica for SQL on Hadoop is for deployment on Hadoop nodes. Includes 1 TB of Vertica ROS formatted data on HDFS.

The following features and functionality (as defined in the **documentation**) are not included with licenses of Vertica for SQL on Hadoop:

1. User Defined Extensions (Python UDXs, R UDxs, C++ UDxs). UDx libraries shipped with Vertica and Java UDxs are included with Vertica for SQL on Hadoop license
2. Advanced SQL Functions
    A. Analytical Functions
    B. Pattern Matching Functions
    C. Time series Functions
    D. Geospatial Functions
3. ROLAP SQL Functions
    A. ROLLUP Aggregate
    B. GROUPING SETS Aggregate
    C. CUBE Aggregate
    D. Pivot
4. Text Search
5. Live Aggregate Projections
6. Flattened Tables
7. FIPS 140-2 Support
8. Dynamic Workload Management (Secondary Resource Pools – Cascade To Parameter)
9. Vertica Linux (EXT4) File System for storing business data.
10. Backup and Restore utility (vbr.py)
11. Predictive Analytics Functions
    A. Normalization, outlier detection, sampling, imbalanced data processing and missing value imputation functions
    B. Linear regression, logistic regression, k-means, naïve bayes, random forests, singular value decomposition, support vector machines, generalized boost models, neural networks, page rank, k nearest neighbors
    C. Confusion matrix, receiver operator characteristic (ROC), error rate, lift table, mean squared error, r squared, wald statistics

Vertica Premium Edition

Vertica Premium Edition is licensed per TB measured in Raw Data Size, on an unlimited number of central processing units or CPUs and for an unlimited number of Users. Licensee is permitted to use an identical data set for no more than three (3) Vertica Clusters. Vertica Premium Edition must be installed on a separate Node from Hadoop when performing queries of the Hadoop native formatted data. The use of HDFS as a storage location is permitted and counts against the licensed capacity.

The Vertica Premium Edition includes a limited, revocable (as provided herein), nonexclusive right to use the source code of the Vertica SDK Software ("SDK Software), without right to transfer or sublicense, for the sole purpose of creating libraries and functions for use with the Vertica Premium Edition solely for Licensee's internal use ("SDK Libraries"). Licensee shall own all SDK Libraries provided, however, that the SDK Libraries are to be used by Licensee for Licensee's internal purposes in connection with the use and operation of the Vertica Premium Edition, and Licensee is expressly prohibited from transferring, assigning, distributing, licensing or selling the SDK Libraries to any third party. If Licensee uses third party or open source software to develop SDK Libraries using the SDK Software, Licensee is solely responsible for complying with any such third party or open source license requirements.

MICRO FOCUS BEARS NO RESPONSIBILITY FOR THE CONSEQUENCES OF USE BY LICENSEE OF (i) THE SDK SOFTWARE AS MODIFIED BY LICENSEE, AND (ii) ANY SOFTWARE CREATED BY LICENSEE AND SDK LIBRARIES. MICRO FOCUS MAKES NO REPRESENTATIONS AND DISCLAIMS ALL WARRANTIES WITH RESPECT TO THE SDK SOFTWARE AS MODIFIED BY LICENSEE, AND ANY SOFTWARE CREATED BY LICENSEE AND SDK LIBRARIES, AND DOES NOT GUARANTEE THE PERFORMANCE OF THE SDK SOFTWARE AS MODIFIED BY LICENSEE, OR ANY SOFTWARE CREATED BY LICENSEE OR SDK LIBRARIES, INCLUDING WITHOUT LIMITATION THAT ANY SDK LIBRARIES WRITTEN AGAINST ONE VERSION OF THE SDK SOFTWARE WILL BE BINARY COMPATIBLE WITH FUTURE VERSIONS OF THE SDK SOFTWARE.

Third party suppliers are intended beneficiaries and independently may protect their rights in the software in the event of any infringement. All rights not expressly granted to Licensee are reserved solely to Micro Focus or its suppliers.

5200-1653, June 01, 2018; replaces 5200-1618 (October 30, 2017)