Overview

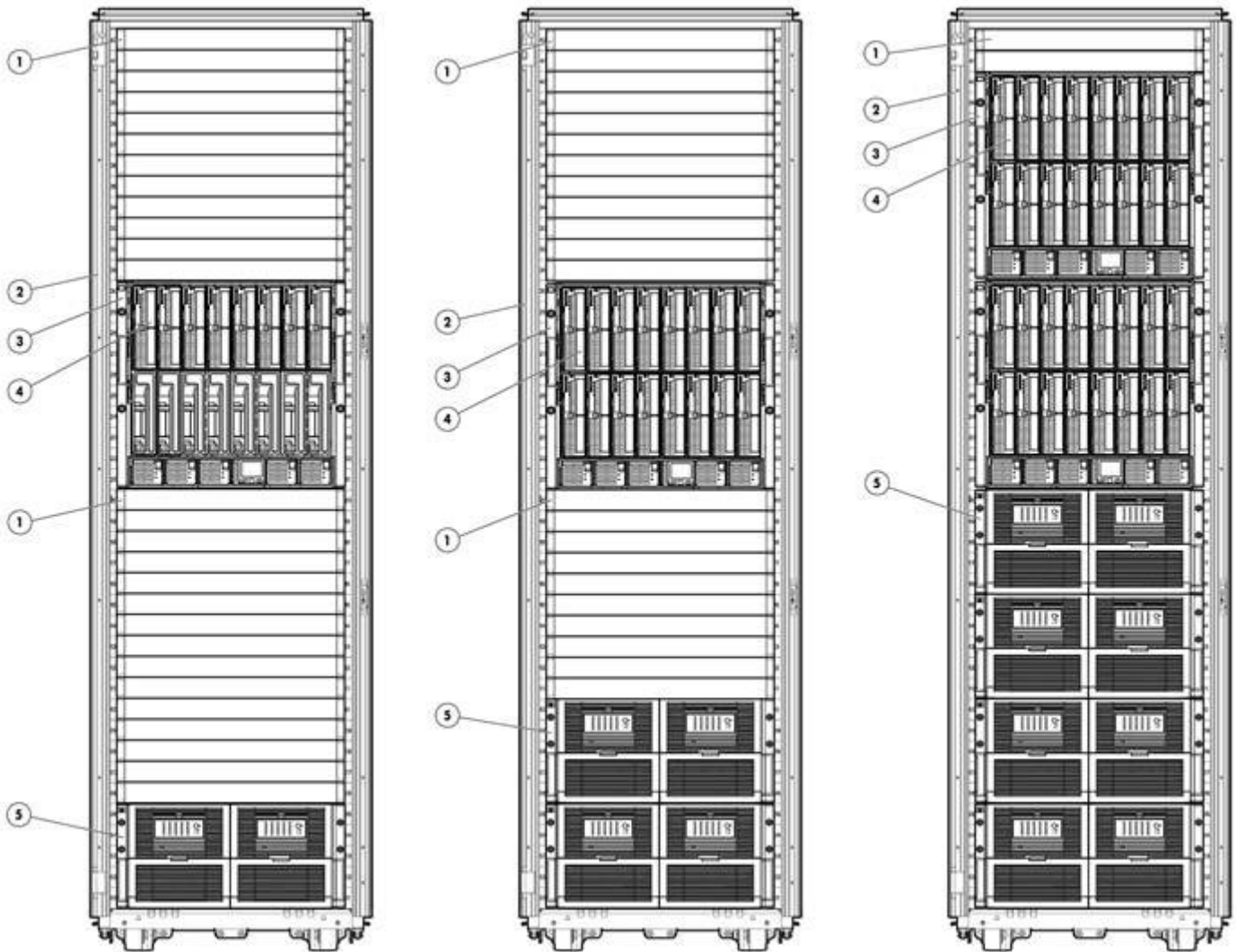### Quarter Rack Configuration

1. Rack filler panels
2. HP Universal Rack 10642 G2 1200mm deep Shock Rack
3. One (1) HP BladeSystem c7000 enclosure
4. Eight (8) HP ProLiant BL460c G7 server blades. 96 cores, 768GB Ram
5. One (1) HP MDS600 with 26TB RAID 6 (ADG) capacity and initial 5 or 10TB Vertica license

Half Rack Configuration

1. Rack filler panels
2. HP Universal Rack 10642 G2 1200mm deep Shock Rack
3. One (1) HP BladeSystem c7000 enclosure
4. Sixteen (16) HP ProLiant BL460c G7 server blades. 192 cores, 1536GB Ram
5. Two (2) HP MDS600 with 52TB RAID 6 (ADG) capacity and initial 20TB Vertica license

Full Rack Configuration

1. Rack filler panels
2. HP Universal Rack 10642 G2 1200mm deep Shock Rack
3. Two (2) HP BladeSystem c7000 enclosure
4. Thirty-two (32) HP ProLiant BL460c G7 server blades. 384 cores, 3072GB Ram
5. Four (4) HP MDS600 with 105TB RAID 6 (ADG) capacity and initial 50TB Vertica license

Overview

The PDU for Americas and Japan (PN AF916A) requires 2x 60 amp 3 phase Delta circuits and the PDU for EMEA and AP (PN AF917A) requires 2x 32 amp 3 phase Wye circuits.

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At A Glance

The HP Vertica Analytics System provides revolutionary real-time analytics-purpose built for tomorrow's demands today. Simple to use, it delivers the fastest time-to-value immediately to business users, DBAs, and programmers. It has been optimized on a Converged Infrastructure and is based on the HP BladeSystem c7000 with BL460c G7 server blades, HP 600 Modular Disk System, Red Hat Enterprise Linux, the HP Vertica Analytics Platform software, and includes one year of HP 24x7 hardware and software support. The HP Vertica Analytics Platform (software only) can also be deployed on existing hardware.

The HP Vertica Analytics System provides real-time insight into your data allowing you to consume, analyze, and make informed decisions at the speed of business with the fastest time-to-value making it possible to monetize your data in a matter of minutes, not days.

The HP Vertica Analytics System is pre-configured, tested and optimized to provide easy deployment to users, allowing for fast implementation and minimizing reliance on IT resources. Realizing one size does not fit all it is offered in quarter, half, and full rack configurations.

The HP Vertica Analytics System is built on well-established HP technologies and functionality including:

- HP BladeSystem c7000 enclosure provides a complete infrastructure for power, cooling, and deployment and management of c-Class server blades.
- HP BL460c G7 server blades provide enterprise-class features for high performance and reliability without compromising energy efficiency or density
- HP MDS600 is high-density, low-cost storage solution for HP BladeSystem servers, combining the simplicity and cost-effectiveness of direct attached storage without sacrificing flexibility or performance.
- Red Hat Enterprise Linux, an operating system delivering high performance, reliability, and security.
- HP Vertica Analytics Platform designed and built for today's most demanding analytic workloads.
- Factory Integration assembles and tests the solution and our onsite installation reduces deployment time by over 50%.
- HP support provides a single point of contact across all components; the servers, storage, operating system, and Vertica software. Additional Vertica configuration services and other Vertica professional services are also available.

For more information about the HP Vertica Analytics System, see: http://www.hp.com/go/verticasystem
For more information about HP and Vertica see: http://www.hp.com/go/verticasystem
For more information about Storage, see: www.hp.com/go/storage
For more information about HP racks see: http://h18000.www1.hp.com/products/quickspecs/12402_div/12402_div.html
For more information about HP blades see: http://h18004.www1.hp.com/products/blades/bladesystem/index.html
For more information about HP BladeSystem c7000 Enclosure see:
http://h18000.www1.hp.com/products/quickspecs/12810_div/12810_div.html
For more information about HP BladeSystem c-Class Interconnect and Mezzanine Components see:
http://h18004.www1.hp.com/products/blades/components/c-class-interconnects.html
http://h18004.www1.hp.com/products/blades/components/c-class-adapters.html

How to Order

How to order the HP
Vertica Analytics System

The HP Vertica Analytics System includes all of the HP hardware, HP software, and Red Hat Linux operating system components plus factory integration, onsite installation and one year of 24x7 hardware and software support. For maximum customer flexibility four models are available. A quarter rack solution (PN A2E56A/AM452A) coupled with a 5TB or 10TB Vertica Analytics Platform software license. A half rack configuration (PN AM453A) with a 20TB software license. The full rack solution (PN AM454A) includes a 50TB software license. Additional software licenses can be purchased with our software only offering, (PN T2274AA), in 5, 10, 20 or 50TB increments. The software license included with each model of the HP Vertica Analytics System may not fully meet requirements. Customers will work with the HP sales team to determine the appropriate level of software licenses required for their installation. See below for details.

With all HP Vertica Analytics System orders, the following services are included:

- Factory integration services to default configure, rack, and cable the infrastructure in a rack,
- Site readiness assessment,
- Installation and start up services,
- 1yr Support Plus 24 (24x7 hardware and software support with 4 hour on-site hardware response), with the option to upgrade to higher service levels or extend to longer durations.

While HP is building the system for a given customer, an assigned project manager from Technology Services (TS) will start managing a team of TS engineers to begin planning the rollout of the installation service, including engaging with the customer on environmental requirements and related details. TS engineers will start the actual installation of the equipment as soon as possible after its arrival date at the customer site.

The Technology Services Installation Service is detailed in the installation and start up section below.

Standard Features

HP Vertica Analytics Platform software	The HP Vertica Analytics System comes standard with the HP Vertica Analytics Platform software and Red Hat Enterprise Linux. The software is preinstalled and licenses are included. See model details for license detail. Also included with the HP Vertica Analytics System is 1 year Support Plus 24 (24x7 hardware and software support) for all components.

The HP Vertica Analytic Platform is the only database built from scratch to handle today's heavy analytics workloads. The key to the HP Vertica Analytics Platform performance is three fold:

- HP Vertica Analytics Platform organizes data on disk as columns of values from the same attribute, as opposed to storing it as rows of tabular records. This organization means that when a query needs to access only a few columns of a particular table, only those columns need to be read from disk. Conversely, in a row-oriented database, all values in a table are typically read from disk, which wastes I/O bandwidth.
- HP Vertica employs aggressive compression of data on disk, as well as a query execution engine that is able to keep data compressed while it is operated on. Compression in HP Vertica is particularly effective, as values within a column tend to be quite similar to each other and compress very well-often by up to 90%. In a traditional row-oriented database, values within a row of a table are not likely to be very similar, and hence are unlikely to compress well. Columnar compression and direct operation on compressed data shift the bottleneck in query processing from disks to CPUs.
- Because data is compressed so aggressively, HP Vertica Analytics Platform has sufficient space to store multiple copies of the data to ensure fault tolerance and to improve concurrent and ad hoc query performance. Logical tables are decomposed and physically stored as overlapping groups of columns, called "projections," and each projection is sorted on a different attribute (or set of attributes), which optimizes them for answering queries with predicates on its sort attributes

Besides remarkable performance on a variety of database workloads, HP Vertica Analytics Platform includes several other features designed to offer performance, scalability, reliability, and ease of use.

These include:

- A shared-nothing, grid-based database architecture that allows the HP Vertica Analytics Platform to scale effectively.
- A hybrid data store, where newly inserted records are added to a write-optimized portion of the database to allow continuous, high-performance insert operations concurrently with querying to enable real-time analytics.
- Automated physical database design tools that recommend how data should be organized both locally on each node in a cluster, as well as horizontally partitioned across a cluster. In addition to choosing projections and sort orders, these tools ensure k-safety, meaning that all data is replicated on multiple nodes so that k node failures can be tolerated by the system without interrupting functionality

NOTE: HP Vertica Analytics Platform software support provided in US English

Standard Features

Red Hat Enterprise Linux	HP and Red Hat together provide powerful integrated solutions for customers who want the confidence of deploying Red Hat Enterprise Linux on robust certified systems with comprehensive services and seamless support.

The long-standing partnership between HP and Red Hat is based on collaborative engineering and joint marketing activities that have led to many customer successes across a wide range of industries including financial services, telecommunications, and the public sector

Red Hat Enterprise Linux is preinstalled on the HP Vertica Analytics System and necessary licenses are included. More information is available at http://h71028.www7.hp.com/enterprise/cache/321114-0-0-0-121.html

NOTE: Any necessary updates to Red Hat Enterprise Linux will be provided by HP as part of update processes for the HP Vertica V2400 Analytics System. You do not need to register your subscription with Red Hat, all updates and service needs will be met by HP. |

HP Insight management software	HP Insight Foundation	- Managing the growing number of servers can be complex and expensive for your organization. IT managers need to address changing business needs with tools that meet the challenges of managing today's complex Datacenters - HP provides management solutions that are designed to simplify a server's installation, configuration and maintenance throughout the entire server lifecycle. This provides the customer with higher levels of operational efficiency and highly reliable systems: www.hp.com/go/foundation. - The foundation pack includes ○ HP SmartStart ○ HP Management DVD ○ HP ProLiant Smart Update Firmware DVD ■ SmartStart version supported (minimum): SmartStart 8.50. http://www.hp.com/servers/smartstart
	HP Integrated Lights-Out 3 (iLO 3) (included with each model)	HP Integrated Lights-Out 3 (iLO) simplifies server setup, health monitoring, power and thermal control, and lights-out remote administration of ProLiant ML, DL, and BL servers. HP iLO functions without additional software and can be accessed from any location via a web browser. HP iLO works hand-in-hand with HP Systems Insight Manager, Insight Control suites, and Insight Dynamics for ProLiant, helping customers unleash the value of the ProLiant platform and deliver the highest possible quality of IT service. For more information, visit: www.hp.com/go/iLO

Standard Features

Installation and Startup Service	The included onsite Installation and Startup Service consists of these steps:

- Prior to solution delivery, a simplified site readiness assessment will be performed to ensure that the customer has enough power, cooling, floor space to accommodate the HP Vertica V2400 Analytics System requirement. At this point, HP will also collect the various parameters needed to perform System installation, in particular the network parameters.
- Upon delivery to customers site, unpack and inspect for damages
- Integrate racks in to customers environment, power, network cabling
- Configuration of the network connections towards the customer environment and connection verification
- Conduct basic appliance level functionality testing using the provided "Cluster System Test" tool.
- Familiarize customer with the equipment and with basic processes (HP-side only)
- Instruct customer on how to place support calls

Warranty services

The Vertica Analytics System is covered by a global limited warranty and supported by HP Services and a worldwide network of HP Authorized Channel Partners. Hardware diagnostic support and repair is available for three years from date of purchase.

Beyond the warranty, 1 year Support Plus 24 is included as a part of the standard offering, providing 24x7 hardware and software support with 4 hour on-site hardware response time covering all components of the system, including the HP Vertica Analytics Platform software. Customers may upgrade to higher support levels or extended durations. See Step 2, Choose HP Care Pack Support and Additional Services for more information.

NOTE: Server Warranty includes 3-Year Parts, 3-Year Labor, 3-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have HP replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at: http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html.

HP Financial Services

To support customers' transition, HP Financial Services (HPFS) can help in a way that you may not have considered. HPFS can help you invest in your business while preserving precious capital.

For more information, contact your local HP Financial Services Representative. In the United States, call 1-888-277-5942. In Canada, dial 1-800-HP-LEASE. For more information please visit: www.hp.com/hpfinancialservices for links to HP Financial Services around the world.

Rack Airflow Requirements

Rack 10000 G2 series cabinets
The increasing power of new high-performance processor technology requires increased cooling efficiency for rack-mounted servers. The HP 10000 G2 Series racks provide enhanced airflow for maximum cooling, allowing these racks to be fully loaded with servers using the latest processors.

CAUTION: Always use blanking panels to fill all remaining empty front panel U-spaces in the rack. This arrangement ensures proper airflow. Using a rack without blanking panels will result in improper cooling that can lead to thermal damage.

Configuration Information - Factory Integrated Models

NOTE: This section lists the standard features included in each model of the HP Vertica Analytics System
NOTE: All components are factory integrated and have been localized to US English.
NOTE: Software is preinstalled.

Step 1: Order HP's Vertica Analytics System model. Choose from one of the three models below which meets your data and performance needs.

HP Vertica Analytics System	HP Vertica V2400 50TB Analytics 1yr System	AM454A

HP Vertica Analytics System full rack configuration includes the following:

One (1) HP Universal Rack 10642 G2 1200mm deep Shock Rack includes:

- Two (2) HP BladeSystem c7000 enclosures, single phase with 6 power supplies and 10 fans. Each of the two enclosures includes:
  - Sixteen (16) HP ProLiant BL460c G7 server blades, processor X5670
  - One hundred ninety two (192) HP 8GB 2Rx4 PC3-10600R-9 Memory Kit
  - Thirty two (32) HP 72GB 6G SAS 15K 2.5in Hard Drives
  - Two (2) HP 6120XG Blade Switches
  - Two (2) HP 3GB SAS BL Switches
  - One (1) HP 6X 2400W Platinum Power Supply HP Insight Control, Factory-Integration License Option for HP c-Class
  - Twenty-four (24) 1Gb copper RJ-45 SFP modules
  - Eight (8) 1Gb SX fiber SFP modules
  - Thirty-two (32) 10Gb LC SR fiber SFP+ modules
  - Fourteen (14) 2m multi-mode OM3 LC/LC fiber cables
- One (1) HP 10K Rack Airflow Optimization Kit
- One (1) HP 10642 G2 1200mm Rack Side Panel Kit
- Two (2) HP 17.3 kVA S348 Monitored PDU- single input, 3Ø, 48A (Americas and Japan) PN AF916A or Two (2) HP 22 kVA S332 Monitored PDU- single input, 3Ø, 32A (EMEA and AP) PN AF917A
- Red Hat Enterprise Linux, Embedded
- HP Vertica Analytics Platform, 50TB license
- Four (4) HP MDS600 with two Dual Port I/O Module System each with:
  - Seventy (70) HP 600GB 6G SAS 15K LFF (3.5 inch) Hard Drives
- Factory Integration
- Onsite installation and startup
- 1 year HP Support Plus 24

HP Vertica V2400 20TB Analytics 1yr System	AM453A

HP Vertica Analytics System half rack configuration includes the following:

One (1) HP Universal Rack 10642 G2 1200mm deep Shock Rack includes:

- One (1) HP BladeSystem c7000 enclosures, single phase with 6 power supplies, 10 fans with:
  - Sixteen (16) HP ProLiant BL460c G7 server blades, processor X5670
  - One hundred ninety two (192) HP 8GB 2Rx4 PC3-10600R-9 Memory Kit
  - Thirty two (32) HP 72GB 6G SAS 15K 2.5in Hard Drives
  - Two (2) HP 6120XG Blade Switches

Configuration Information - Factory Integrated Models

- o Two (2) HP 3GB SAS BL Switches
- o One (1) HP 6X 2400W Platinum Power Supply HP Insight Control, Factory-Integration License Option for HP c-Class
- o Twelve (12) 1Gb RJ-45 copper SFP modules
- o Four (4) 1Gb SX fiber SFP modules
- o Sixteen (16) 10Gb LC SR fiber SFP+ modules
- o Fourteen (14) 2m multi-mode OM3 LC/LC fiber cables
- One (1) HP 10K Rack Airflow Optimization Kit
- One (1) HP 10642 G2 1200mm Rack Side Panel Kit
- Two (2) HP 17.3 kVA S348 Monitored PDU- single input, 3Ø, 48A (NA/JPN) PN AF916A or Two (2) HP 22 kVA S332 Monitored PDU- single input, 3Ø, 32A (EMEA and AP) PN AF917A
- Red Hat Enterprise Linux, Embedded
- HP Vertica Analytics Platform, 20TB license
- Two (2) HP MDS600 with two Dual Port I/O Module System each with:
  - o Seventy (70) HP 600GB 6G SAS 15K LFF (3.5 inch) Hard Drives
- Factory Integration
- Onsite installation and startup
- 1 year HP Support Plus 24

HP Vertica V2400 5TB Analytics 1yr System	A2E56A
HP Vertica V2400 10TB Analytics 1yr System	AM452A

HP Vertica Analytics System quarter rack configuration includes the following:

One (1) HP Universal Rack 10642 G2 1200mm deep Shock Rack includes:

- One (1) HP BladeSystem c7000 enclosure, single phase with 6 power supplies, 10 fans with:
  - o Eight (8) HP ProLiant BL460c G7 server blades, processor X5670
  - o Ninety six (96) HP 8GB 2Rx4 PC3-10600R-9 Memory Kit
  - o Sixteen (16) HP 72GB 6G SAS 15K 2.5in Hard Drives
  - o Two (2) HP 6120XG Blade Switches
  - o Two (2) HP 3GB SAS BL Switches
  - o One (1) HP 6X 2400W Platinum Power Supply HP Insight Control, Factory-Integration License Option for HP c-Class
  - o Twelve (12) 1Gb RJ-45 copper SFP modules
  - o Four (4) 1Gb SX fiber SFP modules
  - o Sixteen (16) 10Gb LC SR fiber SFP+ modules
  - o Two (2) 2m multi-mode OM3 LC/LC fiber cables
- One (1) HP 10K Rack Airflow Optimization Kit
- One (1) HP 10642 G2 1200mm Rack Side Panel Kit
- Two (2) HP 17.3 kVA S348 Monitored PDU- single input, 3Ø, 48A (NA/JPN) PN AF916A or Two (2) HP 22 kVA S332 Monitored PDU- single input, 3Ø, 32A (EMEA and AP) PN AF917A
- Red Hat Enterprise Linux, Embedded
- HP Vertica Analytics Platform, 5TB (A2E56A) or 10TB (AM452A) license
- One (1) HP MDS600 with two Dual Port I/O Module System each with:
  - o Seventy (70) HP 600GB 6G SAS 15K LFF (3.5 inch) Hard Drives
- Factory Integration
- Onsite installation and startup
- 1 year HP Support Plus 24

Configuration Information - Factory Integrated Models

> NOTE: "Ø" = number of electrical phases at input.
> NOTE: The PDU for Americas and Japan (PN AF916A) requires 2x 60 amp 3 phase Delta circuits and the PDU for EMEA and AP (PN AF917A) requires 2x 32 amp 3 phase Wye circuits.
> NOTE: Multirack configurations are available. Please contact your HP representative to ensure the optimum configuration to meet your needs.

Step 2: Choose HP Care Pack Support and Additional Services

HP Service and Support

1yr HP Support Plus 24 is included with the HP Vertica Analytics System. Customers have the opportunity to upgrade support levels or extend the support duration by selecting one of the following support offers.

NOTE: HP Vertica Analytics Platform software support provided in US English

HP Support Plus 24 - 3yr, 4yr or 5yr
NOTE: For a high return on your server and storage technology, our 3-year combined reactive support service delivers integrated onsite hardware/software support services available 24x7x365, including access to HP technical resources, 4-hour response onsite hardware support and software updates. Support Plus 24 is available with or without DMR (Defective Media Retention)
NOTE: For each HP Vertica Analytics System (PN A2E56A, PN AM452A, PN AM453A, or PN AM454A) ordered, choose the duration Care Pack desired.

3yr Support Plus 24
NOTE: Supports HP Vertica V2400 5TB Analytics 1yr System (PN A2E56A).	HA110A3 #QB7
NOTE: Supports HP Vertica V2400 10TB Analytics 1yr System (PN AM452A).	HA110A3# Q1M
NOTE: Supports HP Vertica V2400 20TB Analytics 1yr System (PN AM453A).	HA110A3#Q1L
NOTE: Supports HP Vertica V2400 50TB Analytics 1yr System (PN AM454A).	HA110A3#Q1K

3yr Support Plus 24 with DMR
NOTE: Supports HP Vertica V2400 5TB Analytics 1yr System (PN A2E56A).	HG930A3 #QB7
NOTE: Supports HP Vertica V2400 10TB Analytics 1yr System (PN AM452A).	HG930A3 #Q1M
NOTE: Supports HP Vertica V2400 20TB Analytics 1yr System (PN AM453A).	HG930A3 #Q1L
NOTE: Supports HP Vertica V2400 50TB Analytics 1yr System (PN AM454A).	HG930A3 #Q1K

4yr Support Plus 24
NOTE: Supports HP Vertica V2400 5TB Analytics 1yr System (PN A2E56A).	HA110A4 #QB7
NOTE: Supports HP Vertica V2400 10TB Analytics 1yr System (PN AM452A).	HA110A4 #Q1M
NOTE: Supports HP Vertica V2400 20TB Analytics 1yr System (PN AM453A).	HA110A4 #Q1L
NOTE: Supports HP Vertica V2400 50TB Analytics 1yr System (PN AM454A).	

4yr Support Plus 24 with DMR
NOTE: Supports HP Vertica V2400 5TB Analytics 1yr System (PN A2E56A).	HG930A4 #QB7
NOTE: Supports HP Vertica V2400 10TB Analytics 1yr System (PN AM452A).	HG930A4 #Q1M

Configuration Information - Factory Integrated Models

NOTE: Supports HP Vertica V2400 20TB Analytics 1yr System (PN AM453A).	HG930A4 #Q1L
NOTE: Supports HP Vertica V2400 50TB Analytics 1yr System (PN AM454A).	HG930A4 #Q1K

5yr Support Plus 24

NOTE: Supports HP Vertica V2400 5TB Analytics 1yr System (PN A2E56A).	HA110A5 #QB7
NOTE: Supports HP Vertica V2400 10TB Analytics 1yr System (PN AM452A).	HA110A5# Q1M
NOTE: Supports HP Vertica V2400 20TB Analytics 1yr System (PN AM453A).	HA110A5#Q1L
NOTE: Supports HP Vertica V2400 50TB Analytics 1yr System (PN AM454A).	HA110A5#Q1K

5yr Support Plus 24 with DMR

NOTE: Supports HP Vertica V2400 5TB Analytics 1yr System (PN A2E56A).	HG930A5 #QB7
NOTE: Supports HP Vertica V2400 10TB Analytics 1yr System (PN AM452A).	HG930A5# Q1M
NOTE: Supports HP Vertica V2400 20TB Analytics 1yr System (PN AM453A).	HG930A5 #Q1L
NOTE: Supports HP Vertica V2400 50TB Analytics 1yr System (PN AM454A).	HG930A5 #Q1K

HP Proactive Select - 1yr, 3yr, 4yr, or 5yr

NOTE: Provides an assigned account support manager focused on technical and operational improvements specific to your business environment.

NOTE: With HP Proactive Select, you purchase credits that can be applied to any proactive service from our extensive menu that spans the entire lifecycle of your IT environment. For example, help with implementing a new technology, or proactive notification of critical network service problems.

NOTE: Available in packages of service credits redeem them, as you go, choosing the proactive services you need to fit your environment and critical IT and business goals. In addition, you can select HP Priority Connect as an option from the HP Proactive Select menu to gain priority incident-based access to expert reactive support from the HP Global Mission Critical Solution Center.

NOTE: Care Pack Services for different duration and credit sizes are listed below.

HP 1Y Proactive Select 10 credits SVC	HK696A1#2BR
HP 1Y Proactive Select 30 credits SVC	HG921A1#12F
HP 1Y Proactive Select 60 credits SVC	HG922A1#12G
HP 1Y Proactive Select 180 credits SVC	HG923A1#12H
HP 1Y Add 10 Proactive Select Credit SVC	HG924A1#12J
HP 3Y Proactive Select 30 credits SVC	HK696A3#2BR
HP 3Y Proactive Select 90 credits SVC	HG921A3#12F
HP 3Y Proactive Select 180 credits SVC	HG922A3#12G
HP 3Y Proactive Select 540 credits SVC	HG923A3#12H
HP 3Y Add 10 Proactive Select Credit SVC	HG924A3#12J
HP 4Y Proactive Select 40 credits SVC	HK696A4#2BR
HP 4Y Proactive Select 120 credits SVC	HG921A4#12F
HP 4Y Proactive Select 240 credits SVC	HG922A4#12G
HP 4Y Proactive Select 720 credits SVC	HG923A4#12H
HP 4Y Add 10 Proactive Select Credit SVC	HG924A4#12J

Configuration Information - Factory Integrated Models

HP 5Y Proactive Select 50 credits SVC	HK696A5#2BR
HP 5Y Proactive Select 150 credits SVC	HG921A5#12F
HP 5Y Proactive Select 300 credits SVC	HG922A5#12G
HP 5Y Proactive Select 900 credits SVC	HG923A5#12H
HP 5Y Add 10 Proactive Select Credit SVC	HG924A5#12J

HP Critical Advantage - 1yr, 3yr, 4yr, or 5yr

NOTE: Provides an assigned account team to deliver support and maintain uptime of business-critical, virtualized environments. An end-to-end infrastructure support solution (x86 server, OS/hypervisor, storage and network support), Critical Advantage provides flexible reactive hardware service levels, proactive services, and access to the Global Mission Critical Solution Center for business critical applications running on virtualized x86 infrastructures.

NOTE: Choose between Level 2 for 24x7 reactive or Level 3 for 6 hour Call-to-Repair.

NOTE: Proactive Select and Critical Advantage services are available in support of the Infrastructure but are not available for the Vertica application layer. And, Critical Advantage support for Vertica Analytics System is expected in the future but no date is available at this time. For questions about quoting CA on Vertica infrastructure or about plans for Vertica application support please contact your Mission Critical Business Developer. Locate more information on Critical Advantage at the following URL: http://intranet.hp.com/tsg/ams3/services/002/Service_Solutions_MC/Pages/CriticalAdvantage.aspx

Additional Services

NOTE: Additional services for assistance with your HP Vertica Analytics System and HP Vertica Analytics Platform are available. For assistance in quoting any of these services, please submit a request to mailto:VerticaServices@hp.com

NOTE: To order configuration services to complement the installation provided with the HP Vertica Analytics System, order HP Bus Critical Server Tech Assist SVC (PN HA334A1). To determine the appropriate quantity to order, you will need consultation to consider the customer's situation. Please submit a request to: VerticaServices@hp.com. The typical engagement is about 5 days (Qty 5 of PN HA3341A).

HP Bus Critical Server Tech Assist SVC	HA334A1

NOTE: Additional Vertica Services are available. The Vertica professional services team provides expert consulting to maximize your investment in the Vertica Analytic System by bringing our experience and industry best practices to your implementation. Other applicable services are also available, such as educational services. See: http://www8.hp.com/us/en/services/it-services.html

NOTE: Vertica Consultants are certified experts in the Vertica Analytics System who will work with your team to seamlessly integrate Vertica into your existing ecosystem. Our professional services team will assist with data modeling, schema design, query optimization, ETL and BI best practices, system monitoring and DR best practices. We are committed to your success and can help you achieve business results faster, lower your IT development and maintenance costs, and give you a competitive edge in the marketplace.

Configuration Information - Factory Integrated Models

Step 3: Choose Additional Options

Additional software licenses and Care Packs for the HP Vertica Analytics Platform are available. Each model of the HP Vertica Analytics System comes with preinstalled software and a minimum license. Customers who will need licenses for a greater quantity of data can purchase part number T2274AA and the appropriate option. Additional licenses are in 5, 10, 20, or 50TB quantities. Software license quantities must match or exceed the quantity of uncompressed data you will manage on the HP Vertica V2400 Analytics System.

NOTE: Order HP Vertica Analytics Platform (PN T2274AA) plus the appropriate option(s) from the list below.

NOTE: HP Vertica Analytics Platform (PN T2274AA) licenses listed below can be added to HP Vertica Analytics Systems if support for additional TB of data is required. This part number may also be ordered standalone if a custom configuration is required. While a wide range of HP products are supported at this time the HP ProLiant DL980 is not.

HP Vertica Analytics Platform	T2274AA
HP Vertica 5TB DB SW with1yr Support	T2274AA#005
HP Vertica 10TB DB SW with1yr Support	T2274AA#010
HP Vertica 20TB DB SW with1yr Support	T2274AA#020
HP Vertica 50TB DB SW with1yr Support	T2274AA#050

NOTE: For each HP Vertica Analytics Platform License (PN T2274AA with options) ordered, choose the duration Care Pack desired.

3yr Support Plus 24	HA110A3#Q1R

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#005).

3yr Support Plus 24	HA110A3#Q1Q

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#010).

3yr Support Plus 24	HA110A3#Q1P

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#020).

3yr Support Plus 24	HA110A3#Q1N

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#050).

4yr Support Plus 24	HA110A4#Q1R

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#005).

4yr Support Plus 24	HA110A4#Q1Q

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#010).

4yr Support Plus 24	HA110A4#Q1P

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#020).

4yr Support Plus 24	HA110A4#Q1N

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#050).

5yr Support Plus 24	HA110A5#Q1R

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#005).

5yr Support Plus 24	HA110A5#Q1Q

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#010).

5yr Support Plus 24	HA110A5#Q1P

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#020).

5yr Support Plus 24	HA110A5#Q1N

NOTE: Supports HP Vertica Analytics Platform License (T2274AA#050).

NOTE: HP Vertica Analytics Platform software support provided in US English

Technical Specifications

HP Vertica V2400 Analytics System			
	Dimensions	Height	79 in (200.7 cm)
		Width	24 in (60 cm)
		Depth	48.875 in (123.8 cm)
	Shipping Dimensions	Height	86 in (219 cm)
		Width	36 in (91.5 cm)
		Depth	56 in (142.3 cm)
	Weight (approximate for full rack configuration)	Static	3000 lb (1361 kg)
		Dynamic	2500 lb (1125 kg)
	Color	Doors	Graphite Metallic
		Frame	Carbon
	Clearance (for air flow and access)	Front	48 in (121.9 cm)
		Rear	30 in (76.2 cm)
	Temperature range	Operating	50° to 95° F (10° to 35° C)
		Non-Operating	-22° to 140° F (-30° to 60° C)
	Relative humidity	Operating	15 to 85% relative humidity (Rh) 28°C (82.4°F) maximum wet bulb temperature, non-condensing
		Non-Operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F)maximum wet bulb temperature, non-condensing.
	Power Usage - maximum	Full Rack	18444 watts (at 208V)
		Half Rack	9222 watts (at 208V)
		Quarter Rack	5242 watts (at 208V)
	BTU rating, maximum	Full Rack	62949 BTU/hour
		Half Rack	31475 BTU/hour
		Quarter Rack	17891 BTU/hour

NOTE: Operating temperature has an altitude derating of 1.8° F (1° C) per 1,000 ft (304.8 m). No direct sustained sunlight. Upper operating limit is 10,000 ft (3,048 m) or 70Kpa/10.1 psia. Upper non-operating limit is 30,000 ft (9,144 m) or 30.3 KPa/4.4 psia.

NOTE: To review maximum system power ratings for facilities planning purposes use the HP Power Advisor at: http://www.hp.com/go/hppoweradvisor.

Technical Specifications

Environmental-friendly products and approach	End-of-life management and recycling	Hewlett-Packard offers end-of-life HP product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest HP sales office. Products returned to HP will be recycled, recovered or disposed of in a responsible manner.
		The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard web site at: http://www.hp.com/go/green. These instructions may be used by recyclers and other WEEE treatment facilities as well as HP OEM customers who integrate and re-sell HP equipment.