

InfiniDB[®]

Minimum Recommended Specifications Guide

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InfiniDB Minimum Recommended Specifications Guide

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1 Introduction

This guide lists the minimum recommended hardware and software specifications for implementing InfiniDB.

1.1 Audience

This guide is intended for database administrators and IT administrators who are responsible for setting up and maintaining InfiniDB.

1.2 List of Documentation

The InfiniDB Database Platform documentation consists of several guides intended for different audiences. The documentation is described in the following table:

Document	Description
InfiniDB Administrator's Guide	Provides detailed steps for maintaining InfiniDB.
InfiniDB Apache Hadoop™ Configuration Guide	Installation and Administration of an InfiniDB for Apache Hadoop system.
InfiniDB Concepts Guide	Introduction to the InfiniDB analytic database.
InfiniDB Installation Guide	Contains a summary of steps needed to perform an install of InfiniDB.
InfiniDB Multiple UM Configuration Guide	Provides information for configuring multiple User Modules.
InfiniDB SQL Syntax Guide	Provides syntax native to InfiniDB.
Performance Tuning for the InfiniDB Analytics Database	Provides help for tuning the InfiniDB analytic database for parallelization and scalability.
InfiniDB Windows Installation and Administrator's Guide	Provides information for installing and maintaining InfiniDB for Windows.

1.3 Obtaining documentation

These guides reside on our <http://www.infinidb.co> website. Contact support@infinidb.co for any additional assistance.

1.4 Documentation feedback

We encourage feedback, comments, and suggestions so that we can improve our documentation. Send comments to support@infinidb.co along with the document name, version, comments, and page numbers.

1.5 Additional resources

If you need help installing, tuning, or querying your data with InfiniDB, you can contact support@infinidb.co.

2 Minimum Recommended Technical Specifications

This chapter lists the minimum hardware and software specifications recommended to install and operate InfiniDB. In addition, it describes the hardware configurations that have been tested with InfiniDB.

Note: Software is capable of being deployed on platforms that do not meet these minimum recommended specifications, however, resultant degradation in capability should be expected that may not be suitable for production instances of the InfiniDB software.

2.1 Hardware

2.1.1 Standalone configuration

The following table lists the minimum hardware requirements for implementing InfiniDB on a Standalone System.

Table 1 - Standalone minimum recommended hardware configuration

Item	Description
Physical Server	x86 architecture (AMD or Intel) 4 cores, 32GB memory
Virtual Server/ Amazon EC2 Server	4 cores, 32Gb memory
Storage	Properly sized internal storage or direct attached storage.

2.1.2 Distributed configuration

The following table lists the minimum hardware requirements for implementing InfiniDB on a Distributed System.

Table 2 - Distributed minimum recommended hardware configurations

Item	Description
Physical Servers	x86 architecture (AMD or Intel) 4 cores, 32Gb memory 4 cores, 16Gb (PM Only)
Virtual Servers/ Amazon EC2 Server	4 cores, 32Gb memory 4 cores, 16Gb (PM Only)

Network Storage	<p>Because of InfiniDB's column oriented architecture, storage performance requirements are less than those for row-oriented database architectures. It should be noted that the slowest portion of database activities often are attributed to physical I/O.</p> <p>In general, high performance controllers, drives and interconnect will result in performance gains. In very general terms, eight server cores can fully tax a 4Gb fibre channel storage connection. Proper storage configuration is highly dependent on data access patterns.</p>
Interconnect	Module communication is accomplished via TCP/IP.

The hardware configuration varies for all customers and is dependent on database size, user concurrency, performance, and system availability.

You can configure InfiniDB as non-high availability or high-availability. Higher-availability configurations require additional hardware to support system redundancy.

2.1.3 Tested hardware configurations

The qualified hardware configuration table lists the minimum hardware configurations that have been tested with InfiniDB:

Table 3 - Tested Hardware Configurations

Servers	Switches	Storage Array
Dell PowerEdge 1950 Dual 2.0 GHz Quad Core Processors 16GB Memory Dual port 4Gb/s Fibre Channel HBA	Cisco 10/100 Ethernet Cisco 3560G GbE Ethernet Cisco MDS 9124 Fibre Channel	LSI399x series RAID 10 HBA Drivers QLA 2462 8.7.1-K or later
Hewlett Packard HP ProLiant DL360G5 Dual 2.3Ghz Quad Core Processors 16GB Memory Dual port 4Gb/s Fibre Channel HBA Amazon EC2 m3.xlarge		

2.2 Software

The following is an all-inclusive list of software that is typically used to implement InfiniDB:

Table 4- Required Software

Type	Required Software
OS	RedHat®/CentOS v5, v6 Debian v6, v7 Ubuntu 10.04 LTS, 12.04 LTS Windows Server 2008, 2012 Supporting packages: expect For Debian/Ubuntu, the following additional packages should be installed: expect
InfiniDB	InfiniDB Software

Note: Support for other operating systems may be available. If you require InfiniDB to be deployed against another operating system, contact support@infinidb.co for additional information.