
Calpont InfiniDB® 最小推奨仕様ガイド

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はじめに

本書では、Calpont InfiniDB の実装に必要なハードウェアおよびソフトウェアの最小推奨仕様を示します。

対象読者

本書は、Calpont InfiniDB の実装を行う IT 管理者を対象としています。



表記規則

本書では、次の表記規則およびユーザーへの警告を使用しています。

表 1: 表記規則

項目	説明
太字	表示されたとおりに入力する文字。 例： <code>getLogInfo</code> と入力します この場合、 <code>getLogInfo</code> と入力します。
斜体	変数またはプレースホルダ。文字列を適切に置き換えて入力します。複数の単語で構成される変数はアンダースコア (<code>_</code>) で連結して表示されています。 例： <code>ID</code> を入力します。 ID 番号 <code>34878</code> を入力します。 <code>IP_address</code> を入力します。 IP アドレス <code>110.68.52.01</code> を入力します。

表 2: ユーザーへの警告

項目	説明
	<p>注意：役立つ情報であることを示します。</p>
	<p>警告：データの損失または破損の原因となるハードウェアやソフトウェアのエラーを発生させる可能性があることを示します。</p>

マニュアルリスト

Calpont InfiniDB のマニュアルは、様々な読者を対象とした複数のガイドで構成されています。次の表を参照してください。

表 3: マニュアル

マニュアル	説明
『Calpont InfiniDB 管理者ガイド』	Calpont InfiniDB を管理するための詳細な手順について説明します。
『Calpont InfiniDB インストールレーションガイド』	分散構成に Calpont InfiniDB をインストールするために必要な手順の概要について説明します。
『Calpont InfiniDB SQL 構文ガイド』	Calpont InfiniDB に固有の構文について説明します。
『Calpont InfiniDB 概要』	分析用データベース Calpont InfiniDB の概要について説明します。
『Calpont InfiniDB パフォーマンスチューニングガイド』	分析用データベース InfiniDB をパラレル化および拡張するためのチューニングに役立つ情報について説明します。
『Calpont InfiniDB マルチ UM 同期ガイド』	Calpont InfiniDB で 2 つ以上のユーザーモジュールの同期を保持するために使用するオプションの概要について説明します。

マニュアルの入手

英語版のマニュアルは、(<http://www.infinidb.org/> および <http://www.calpont.com>) で入手することができます。追加の支援が必要な場合は infinidb_doc@ashisuto.co.jp にご連絡ください。

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追加リソース

Calpont InfiniDB のインストールおよびチューニング、または Calpont InfiniDB を使用したデータの間合せに関して支援が必要な場合は infinidb_doc@ashisuto.co.jp までご連絡ください。

最小推奨仕様

この章では、Calpont InfiniDB のインストールおよび操作に必要なハードウェアおよびソフトウェアの最小推奨仕様を示します。また、Calpont InfiniDB でテスト済みのハードウェア構成について説明します。

注意：ソフトウェアはこれらの最小推奨仕様を満たさないプラットフォームに展開できますが、結果として機能低下が発生し、Calpont InfiniDB ソフトウェアの製品インスタンスに適さない可能性があります。

ハードウェア

スタンドアロン構成

次の表に、スタンドアロンシステムに Calpont InfiniDB を実装する場合のハードウェアの最小要件を示します。

表 1: スタンドアロンでのハードウェアの最小推奨構成

項目	説明
物理サーバー	x86 アーキテクチャ (AMD または Intel) 4 コア、32GB のメモリー
Amazon EC2 サーバー	ハイメモリダブルエクストララージインスタンス m2.2xlarge ハイメモリクアドラブルエクストララージインスタンス m2.4xlarge クラスタコンピューティングクアドラブルエクストララージインスタンス cc1.4xlarge クラスタコンピューティングエイトエクストララージインスタンス cc2.8xlarge ハイ I/O クアドラブルエクストララージインスタンス hi1.4xlarge
仮想サーバー	4 コア、32GB のメモリー
ストレージ	適切なサイズの内部ストレージまたは Direct Attached Storage

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分散構成

次の表に、分散システムに Calpont InfiniDB を実装する場合のハードウェアの最小要件を示します。

表 2: 分散でのハードウェアの最小推奨構成

項目	説明
物理サーバー	x86 アーキテクチャ (AMD または Intel) 4 コア、32GB のメモリー 4 コア、16GB (PM のみ)
Amazon EC2 サーバー	エクストララージインスタンス * (PM のみ) ハイメモリダブルエクストララージインスタンス m1.xlarge ハイメモリクアドラブルエクストララージインスタンス m2.2xlarge クラスタコンピュートクアドラブルエクストララージインスタンス m2.4xlarge クラスタコンピュートエイトエクストララージインスタンス cc1.4xlarge ハイ I/O クアドラブルエクストララージインスタンス cc2.8xlarge hi1.4xlarge
仮想サーバー	4 コア、32GB のメモリー 4 コア、16GB (PM のみ)
ネットワークストレージ	Calpont InfiniDB は列指向アーキテクチャであるため、ストレージのパフォーマンス要件は行指向データベースアーキテクチャに比べて小さくなります。多くの場合、データベースで最も時間のかかるアクティビティは物理 I/O に起因することに注意してください。 通常、高パフォーマンスのコントローラ、ドライブおよびインターコネクトを使用するとパフォーマンスが向上します。一般的には、8つのサーバーコアで、4GBのファイバチャネルストレージ接続の負荷をすべて負担することができます。適切なストレージ構成は、データのアクセスパターンに大きく依存します。
インターコネクト	モジュールの通信は、TCP/IP を介して行われます。

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Calpont InfiniDB は、非高可用性として構成することも、高可用性として構成することもできます。より可用性の高い構成を実現するには、システムの冗長性がサポートされるようにハードウェアを追加する必要があります。

テスト済みのハードウェア構成

認証済みハードウェア構成の表に、Calpont InfiniDB でテストされたハードウェアの最小構成を示します。

表 3: テスト済みのハードウェア構成

サーバー	スイッチ	ストレージレイ
Dell PowerEdge 1950 2.0GHz クワッドコアプロセッサ × 2 16GB のメモリー デュアルポート 4Gb/ 秒のファイ バチャンネル HBA	Cisco 10/100 イーサネット Cisco 3560G ギガビットイー サネット Cisco MDS 9124 ファイバチャ ネル	LSI399x シリーズ RAID 10 HBA ドライバ QLA 2462 8.7.1-K 以降
HP (Hewlett Packard) ProLiant DL360G5 2.3GHz クワッドコアプロセッサ × 2 16GB のメモリー デュアルポート 4Gb/ 秒のファイ バチャンネル HBA Amazon EC2 m1.xlarge		

ソフトウェア

Calpont InfiniDB の実装に使用される一般的なソフトウェアの包括的なリストを次に示します。

表 4: 必須ソフトウェア

必須ソフトウェア	
OS	Red Hat® EnterpriseLinux® OS/CentOS v5、v6 Debian v5、v6 Ubuntu 10.04 LTS Windows Server 2008 (日本国内では開発ライセンスのみ提供しています) サポートパッケージ： expect Debian または Ubuntu の場合は、次の追加のパッケージをインストールする必要があります。 expect
Calpont	Calpont データベースソフトウェア

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