Arellano Granados Angel Mariano

Seminario de solución de problemas de bases de datos

2022B D05

lunes y miércoles de 9-11 beta 09

Requerimientos para la instalación de sistemas gestores de bases de datos (DBMS).

1. MySQL

Requisitos:

	Mínimo	Recomendado
CPU	64bit x86	Multi Core 64bit x86
RAM	4 GB	8 GB
Display	1024×768	1920×1200

Características:

The driving force behind MySQL has been to provide a reliable, high-performance server that is easy to set up and use. These qualities are why many Internet companies in the late 1990s chose MySQL to power their websites. These same qualities are why MySQL is making strong inroads into the internal database servers of Fortune 1000 companies that have traditionally used commercial databases.

MySQL server has been downloaded more than 100 million times. MySQL is open source software. An admittedly simple definition of open source software is software that is freely available (including source code) with free redistribution. Source code is the source of a program — the file(s) containing the original programming language code

Tipos de Datos:

order to store, retrieve, or process data, the data must be assigned a data type. MySQL includes many of the ISO SQL:2003 standard data types, and adds in more data types. The ISO SQL:2003 standard defines seven categories of data types:

a. Character String Types
b. National Character string Types
c. Bynary Large Object String Types
d. Numeric Types
e. Boolean Types
f. Datetime Types
g. Interval Types

2. Microsoft SQL

Requisitos:

Component	Requirement
Hard Disk	SQL Server requires a minimum of 6 GB of available hard-disk space.
Monitor	SQL Server requires Super-VGA (800x600) or higher resolution monitor.
Internet	Internet functionality requires Internet access (fees may apply).
Memory	Minimum: Express Editions: 512 MB All other editions: 1 GB Recommended: Express Editions: 1 GB All other editions: At least 4 GB
Processor Speed	Minimum: x64 Processor: 1.4 GHz Recommended: 2.0 GHz or faster
Processor Type	x64 Processor: AMD Opteron, AMD Athlon 64, Intel Xeon with Intel EM64T support, Intel Pentium IV with EM64T support

Características:

The edition layout of SQL Server has changed again with this release to align closer with the way organizations use the product. Following are three main editions:

■ Enterprise: This edition focused on mission critical applications and data warehousing.

■ Business intelligence: This new edition has premium corporate features and self- service business intelligence features. If your environment is truly mission criti- cal however, this may be missing some key features you might want. The key is to leverage this edition on your BI servers and use Enterprise where needed.

■ Standard: This edition remains to support basic database capabilities including reporting and analytics. You may wonder about the previous editions and how to move from what you have to the new plan.

Following is a breakdown of deprecated editions and where the features now reside.
■ Datacenter: Its features are now available in Enterprise Edition.
■ Workgroup: Standard will become your edition for basic database needs.
■ Standard for small business: Standard becomes your sole edition for basic data- base needs.

Tipos de Datos:

Character Data Types

- Char(n)
- Nchar(n)
- VarChar(n)
- VarChar(max)
- nVarChar(n)
- nVarChar(max)
- Text
- nText
- Sysname

Numeric Data Types

- Bit
- Tinyint
- Smallint
- Int
- Bigint
- Decimal or Numeric
- Money
- SmallMoney
- Float
- Real

Date / Time Data Types

- Datetime
- Smalldatetime
- DateTime2()
- Date
- Time (2)
- Datetimeoffset

Other Data Types

- Timestamp or Rowversion
- Uniqueidentifier
- Binary(n)
- VarBinary(max)

3. Oracle

Requisitos:

Sistema. Oracle en Windows requiere un PC Intel x86, AMD64 o Intel EM64T

Memoria. Al menos 1 GB de RAM y el doble en virtual.

Espacio en disco duro. Al menos 6 GB para la instalación. Además, necesitamos poder almacenar 500 MB en la carpeta TEMP del sistema.

Tarjeta gráfica. Debe de ser capaz de mostrar 1024 por 768 píxeles como mínimo y 256 colores.

Características:

Oracle databases are extremely advanced and sophisticated software components that are state of the art for RDBMS. Many features and options are available, and we guide you through the features you need for most implementations. The highly advanced features, such as Real Application Clusters (RAC), remote data replication, and engineered solutions such as Exadata, are for customers who require the cutting edge of technology for specialized implementations.

Oracle offers several databases targeted for different uses and audiences at varying price points, including Oracle Enterprise Edition, Oracle Standard Edition, Oracle Berkley DB, Oracle NoSQL, and MySQL. Additionally, Oracle offers a programming extension of SQL called PL/SQL, which is used to implement application logic within an Oracle database.

Tipos de Datos:

CHAR (size)

Fixed-length character data of length size bytes.

VARCHAR2 (size)

Variable-length character data.

NCHAR(size)

Fixed-length character data of length size characters or bytes, depending on the national character set.

NVARCHAR2 (size)
Variable-length character data of length size characters or bytes, depending on national character set. A maximum size must be specified.

CLOB
Single-byte character data.

NCLOB
Single-byte or fixed-length multibyte national character set (NCHAR) data.

LONG
Variable-length character data.

NUMBER (p, s)
Variable-length numeric data. Maximum precision p and/or scale s is 38.

DATE
Fixed-length date and time data, ranging from Jan. 1, 4712 B.C.E. to Dec. 31, 4712 C.E.

BLOB
Unstructured binary data.

BFILE
Binary data stored in an external file.

RAW (size)
Variable-length raw binary data.

LONG RAW
Variable-length raw binary data.

ROWID
Binary data representing row addresses.

MLSLABEL
Trusted Oracle datatype.

Referencias:

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