


SERVER REQUIREMENTS

Diane

VERSION HISTORY			
Version	Date of writing	Name of editor	Nature of modification
01	07/03/2018	Kevin Lacroix	Documentation creation
02	19/02/2019	Kevin Lacroix	Addition of information on drug database
03	11/07/2019	Kevin Lacroix	Modification of graphic charter
04	26/10/2020	Kevin Lacroix	Deletion of obsolete information and addition of ports to be opened.
05	08/02/2021	Kevin Lacroix	Addition of encoding for Oracle.

Name, role, initials of editor	Name, role, initials of auditor	Name, role, initials of approver
Kevin Lacroix Deployment Manager 	Pascal Bellebouche R&D Manager 	Kevin Lacroix Deployment Manager 
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1. Minimum configuration

The configuration specified below applies to the latest version of DIANE.

The servers for both the database and the server interface/update must be taken into account.

NB: Diane does not require an application server.

The two servers (database and interface) can be installed on the same computer or separately on two computers according to your requirements.

Please refer to the DBMS guidelines for the requirements for the database server.

NB: If the database and the interface/update elements are installed on the same server, please adjust the minimum configurations accordingly.

-Processor: Dual core 2 GHz, 3 MB cache minimum, 6 MB recommended.

-RAM: 4 GB minimum, 8 GB recommended.

-Hard disk space:

- For the **interface server**: 40 GB minimum (20 GB for updates and 20 GB for interface files). Given the low cost of disk space and our moderate requirements, we recommend applying a comfortable margin to the minimum requirement.

- For the **database server**:

- **Anaesthesia:**

The space depends on the number of procedures carried out. The volume of the database is calculated on the basis of approx. 300 KB per record (one DIANE Anaesthesia record = 1 consultation + 1 procedure + 1 recovery).

Decision on server size must take into account the actual data for the hospital but the following is an averaged basis for the calculation:

Example: a hospital with 10 operating theatres carries out approx. 10,000 surgeries per year:
 $10,000 \times 300 \text{ KB} = 3,000,000 \text{ KB} = 3 \text{ GB/year}$.

- **ICU:**

The space depends on the number of beds and the occupancy rate of your units. A full ICU patient record represents on average 4 MB per patient for 24 hours.

Decision on server size must take into account the actual data for the hospital but the following is an averaged basis for the calculation:

Example: A hospital with 10 ICU beds and an occupancy rate of 90%:

$$365 \times 10 \times 4 \text{ MB} \times 0.9 = 13.1 \text{ GB per year}$$

Given the low cost of disk space and our moderate requirements, we recommend applying a comfortable margin to the minimum requirement.

We recommend keeping all data online indefinitely and thus ensuring that the disk space available is sufficient.

- Network: Ethernet connection 100 MB/s minimum, 1,000 MB/s recommended.

- Screen resolution: Minimum 1280x800 for the interface server, 1280x1024 recommended, no requirement for the database server.

- Peripherals: Tape or disk back-up system (recommended for database).

2. Software to be installed in advance

2.1 Database server

For all versions of DIANE.

- **Operating system:** Windows Server all versions, Unix, Linux.

- **DBMS:** Oracle (Version 10G minimum, 32bit client, WE8ISO8859P15 encoding),

MySQL with INNODB engine, Barracuda storage

SQLServer 2014 or later. Adapt interfiling based on country of installation.

At least two databases (production and test) are recommended.

We recommend entering database names as follows:

TNSName = DianePRD (production database),

TNSName = DianeREC (recipe database),

TNSName = DianeFOR (for the training database),

TNSName = DianePPRD (for the preproduction database).

2.2 Interface server

- **Operating system:** Windows: all versions currently supported by Microsoft.

For more information on supported versions of Windows, see the release notes of the Diane version in use.

- **Software:**

- Oracle SQL Developer or equivalent (Toad, PLSQL Developer)
- FTP server (for interfaces, for example Filezilla Server)
- Office Word (version 2000 or later)
- Acrobat Reader 9.0 and all other readers required for files likely to be opened on the computer (PDF, Dicom, etc. depending on the hospital).
- If the database is an **Oracle** database, installation of **Oracle 32 bit** client configured with the database server:
 - TNSName = DianePRD (production database),
 - TNSName = DianeREC (recipe database),
 - TNSName = DianeFOR (for the training database),
 - TNSName = DianePPRD (for the preproduction database).

The 32-bit Oracle client version 10G (minimum) must be installed.

If the Oracle client version is < 10.2 and the operating system (Windows) is 64 bit, it is not possible to install DIANE in C:\Program Files (x86) due to a constraint of Oracle clients < 10.2). In this specific case, DIANE must be installed in a directory that **does not contain** brackets: ()

- Local copy of executables and Diane help files (approx. 1 GB) made using our DiaUpdate.exe installation tool (identical to client computer).

The installation and configuration of the Oracle client remains the responsibility of the facility and requires administrator rights for the computer.

A domain user account with the relevant interface/update server rights should also be provided before deployment.

2.2.1 Security

NB: The interface/update server must be set up as a client computer. Please see the client computer requirements.

- Drug database: If the Vidal or BCB drug databases are used, please refer to the minimum version required as stated in the release notes corresponding to the version of Diane in use.