

Hardware Requirements

Minimum Requirements to Deploy Visual Dolphin

Technical Platform Requirements

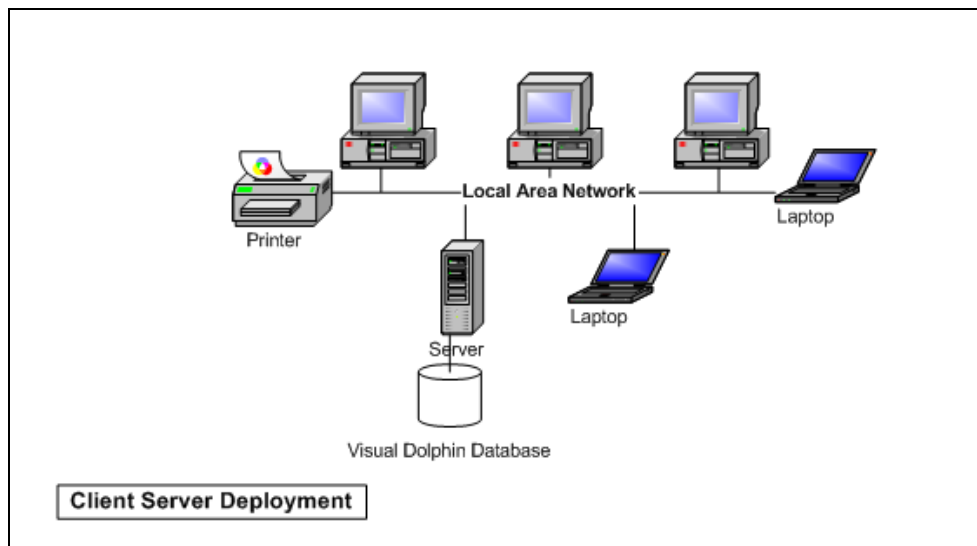
Hardware requirements listed here after are the minimal recommended configuration to support any Deployment Scenario. It is preferable that, prior to any installation and depending on the selected scenario, the existing hardware should be reviewed and the required equipment dimensioned by Software Design's Consultants.

Independently of the adopted deployment scenario, the server hosting Visual Dolphin and its database should not be used at the same time as a Mail Server OR by any other client application. It should be completely independent and configured to host ONLY Visual Dolphin programs and database.

Client-Server Deployment

By Client-Server deployment, we mean the classical technical architecture where processing is shared between clients' terminals and the server. This architecture is often implemented in the same physical location using a local area network.

The recommended server configuration often depends on the number of users accessing the server and the volume of data stored.



Back Office Server: (minimal configuration required)

	< 10 users, limited volume of data	> 10 users, large volume of data
Processor	Xeon Dual Core 1.6 Ghz	Xeon Quad Core 2.0 Ghz
Memory	At least 1 GB RAM	At least 4GB RAM
Hard Disk (SCSI) ¹	120 GB, RAID Technology recommended	120 GB, RAID Technology recommended
Ethernet Card	100Mbit/s	100Mbit/s
Operating System ²	MS Windows 2003 Server	MS Windows 2003 Server
Database ³	MS SQL Server 2000 or 2005	MS SQL Server 2000 or 2005
Reporting	Business Objects Crystal Reports V 11	

(1) It is clear that the size of the disks depends on the volume of data processed

(2) (3) Latest service pack is required

Workstation

Processor	P4 Dual Core 2.8 Ghz
Memory	512 Mbytes RAM
Hard Disk	120 GB
Ethernet Card	10/100Mbit/s
Operating System	Windows XP or Vista

Online Deployment

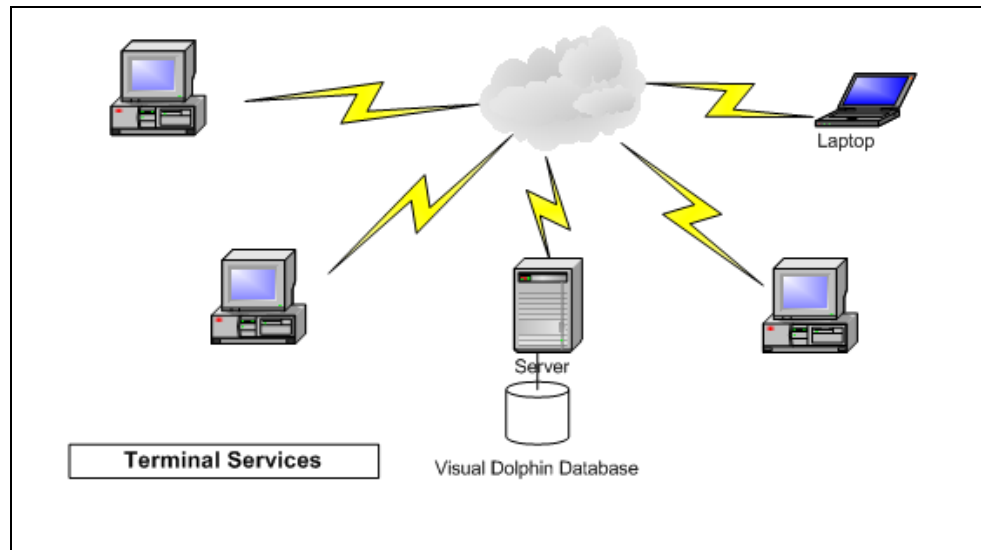
Online deployment is very interesting for installations with several remote locations and where it is necessary to have immediate access to consolidated data.

Visual Dolphin can be deployed online in two different scenarios: by accessing remotely a central server (Terminal Services) or by using data replication. It is obvious that the two scenarios rely heavily on data communication.

Terminal Services

Terminal Services is a service allowing a remote PC to access via data connection a server through an emulation screen. PC resources are not used. All the processing is performed by the server. Therefore, the server required for such a scenario needs to be performant enough to handle the users connections and data volume.

To optimize the performance, another implementation possibility is to have two servers, one hosting the application and the other one for the database. Processing is split between the two servers and provides maximum response time.



Back Office Server: (minimal configuration required)

Processor	Xeon Quad Core 2.0 Ghz
Memory	At least 4GB RAM
Hard Disk (SCSI) ¹	120 GB, RAID Technology recommended
Ethernet Card	100Mbit/s
Operating System ²	MS Windows 2003 Server
Emulation Software ³	MS Terminal Services
Database ⁴	MS SQL Server 2000 or 2005
Reporting	Business Objects Crystal Reports V 11

(1) It is clear that the size of the disks depends on the volume of data processed

(2) (4) Latest service pack is required

(3) MS Terminal Services basic package is for two concurrent users. License should be acquired according to the required number of concurrent users.

NB: An additional 512Kb RAM memory has to be added per each remote user

Workstation

Processor	P4 Dual Core 2.8 Ghz
Memory	512 Mbytes RAM
Hard Disk	120 GB
Ethernet Card	10/100Mbit/s
Operating System	Windows XP or Vista

Data Communication

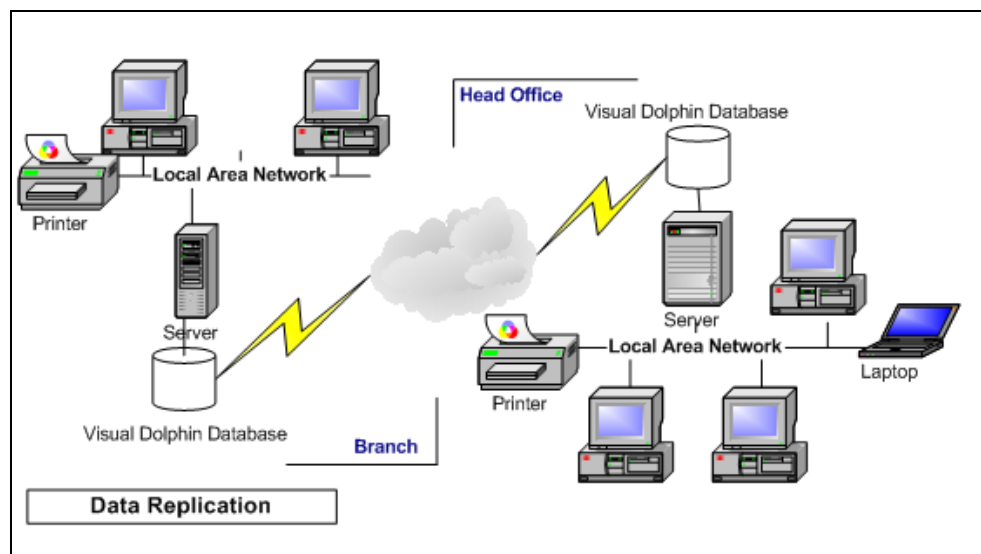
This technical scenario also relies on the quality and performance of data communication. A well configured server needs also a good bandwidth to optimize access and data exchange between the user's terminal and the server.

A minimum of 512 Mb/s is required through leased lines or ADSL connection.

Data Replication

Visual Dolphin relies on the replication features of Microsoft SQL Server. Replication is simply the process of sharing data between databases in different locations.

That is exactly what Visual Dolphin does: it replicates data, like the customer, supplier, inventory and financial information, to make the data available to all the institution locations or entities. According to a pre-defined frequency and the presence of a communication line, databases on different sites communicate and get updated. In other words, it means that information is all accurate and up-to-date in every location.



Back Office Server: (minimal configuration required)

Processor	Xeon Quad Core 2.0 Ghz
Memory	At least 4GB RAM
Hard Disk (SCSI) ¹	120 GB, RAID Technology recommended
Ethernet Card	100Mbit/s
Operating System ²	MS Windows 2003 Server
Database ⁴	MS SQL Server 2000 or 2005
Reporting	Business Objects Crystal Reports V 11

(1) It is clear that the size of the disks depends on the volume of data processed

(2) (3) Latest service pack is required

Workstation

Processor	P4 Dual Core 2.8 Ghz
Memory	512 Mbytes RAM
Hard Disk	120 GB
Ethernet Card	10/100Mbit/s
Operating System	Windows XP or Vista

Data Communication

For data communication, there are two possibilities: using an ADSL connection or through a leased line.

From past experience, branches that need to connect to head office in the same country can use an ADSL connection. When connecting from different countries, a leased line is required.

A minimum of 512 Mb/s is required through leased lines or ADSL connection.



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