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DBM 405
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Databases and the Internet

When it comes to the Internet and databases there are several key components. First you have active server pages (ASP), online analytic processing (OLAP), data warehousing and data mart, and three-tier architecture. The best way to explain ASP, OLAP, data warehousing and three-tier architecture is to start from the most basic overview and work our way inward.

The three-tier architecture is one way database get information onto the Internet. In the three-tier architecture you have three-tiers (figure 1). From the figure you can see the three-tier system. The first tier is the Client tier this is where the user at his computer sits and connected to the Internet. The second tier is the middle tier this tier is where the web server sits along with the ASP scripts, OLAP, and the script engine. The last tier is the database tier this is where the data warehouse and data mart sits.

ASP is computer code whose job is to create dynamic web pages from information the user supplies or from information supplied from a database. The ASP code can be writen in different computer languages; C++, C#, JAVA, XML, PHP, Visual Basic. The only thing determining the language used is the ability of the programmer and what the web page is being used for. If the ASP is just a simple web page including information from a database on a UNIX computer then PHP maybe the most correct language to write the ASP in but if the ASP page is a small part of a complicated application on a Microsoft operation system computer then the ASP might be written in JAVA, C++, C# or Visual Basic.

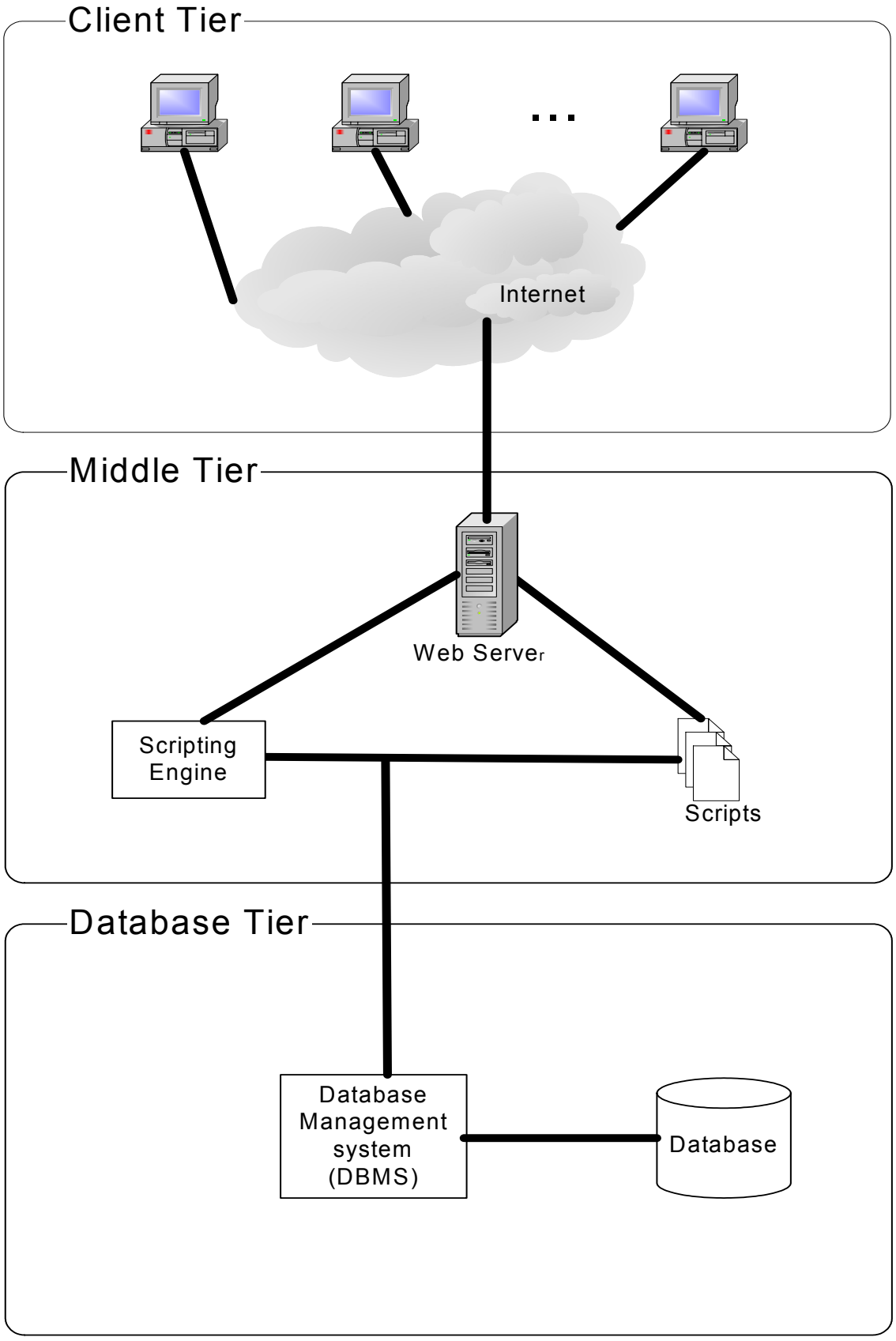
Data warehousing and data marts are nothing more then an extremely large amount of information on a single database or multiple databases spread over a geographic region. This is

nothing more then mass storage of information. This storage can be on several different operation systems as well as different types of databases.

OLAP is a form of data mining. This is one process used to gather information and report the information in a form understandable by CEO's, general public, and programmers. The OLAP is tool programmers use to draw conclusions and gather unrelated information in such a way to show an unknown relationship in the information. One of the ways OLAP does this is by looking at tables and the rows in those tables in what is called data cubes. A grater then two dimensional way of looking at information, some of the correct databases software like oracle can have data cubes with 64 dimensions. What this means is a single table can have 64 different and unrelated ways to be looked at by the OLAP software.

To the person on the Internet this is all hidden and all the person knows is the information displayed on his Internet browser in HTML. The output of all this is a simple HTML pages a person can see on the Internet or Intranet.

Figure 1


Client Tier
Internet
Middle Tier
Web Server
Scripting Engine
Scripts
Database Tier
Database Management system (DBMS)
Database