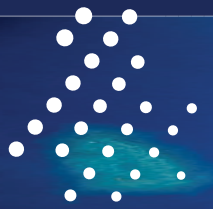




idea<sup>®</sup> server  
DATA ANALYSIS FOR THE ENTERPRISE



A powerful extension to **IDEA Version Eight**



VERSION FOUR

PRODUCT PROFILE

A whole new way to implement data analysis in your organization.

As data file sizes increase, the practicality of desktop data analysis lessens and the cost increases! This is where **IDEA Server** comes in — by harnessing the power of server technology.

**IDEA Server** provides enterprise level data analysis, with the ability to effectively process huge data files, while maintaining the familiar, easy to use IDEA interface. **IDEA Server** is fully scalable in a fault tolerant and load balanced environment.

## IDEA Server Technical Overview

### What the servers do

#### Task Management Server

The Task Management Server incorporates the following protocols, used by IDEA Server:

- IIS Service is used for managing the IDEA Server and user accounts; SOAP is used for management related communications between the client and the Server.
- SQL database, the central data store for client and user management. It is also the central store for task queuing; when a user submits an IDEA task for processing, it is added to the queue to be executed by a Task Server.

#### Task Server

The Task Server is the engine which looks for tasks to run. It accomplishes this by monitoring the SQL database looking for tasks to execute. Once the task has completed, an entry is made in the SQL database identifying the task's completion status as well as any resulting output databases and/or results. The Task Server can be configured to execute a given number of tasks on the server at any given time. Task Servers can be clustered using multiple machines to provide scalability and fault tolerance.

There is only one Task Management Server but there can be any number of Task Servers.

IDEA's File Explorer shows both local files and files processed on the Server.

The screenshot displays the IDEA software interface. On the left, the File Explorer shows a tree view of files, including 'IDEA Server Files' which is circled in red. The main window shows a data table with the following columns: INV\_NO, INV\_DATE, SALESREP\_NO, CUSTNO, PROD\_CODE, and UNIT\_PRICE. The table contains 29 rows of data. On the right, the Properties panel shows settings for the Database (Data, History, Field Statistics, Control Total) and Results (Stratification, Indices, Comments). The bottom status bar indicates the Working Folder is C:\Program Files\IDEA\Samples, the Number of Records is 31/900, and the Disk Space is 33.31 GB.

INV_NO	INV_DATE	SALESREP_NO	CUSTNO	PROD_CODE	UNIT_PRICE
1	1000001	6/27/2006	102	21425	02
2	1000002	7/17/2006	102	21426	03
3	1000032	6/22/2006	102	21450	03
4	1000048	2/28/2006	102	21462	05
5	1000070	2/7/2006	102	21464	05
6	1000089	2/2/2006	102	21466	05
7	1000090	3/28/2006	102	21467	05
8	1000111	3/21/2006	102	21490	05
9	1000217	2/21/2006	102	21496	05
10	1000230	5/24/2006	102	21644	05
11	1000252	5/22/2006	102	21646	05
12	1000265	3/15/2006	102	21650	05
13	1000320	2/14/2006	102	25354	05
14	1000320	5/26/2006	102	30228	05
15	1000334	5/17/2006	102	30501	05
16	1000362	4/11/2006	102	30608	05
17	1000375	2/3/2006	102	30704	05
18	1000384	6/6/2006	102	31505	05
19	1000413	3/31/2006	102	32002	04
20	1000435	2/15/2006	102	32103	05
21	1000466	10/27/2006	102	40004	05
22	1000467	11/6/2006	102	40007	05
23	1000506	8/28/2006	102	40100	05
24	1000524	8/4/2006	102	40108	05
25	1000616	8/8/2006	102	40110	05
26	1000780	11/17/2006	102	40111	05
27	1000784	9/19/2006	102	40114	05
28	1000793	7/24/2006	102	40118	05
29	1000867	8/11/2006	102	40120	05

## Scalability: How to grow the system

The load on the Task Servers varies greatly depending on the size of data, type of analysis and the number of simultaneous users. If the load is too great, tasks will be queued until the Task Servers have time to execute them.

Any number of additional Task Servers can be added to IDEA Server within the existing license agreement. Once an extra server is added, IDEA Server will replicate specific information on the server thus allowing it to be used by the processing of data.

Figure 1

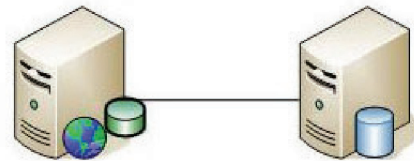
One machine containing all services required to run IDEA Server.



Task Management Server  
& Task Server

Figure 2

By moving the Task Server to one or more separate servers, there is no performance degradation on the Task Management.

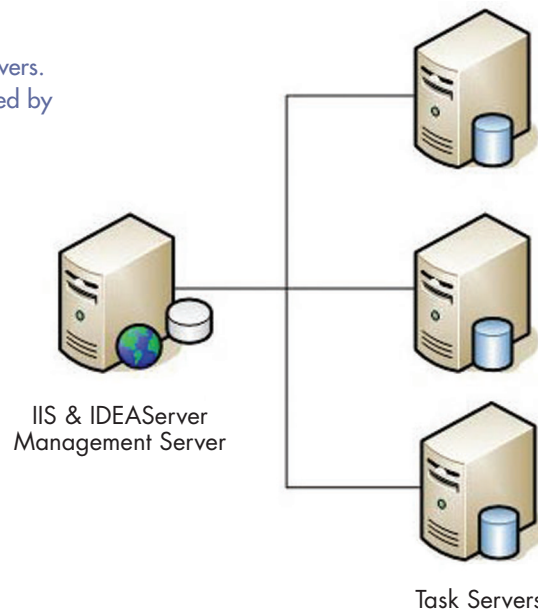


Task Management Server

Task Server

Figure 1

This example shows a configuration with three Task Servers. There is no limit on the number of Task Servers supported by each Task Management Server.



IIS & IDEAServer  
Management Server

Task Servers

## Maximum number of simultaneous tasks

To ensure the Task Server isn't swamped by tasks, IDEA Server has a governor which limits the number of concurrent tasks that can be run on each server. Depending on the nature and types of tasks run, the administrator can configure each Task Server as to the maximum number of concurrent tasks which can be executed at one time.

## Load Balancing

To orchestrate how and when tasks are run, IDEA Server uses sophisticated load balancing software. This technology examines the load on each Task Server and determines which machine should service the request.

## Fault tolerance: what happens when things go bad

Technology is built into IDEA Server to ensure tasks continue to be executed. If for some reason a task fails to complete, the task will be deemed incomplete and will be re-queued. If a Task Server fails, another server will pick the job off the queue.

## Requirements for IDEA Server

IDEA Server Client: IDEA Version Eight

### Requirements for IDEA Task Management

#### Minimum Specifications

Operating Systems: Windows Server 2003  
Windows Server 2000 SP4+  
Database: SQL Server 2000 or  
SQL Server 2005  
Processor: Pentium 4 1.6 GHz or faster  
RAM: 1 GB  
Disk Capacity: 60 GB

### Requirements for IDEA Task Server

#### Minimum Specifications

Operating Systems: Windows Server 2003  
Windows Server 2000 SP4+\*  
Processor: Pentium 4 1.6 GHz or faster  
RAM: 1 GB  
Disk Capacity: Based on user requirements. Temporary space is required when performing data tasks. This is temporary because on completion, the data in this location is purged. This location needs enough disk space to hold twice the size of the largest file multiplied by the number of concurrent tasks, as this is the potential amount of data it needs to hold. A dedicated drive is recommended.

[www.caseware-idea.com](http://www.caseware-idea.com)

CaseWare IDEA Inc. is a privately-held software development and marketing company, with offices in Toronto and Ottawa, Canada, regional sales centres in The Netherlands and China and 40 distributor partners serving 90 countries. CaseWare IDEA Inc. is a subsidiary of CaseWare International Inc., the world leader in business-intelligence software for accountants, auditors and other professionals.

**\*Note:** If running Windows 2000 SP4, you will be unable to install Microsoft Office Access Database Engine 2007. As a result, you will be unable to import Microsoft Access 2007 files (\*.accdb) into IDEA Server Version 4.



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