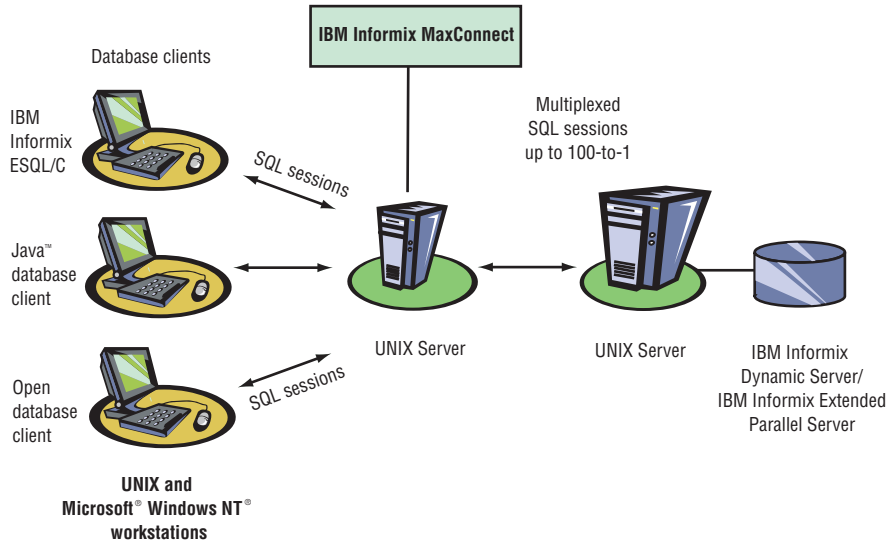
IBM Informix MaxConnect, Version 1.0



IBM Informix MaxConnect multiplexes a number of Structured Query Language (SQL) sessions into a much smaller number of communication sessions at the IBM Informix database level—maximizing scalability and performance.

Highlights

- ***Helps reduce database server CPU consumption***
- ***Helps improve user scalability by enabling more users to simultaneously connect to the database server***
- ***Provides a rich set of administrative and monitoring features***
- ***Helps reduce the CPU overhead required for handling a large number of database connections***
- ***Offers a better sharing of computer tasks and more efficient utilization of computing resources***
- ***Provides global language support.***

IBM Informix® MaxConnect™ is a connection server, which improves system scalability and performance by increasing the number of users that can simultaneously connect to an IBM Informix database server.

In a client/server environment, client connections use system resources on the database server. Hundreds of database client connections use significant amounts of CPU time and considerable system resources—diminishing response times and increasing CPU utilization.

IBM Informix MaxConnect moves the management of user connections away from the IBM Informix database server by multiplexing client connections to a much smaller number of network connections. This significantly reduces operating requirements on the database server and greatly increases system scalability. It also provides a cost-effective alternative to expensive, disruptive and time-consuming hardware or CPU upgrades.

IBM Informix MaxConnect installs transparently, generally without requiring any modifications or code changes to client or server applications.

e® business

Improve performance with IBM Informix MaxConnect

Combining IBM Informix MaxConnect with IBM Informix Dynamic Server™ can help improve system performance, support large numbers of users and extend the life of existing hardware and software solutions. It is a great solution to improve the overall system performance of businesses with large online transaction processing (OLTP) and Internet applications. As the data management component of the IBM Informix Internet infrastructure solution — IBM Informix Internet Foundation™ — it provides a seamless bridge to Web-enabled solutions.

Maximize computing resources

In a client/server architecture, IBM Informix MaxConnect is positioned between the client and the IBM Informix database server. Clients transparently connect to IBM Informix MaxConnect as though they were interfacing with the database server. In reality, IBM Informix MaxConnect provides the connection to the database server.

IBM Informix MaxConnect employs network packet aggregation technology that provides significant benefits to OLTP and Internet architectures in both two-tier and multitier application server environments. IBM Informix MaxConnect aggregates the number of client connections and then connects to the database server using fewer connections. It typically runs on a separate machine from the database server. By simultaneously grouping multiple network messages and offloading the work of managing client connections, IBM Informix MaxConnect can significantly reduce database server CPU consumption.

Increase number of users

IBM Informix MaxConnect greatly improves user scalability by enabling more users to simultaneously connect to the IBM Informix database server. In fact, IBM Informix MaxConnect supports up to tens of thousands of users. And the ratio between user sessions and database connections can be as high as 100-to-1.

A true measure of any product is to put it to the test. The combination of IBM Informix MaxConnect and IBM Informix Dynamic Server has demonstrated increased performance in real-world environments.

With IBM Informix MaxConnect, IBM Informix Dynamic Server has emerged as a performance leader with an enterprise resource planning (ERP) Baan benchmark. In the benchmark, IBM Informix Dynamic Server with IBM Informix MaxConnect handled 21 percent more users than the nearest competitor on the same platform, and usage of the Shared Statement Cache with IBM Informix Dynamic Server achieved a 36 percent reduction in memory utilization.

IBM Informix MaxConnect features and benefits

- *Server administration – IBM Informix Server Administrator™, the browser-based system administration tool, provides a rich set of administrative and monitoring features for the IBM Informix MaxConnect connection server.*
- *Language support – IBM Informix MaxConnect is an international product and provides global language support (GLS). The interface modules require no localization. The product is compatible with GLS and various localized versions of IBM client and server software.*
- *Connection multiplexing – This feature of IBM Informix MaxConnect multiplexes all connections to the database from the client. With IBM Informix MaxConnect, the database clients see improved performance and enhanced scalability.*
- *Reduced CPU requirements – IBM Informix MaxConnect can dramatically reduce the CPU overhead required for handling a large number of database connections.*

- *Optimal use of operating system resources—IBM Informix MaxConnect supports many more users without increasing the number of operating system connections. In some cases, the ratio of users to connections can be 100-to-1.*
- *Optimal use of network resources—In conventional OLTP environments, large numbers of small network packets can rapidly consume connection resources on the database server. IBM Informix MaxConnect improves performance and scalability by separating server connection management tasks from SQL (user) session management tasks. IBM Informix MaxConnect aggregates small packets and multiplexes them over larger transport session packets.*
- *Load sharing—Connection management tasks that would usually be performed on the server where the database resides are now offloaded to the middle tier where IBM Informix MaxConnect resides. This offers a better sharing of computing tasks and more efficient utilization of computing resources.*

For more information

To learn more about IBM Informix MaxConnect, Version 1.0, visit: **ibm.com**/software/data/informix

IBM Informix MaxConnect, Version 1.0 at a glance

Hardware requirements

- UNIX® or Linux® technology-based hardware for IBM Informix MaxConnect server
- Minimum of 64MB RAM
- 30MB hard disk space

Software requirements

- Sun Solaris™, Version 2.6, Version 7 or Version 8
- HP HP-UX, Version 11.0 (32-bit and 64-bit)
- Linux (Kernel, Version 2.2.5 glibc, Version 2.1.1)
- IBM AIX®, Version 4.3.3
- Compaq/Digital Unix, Version 4.0D
- SGI IRIX, Version 6.5

Note: IBM Informix MaxConnect is compatible with versions of IBM Informix Connect that are supported by the host database server

Platform availability

IBM Informix MaxConnect is available on the following platforms:

- Sun Solaris, Version 2.6, Version 7 or Version 8
- HP HP-UX, Version 11.0
- Compaq/Digital, Version 4.0D
- Linux Kernel, Version 2.2.5
- SGI IRIX, Version 6.5
- IBM AIX, Version 4.3.3
- DG DG/UX R4.20

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