

OSAS^{CS}

OSAS Client/Server

White Paper

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OSAS^{CS} White Paper

General Questions About OSASTM Client/Server

What is OSAS^{CS}?

OSAS^{CS} is a 2-tier client/server solution for OPEN SYSTEMS® Accounting Software (OSAS). It uses the PRO/5 Data Server from BASIS International, Ltd. to move data processing operations from the client to the server in networked environments. This type of distributed processing uses the server to perform the lion's share of the I/O operations, leaving the client computers to do the remainder of the processing—namely screen painting, input handling, calculations and report processing.

The *data serve* strategy reduces the number of I/O requests and server responses sent across network lines. By reducing the number of packets transmitted across Windows or Novell networks, network performance is enhanced, translating to superior overall processing times.

For which platforms is Client Server available?

Open Systems offers client/server solutions on various operating systems. Servers are available for Novell NetWare, Windows NT, UNIX, AIX, and Linux operating systems. You can have more than one server on the same network if data is stored on more than one computer.

Windows NT, UNIX, AIX and Linux servers use a TCP/IP protocol to communicate with the client interpreters. You can use any of these servers on the same system, and you can use any combination of TCP/IP-based clients. TCP/IP-based client interpreters are available for workstations running Windows 95, Windows 98, Windows NT and for UNIX, AIX and Linux workstations.

Novell servers use the NCP protocol and can be used only with Novell clients. The Novell client is available only for NetWare workstations running Windows 95, 98 and NT.

How does it work?

When you install the OSAS^{CS} server software on your network server, you designate a name for the server. You can then use that name anywhere in OSAS^{CS} or ODBC where you would normally specify a path name. For example, if your data is stored on a directory called “/osas/data” on a server named “OSASDATA”, you can specify the data paths in OSAS^{CS} as /<OSASDATA>/osas/data¹.

Client interpreters recognize the <servername> convention and make a data request, to which the appropriate server responds.

Can I use OSAS^{CS} in WAN environments?

Yes, OSAS^{CS} can speed up data transfers across communications lines in WAN environments, too. The reduction in transmitted packet traffic can provide performance boosts similar to those experienced in LANs.

Be aware, however, that while OSAS^{CS} will improve system performance over standard network OSAS in WAN environments, remote workstations will not perform at the same speed as local workstations due to the limitations of the communications lines.

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¹ This is an example. See the *OSAS^{CS} Resource Manager User's Manual* for the actual syntax.

OSAS^{CS} White Paper

Why would I recommend OSAS^{CS} for my Clients?

On a Windows or Novell network:

The primary reason for recommending OSAS^{CS} on systems using Windows NT or Novell NetWare as a network environment is the performance increase. Tests conducted by BASIS revealed a three- to ten-fold increase in performance in these network environments. The actual performance improvement on an system will vary depending on a number of factors including, but not limited to:

- the computers used for workstations and server
- the network cabling, hubs and switches used
- the number of workstations and concurrent users of OSAS and other programs on the network
- the other tasks being performed by the server
- the communications lines for remote terminals

On a UNIX/AIX/Linux system:

The reasons for recommending OSAS^{CS} on systems using UNIX, AIX or Linux include:

- the ability to use Windows workstations in native Windows mode (as opposed to using terminal emulation software).
- better performance on systems with data located on more than one server
- better performance in Windows ODBC connections to data (see OSAS^{CS} and ODBC below)

The key feature of OSAS^{CS} for UNIX users is the mix-and-match UNIX and Windows capabilities of OSAS^{CS}. UNIX users may want to use some Windows workstations because of the ODBC connectivity to make use of the graphical features of OSAS version 6.00 and beyond. They may also want to continue using standard UNIX terminals or terminal emulation software on some workstations because of the added cost of Windows hardware or because the character-based interface is preferred for heads-down data entry. With OSAS^{CS} they can have it all; a graphical interface for those who want it, and a text-based interface for those who need it.

OSAS^{CS} and ODBC

What is ODBC?

ODBC, which stands for Open Database Connectivity, is a Windows standard for sharing data between databases and productivity packages such as word processors, spreadsheets, report writers and so on. Most popular productivity packages (such as those found in Microsoft® Office®, Lotus® SmartSuite®, and Corel® WordPerfect® Suite) include support for ODBC.

How does ODBC work with OSAS?

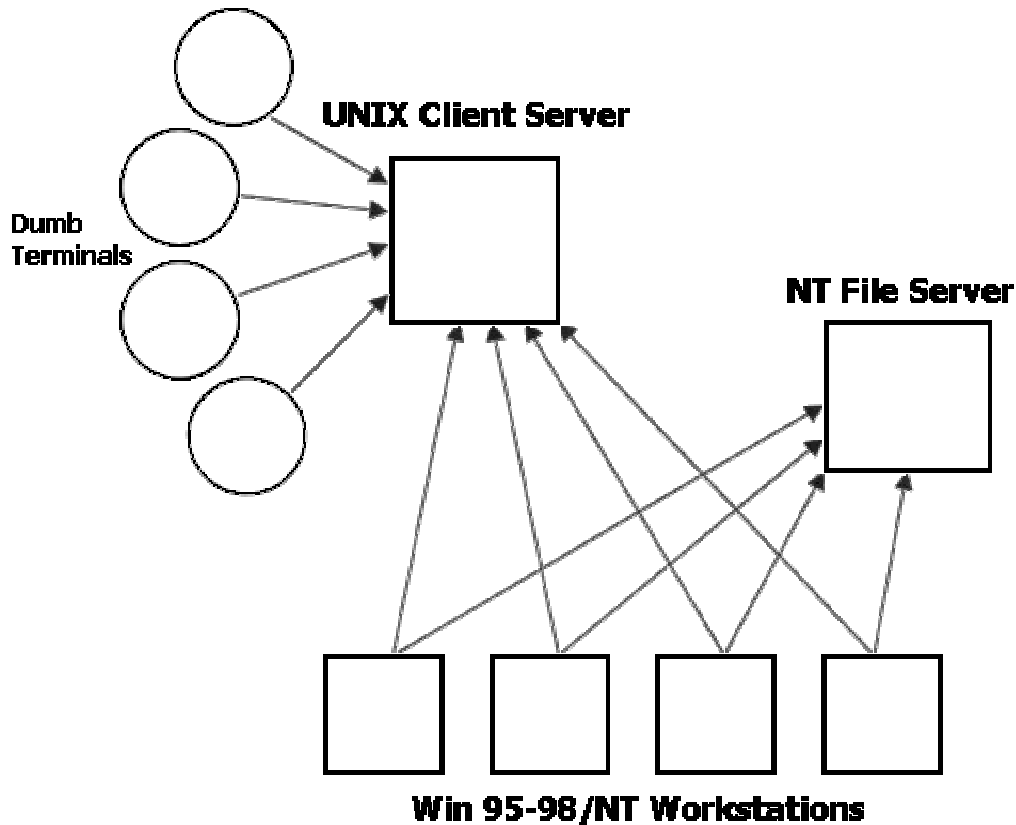
Open Systems sells an ODBC Kit, which includes an ODBC driver that allows these productivity packages access to your accounting data. Using your favorite Windows productivity software and the OSAS ODBC Kit, you can unlock the door to data reporting, mining and analysis in ways you never could before.

Why would I use OSAS^{CS} with ODBC?

You can use OSAS^{CS} to boost the performance of your data queries on a Windows or Novell network system. OSAS^{CS} also allows ODBC speedy access to your files when they reside on a UNIX, AIX or Linux server.

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What do I order for UNIX, Linux or AIX with Windows client/server sites with UNIX terminals?



For this UNIX Server/NT File Server, UNIX Terminal & Win 95/98/NT Workstation scenario, order:

- OLZU600T304 Regular UNIX RM for the UNIX Server
- OLXU520T304 4-user Regular Interpreter for SCO UNI
- OLVU520T304 4-user OSAS^{CS} Server (data server) for the UNIX Server
- OLCP600D304 OSAS^{CS} Open Windows Resource Manager for the NT File Server
- OLXW520D301 Qty 4 Single-User Regular Windows Interpreters for each Windows Workstation
- Full DOS Media For all applications chosen for the workstations
- Full TAR Media For all applications chosen for the server/dumb terminals

In this scenario, a UNIX OSAS system using UNIX terminals and a Windows OSAS network both access the data files on the UNIX box using an OSAS^{CS} Server for UNIX. Install the components as follows:

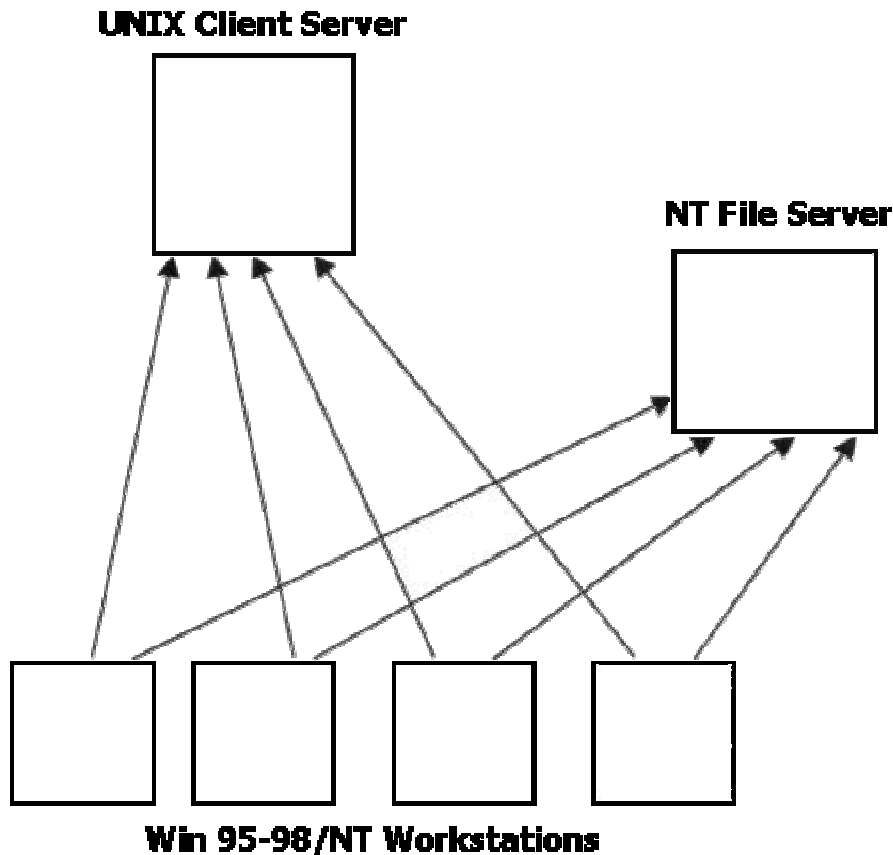
The UNIX server contains a UNIX RM and application installation to support the UNIX terminals.

The UNIX server also stores the OSAS data files. The UNIX version of the OSAS^{CS} server is also installed on the UNIX server. For AIX or Linux, simply substitute the AIX or Linux interpreter and OSAS^{CS} server.

The NT File server contains the Windows Resource Manager and applications to support the Windows workstations. This machine can be a Windows workstation, a Windows server or a UNIX directory mapped to the Windows workstations via NFS, APFS or some other file service. The NT file server in this example stores no data files.

The Windows workstations contain only a single-user Windows Visual PRO/5 interpreter and a few supporting files. The programs are loaded from the Windows file server and the data is accessed through the OSAS^{CS} UNIX (or Linux or AIX) server.

What do I order for UNIX, Linux or AIX with Windows client/server sites without UNIX terminals?



For this UNIX, Linux or AIX Server/NT File Server & Win 95-98/NT Workstation scenario, order:

- OLVU520T304 4-user OSAS^{CS} Server (data server) for the UNIX Server
- OLCP600D304 OSAS^{CS} Open Windows Resource Manager for the NT File Server
- OLXW520D301 Qty 4 Single-User Regular Windows Interpreters for each Windows Workstation
- Full DOS Media For all applications chosen for the workstations

In this scenario, an OSAS system on a Windows network will access the data files on the UNIX box using OSAS^{CS} Server for UNIX. There are no UNIX terminals. The components are installed as follows:

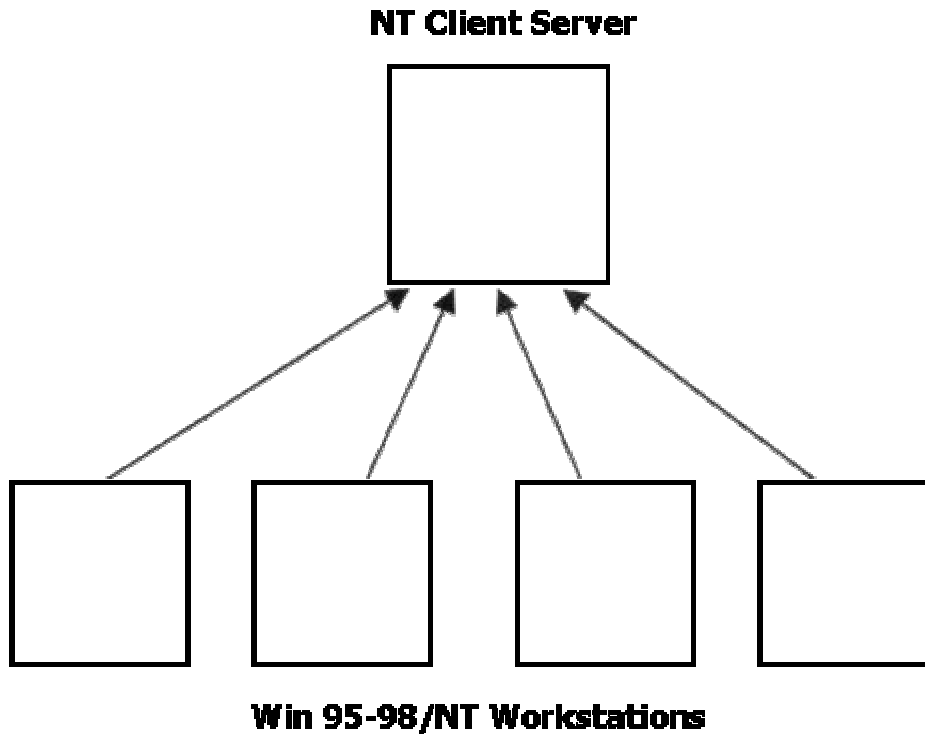
The UNIX server contains the OSAS data files and the OSAS^{CS} Server for UNIX. For Linux or AIX, substitute the Linux or AIX OSAS^{CS} server for the UNIX OSAS^{CS} server.

The NT File server contains the Windows Resource Manager and applications to support the Windows workstations. This machine can be a Windows workstation, a Windows server or a UNIX directory mapped to the Windows workstations via NFS, APFS or some other file service. The NT file server in this example stores no data files.

The Windows workstations contain only a single-user Windows Visual PRO/5 interpreter and a few supporting files. The programs are loaded from the Windows file server and the data is accessed through the OSAS^{CS} Server for UNIX.

Optionally, the programs can be loaded on each workstation for better performance.

What do I order for Windows NT client/server sites?



For this Windows NT Server & Win 95/98/NT Workstation scenario, order:

OLVW520T304	4-user OSAS ^{CS} Server (data server) for the NT Server
OLCP600D304	OSAS ^{CS} Open Windows Resource Manager
OLXW520D301	Qty 4 Single-User Regular Windows Interpreters for each Windows Workstation
Full DOS Media	For all applications chosen for the workstations

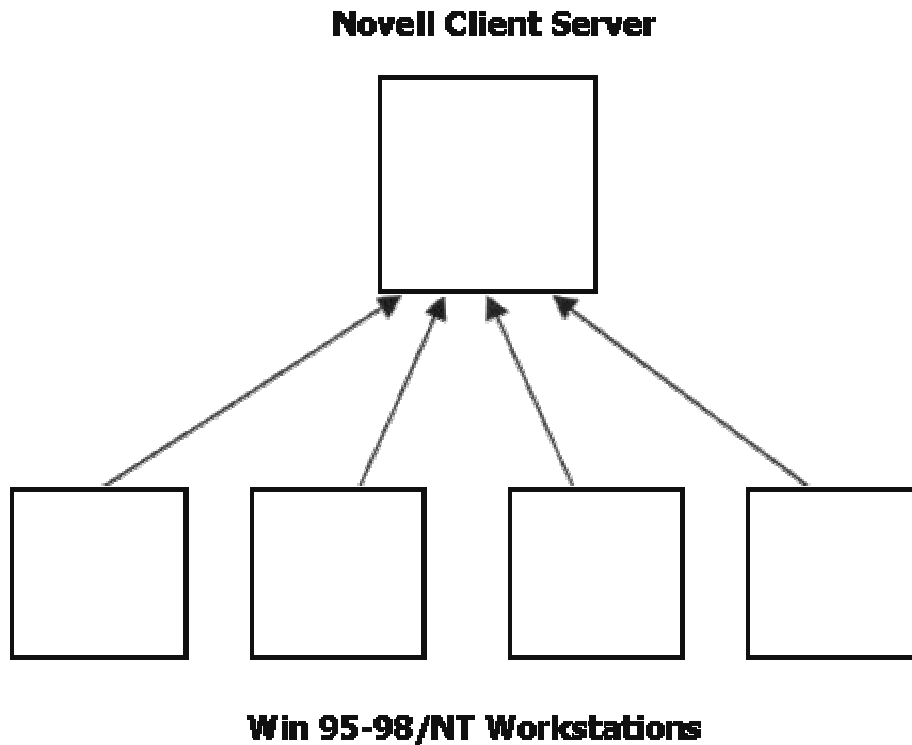
In this scenario, an OSAS system on a Windows network will access the data files on a Windows NT Server using the OSAS^{CS} Server for Windows NT. The components are installed as follows:

The Windows NT Server contains the OSAS Resource Manager, programs and data files. It also contains the OSAS^{CS} Server for Windows NT. The programs must reside on a drive mapped to the individual workstations.

The Windows workstations contain only a single-user Windows Visual PRO/5 interpreter and a few supporting files. The programs are loaded directly from the Windows NT Server and the data is accessed through the OSAS^{CS} Server.

Optionally, the programs can be loaded on each workstation for better performance.

What do I order for Novell NetWare client/server sites?



For this Novell NetWare Server & Win 95/98/NT NetWare Client Workstation scenario, order:

OLVY520T304	4-user OSAS ^{CS} Server (data server) for the Novell Server
OLCY600D304	OSAS ^{CS} Server Open Windows Novell Resource Manager
OLXY520D304	Qty 1 Four-User Regular Novell Interpreters for the Windows Workstations
Full DOS Media	For all applications chosen for the workstations

In this scenario, an OSAS system on a Novell NetWare network will access the data files on a Novell Server using the OSAS^{CS} Server for Novell NetWare. The components are installed as follows:

The Novell NetWare Server contains the OSAS Resource Manager, programs and data files. It also contains the OSAS^{CS} Server for Novell NetWare. The programs must reside on a drive mapped to the individual workstations.

The Windows workstations contain only a single-user Novell for Windows Visual PRO/5 interpreter, the Novell Client drivers, and a few supporting files. The programs are loaded directly from the Novell NetWare Server and the data is accessed through the OSAS^{CS} Server.

Optionally, the programs can be loaded on each workstation for better performance.

OSAS^{CS} White Paper

Where can I get more information?

For more information about OSAS^{CS}, contact your regional sales manager or Open Systems Sales Department at 800-328-2276.