September 1995

STATEMENT of DIRECTION

Prepared by

ICL High Performance Systems

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1. INTRODUCTION

This Statement of Direction has been prepared to assist customers with strategic planning activities. It provides an overview of ICL product strategies for the high performance data centre market. The document covers the hardware, operating systems, middleware and services marketed by ICL *High Performance Systems*.

These strategies illustrate ICL's long term commitment to our data centre customers, with a range of programmes based on the principles of open systems and client/server solutions.

An updated version of this Statement of Direction will be issued annually.

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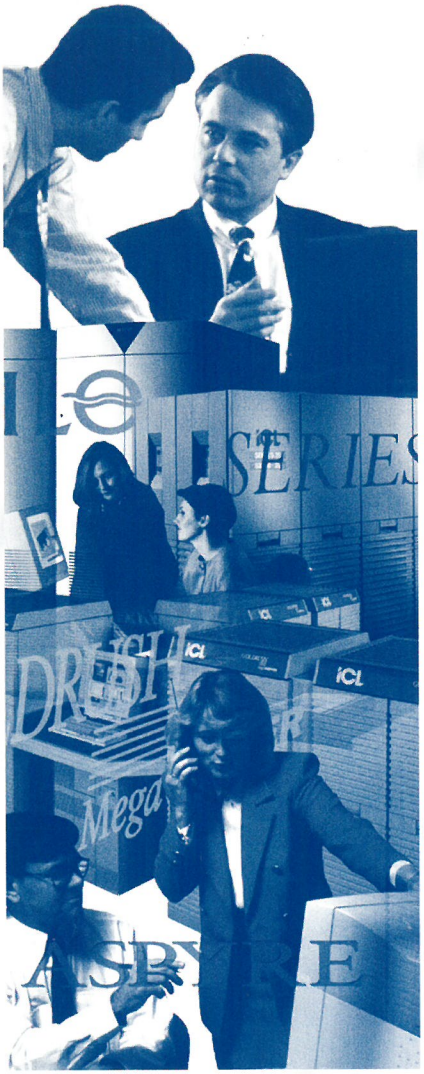


2. MANAGEMENT SUMMARY

Access to accurate customer information has become increasingly essential to modern organisations. The pressure to improve and introduce products and services in an increasingly competitive environment is driving demands for ever more sophisticated customer information. This is forcing the development of new database technologies, in addition to associated data extraction and analysis tools.

Cost constraints have meanwhile brought the total cost of information technology into sharp focus, with many organisations seeking to exert greater control over IT costs both in the data centre and across end-user departments.

Technological advances in software, processors and storage systems are enabling a new generation of data centre systems to meet these two key requirements - improved access to customer data and improved cost-effectiveness. ICL *High Performance Systems* is integrating these new technologies to provide a comprehensive range of data centre solutions, covering hardware, operating systems, middleware and services.

ICL is pursuing a range of developments and partnerships to meet the requirements of this market.

ICL *High Performance Systems* is intercepting and integrating the latest technologies to meet our customers' requirements in four principal areas :

- New mainframe server functionality, enhancing existing customer investment in Series 39 and OpenVME.
- UNIX data centre systems, incorporating SMP-based systems for general purpose server requirements and MPP-based systems (*GOLDRUSH*) for specialist relational database work.
- Software tools and facilities to develop and support distributed applications and databases across a wide range of platforms.
- Professional services, providing the expertise to specify, plan, implement, manage and exploit complex multi-vendor IT systems.

ICL is committed to long term development and partnership programmes in each of these areas. This document summarises these programmes and provides an overview of the new product deliverables expected in the next 12 months.

In the long term, development programmes are looking at the convergence of today's key data centre technologies onto single systems based on commodity microprocessors. These will include support for today's OpenVME applications in addition to UNIX workloads from both SMP and MPP-based systems.

ICL *High Performance Systems* programmes in data centre systems, open middleware and professional services are enabling customers to build new, cost effective IT solutions. These programmes will meet requirements for improved price/performance and system flexibility by exploiting latest technologies and through partnerships and collaborations with industry leaders.

3. THE BUSINESS REQUIREMENTS

In formulating new product strategies, ICL is keen to seek the views of customer organisations. Through listening to our customers, several major themes emerge, themes which we reflect in ICL's business and product strategies. This section summarises the themes influencing the vision, strategies and plans described later in the document.

Modern organisations need to :

- **React Rapidly to Change**

  The opening of new markets, the pace of technological advances and the impact of new legislation and competition have led to a business environment of change and uncertainty. Changing business requirements may involve the need to reskill and reorganise large sections of organisations. In the computer arena, end user departments must be able to modify local systems and applications quickly and cheaply.

- **Improve their Customer Knowledge**

  Organisations need accurate and comprehensive customer information to support new targeted marketing initiatives. However, for many organisations, corporate data is spread across many disparate systems and geographic locations, making a centralised, 'top down' view extremely difficult, if not impossible. This requires the development of new, more flexible customer databases, with the ability to run specific searches and analyses at short lead times. This customer-oriented approach will often represent a fundamental change in corporate culture and business systems.

- **Reduce Costs**

  Greater competition and, in many cases, falling profit margins, have led to tighter cost controls across organisations. As a result, the costs of large scale investment in IT - from the desktop to the corporate data centre - have come under close scrutiny.

- **Maximise Return on Investment**

  Organisations typically pursue an evolutionary rather than 'big-bang' approach to the introduction of new IT systems. In this environment, the ability to maximise the return from existing systems whilst gradually introducing new technologies, is key. Organisations must balance the combination of new and legacy systems to exploit their previous investment in systems, applications and people skills.

These requirements have a direct influence on the new programmes being pursued by ICL *High Performance Systems*. The exploitation of latest technologies is enabling ICL to address these requirements, delivering systems with improved price/performance and with the facilities to enable the rapid development of new customer-based business solutions.

4. TECHNOLOGY TRENDS

4.1 Overview

The greater complexity of modern applications, including the incorporation of graphics and multi-media techniques, is driving the demand for increased processing power, more cost-effective data storage and more sophisticated software techniques.

This section provides an overview of the major technology trends impacting the IT market and ICL product strategies.

4.2 Software Technology

The spread of the data formats, the drive towards open applications and the rapid development of the global information highway are having a profound effect on the development of new software technology. The increased size and complexity of data networks is demanding more sophisticated tools and techniques to maintain, or improve, the ease of use for application developers and end users.

The expectations of end users for improved, more intuitive user access have been raised by the spread of windows-based technology, recently heightened by the media attention and subsequent release of Windows 95.

The increasing need to store and access data in multi-media formats, including voice and image, is also driving this development. The client/server model provides a framework for these developments, with new software techniques emerging for handling the database, application and user access elements of new business systems.

The wide acceptance of the client/server model has shaped the approach to new application development. Client/server has encouraged a modular approach to new developments, by separating the database, application and user access elements. For example, large databases may typically be hosted on one or more data centre servers, with local processing and user access tools on UNIX servers or PCs. The concept of data warehousing provides the model for consolidating disparate databases onto a centrally managed and widely accessible data storage facility.

The modular approach to application development and the requirement to run them on a variety of servers has also led to the increased interest in object-oriented techniques. This approach simplifies the application development route, speeding the time to market of new applications and enabling existing applications to be modified more rapidly to meet new requirements. Object oriented systems enable applications to be separated from the constraints of underlying hardware and software environments. These techniques are being implemented in many organisations and in relational product sets.

Relational databases have now become a standard feature of new business applications. New packaged business applications are now typically written for one, or several, of the leading relational product sets. ICL's approach is to offer object technology solutions based on open standards agreed by the Object Management Group and to support the leading relational products across its server range, from PCs to central servers.

4.3 Processor Technology

Processor technology continues to develop rapidly, with the processing power of commodity chip sets currently doubling every 18 months. This has enabled traditional mainframe vendors to look for lower cost alternatives to proprietary ECL-based chip designs.

As a result, ICL and the other leading mainframe vendors have now committed to the use of commodity chips for new generation data centre servers. These will delivers the levels of performance required with significant price/performance benefits compared to ECL-based systems.

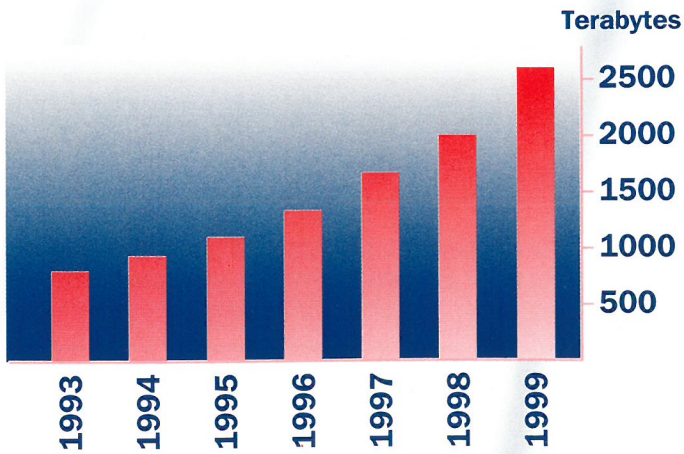
Recent developments include the innovative exploitation of Massively Parallel Processing (MPP) techniques to produce specialist high performance servers for data warehousing applications, and specialist servers for the emerging interactive media market. This requires software, firmware and hardware developments to deliver mainframe class performance across a range of commodity processors.

4.4 Data Storage Technology

The rapid increase in the quantity of data - both local and corporate - will continue to drive the development of new data storage technologies. In addition to the increased volume of data, the demands of storing new generation graphics and multi-media based information will also force the pace of developments in this area. As a result, many organisations will need to increase their data storage capacity dramatically by the end of the current decade.

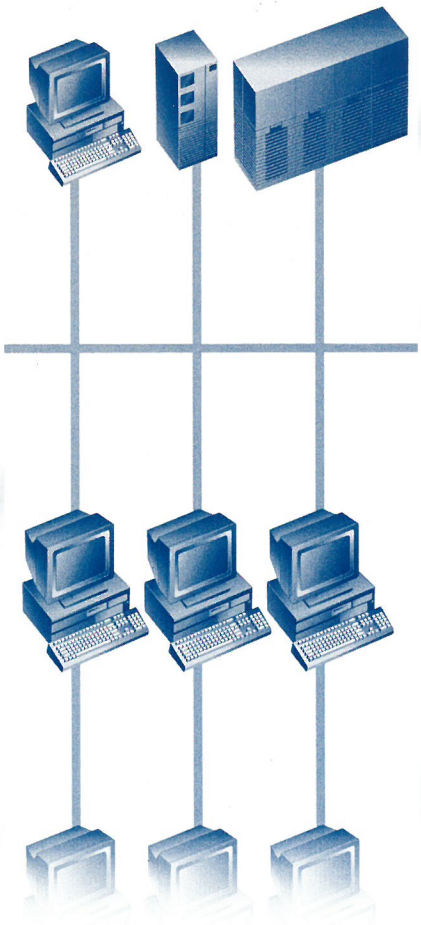
The technologies to meet these increasing requirements are developing fast. The major developments in recent years have been the increased bit and track density on the surface of disks, increasing the quantity of data that a single disk can hold. Bit density has increased four fold in the last three years, while the number of tracks per inch has doubled. New technologies are expected to maintain this growth rate until the year 2000.

Magnetic tape is still the cheapest storage medium and will continue to be used for archiving and back up. The development of automated tape libraries and tape arrays will continue to improve the accessibility and overall cost-effectiveness of tape systems. These developments will address customer requirements for increased capacity and improved performance. In support of these developments, ICL will continue to pursue partnerships with the world's leading suppliers of data storage systems and system components.



Demand for Disk Storage

5. DATA CENTRE COMPUTING



The ability to manage and coordinate data is a major challenge for many organisations. The move towards local empowerment has led to information becoming dispersed across the organisation. Some attempts at distribution have actually resulted in fragmentation of the organisation's critical data. As a result, the management and coordination of the organisation's data has become increasingly costly.

This has renewed interest in the operation of corporate data centres, supporting the critical business systems and providing a range of services to different parts of the organisation. This section explains the concept of data centre systems, providing the overall framework for new product developments within ICL *High Performance Systems*.

The key function of data centre systems is to maximise the exploitation of data by ensuring :

- continuous availability of services
- fast, consistent and predictable response times for routine end user queries
- security and integrity of data
- support for large numbers of concurrent users
- the ability to interwork with other servers and a range of client systems.

Client/server is the key architecture for the development of new data centre strategies. The client/server approach enables the development of flexible, local applications, meeting the requirements of individual end user departments. These systems can be linked back to data centre servers providing the storage and management of critical databases.

ICL *High Performance Systems* provides complete data centre solutions, based on client/server architecture. These are based around a range of data centre products incorporating hardware, operating systems, applications, middleware and services. The major product streams are :

- Series 39 and OpenVME. Proven, high performance, general purpose data centre servers specialising in large scale OLTP and batch workloads and incorporating proven data integrity, availability, security and open systems features.
- UNIX Data Centre solutions. These include solutions based on *GOLDRUSH Mega***SERVER**, ICL's high performance database server, and Nile Series, a general purpose UNIX data centre server supporting a wide range of business applications.
- Advanced software products - including DAIS, ICL's open distributed application environment and *i500,* ICL's enterprise-wide directory server.
- ASPYRE professional services, covering systems planning, definition, implementation and exploitation. These services are delivered by industry consultants from within ICL *High Performance Systems*.

To deliver world class products in each of these streams, ICL is pursuing a strategy of partnerships and collaborations, complemented by ICL's own in-house development programmes.

ICL will continue its strategy of collaboration and partnership with market-leading vendors in particular industry segments. This will include growing the close relationships already established with the leading suppliers of relational databases, and with open middleware providers. This approach ensures that ICL can offer 'best of breed' products as part of an overall systems integrator approach.

6. THE ICL VISION

ICL is committed to the long term development and support of Series 39 and UNIX data centre systems, in addition to a wide range of new open middleware and professional services products. Individual customer support contracts for OpenVME already extend to the year 2020.

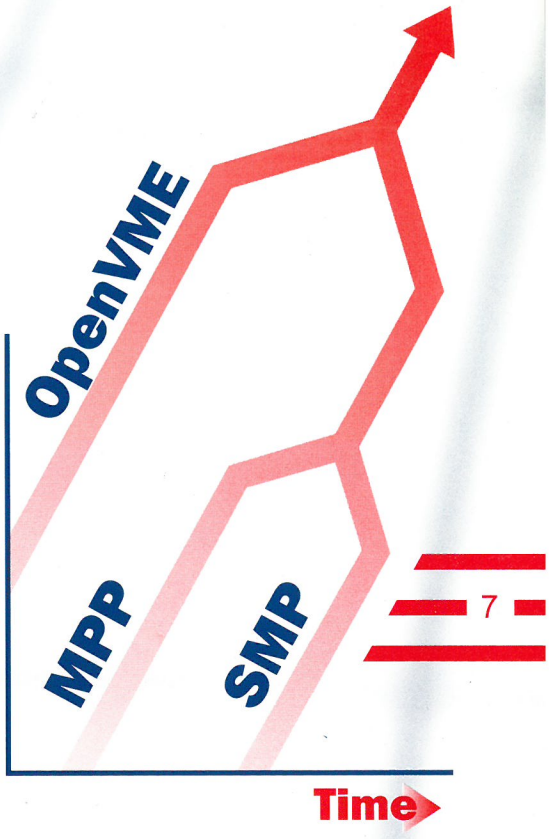
The development of the open middleware portfolio is a key element of ICL strategy. These products will provide fully distributed and scalable application environments supporting transactions, security, global directory and information access services, together with appropriate application development toolkits, across a wide range of ICL and non-ICL hardware platforms. These will enable organisations to develop a wide range of new applications and services, fully exploiting both current and emerging IT technologies.

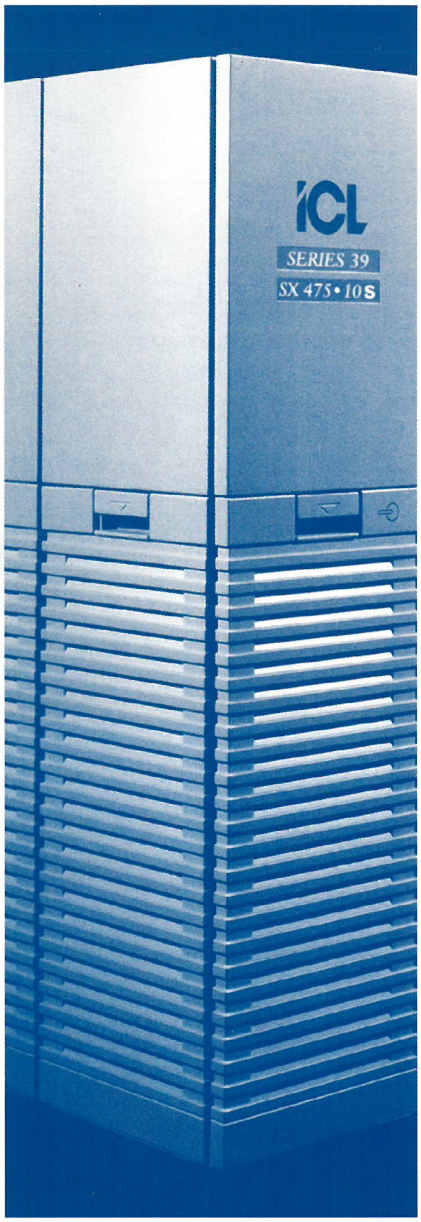
Today's debates about the relative merits of mainframes and UNIX systems, and the positioning of SMP and MPP, will be resolved in the long term by convergence onto single systems using commodity microprocessors.

There have already been significant developments in the convergence of MPP and SMP technologies, such that future systems will deliver both application functionality and massive data processing capability. ICL has already demonstrated the systems management software to enable a combination of SMP and MPP platforms to be remotely managed as a single system.

Commodity microprocessors will ultimately gain sufficient power to meet the largest data centre requirements. At the same time, many organisations will want to take forward their investment in OpenVME applications, features and people skills. ICL is therefore investigating the most practical timeframe for providing OpenVME functionality on commodity microprocessors.

For the longer term, the feasibility of converging OpenVME and UNIX (encompassing both SMP and MPP) functionality onto commodity microprocessors is already being considered. This programme will ensure a long term route forward for customers investing today in applications based around OpenVME, *GOLDRUSH* or Nile Series.





7. ICL PRODUCT STRATEGIES

This Section summarises the strategies for the principal products marketed by ICL *High Performance Systems*. These strategies are designed to meet the market requirements outlined in Section 3 and to exploit the technology trends described in Section 4.

The Divisional name - ICL *High Performance Systems* - reflects the common thread through the product strategy. All the products described in this document have been designed to achieve the highest levels of performance for their particular business solutions and markets. This includes achieving the highest levels of system availability and achieving the most demanding performance requirements.

7.1 Series 39 and OpenVME

Strategy Overview

Series 39 provides a complete range of data centre servers. OpenVME is the operating system running across all current Series 39 DX Systems and SX Systems models.

Series 39 provides high performance central server functionality. This includes both large scale transaction processing and batch work. Series 39 differentiators include high levels of system availability, industry leading disaster tolerance facilities, and the security and integrity for large critical databases.

ICL is continuing to implement a long term programme of price/performance improvements for Series 39 customers, achieved through the exploitation of lower cost processor and data storage technology, and the introduction of user-based software pricing and new commercial packages. This programme has provided major improvements in the total cost of ownership of Series 39 systems.

In 1990, the introduction of Series 39 SX Systems represented a 40% reduction in the price per MIPS of Series 39 processor technology. Since 1993, the introduction of new mainstore technology, **SMART**array disk systems (1994) and price reductions in OpenVME (1995) have resulted in 50% reductions in the cost of ownership of Series 39 systems. The introduction of its successor, code-named the SY processor, will continue this trend.

These measures will ensure that Series 39 remains competitive in the large server market.

1985 1988 1993

OpenVME

OpenVME is the strategic operating system for Series 39 customers. New Series 39 hardware and software developments will be validated only with OpenVME.

New application development facilities on OpenVME will build on the current range of 3GL (COBOL and C based) and 4GL (QuickBuild and third party based) facilities.

Recent market surveys indicate that over 75% of mainframe customers involved in bespoke application development are using COBOL. ICL is committed to supporting the leading toolset products for the continued development of COBOL applications. This includes support for the MicroFocus COBOL product set, including MicroFocus Workbench.

For customers using 4GL CASE tools for application development on Series 39, ICL is involved in on-going product collaborations with several leading vendors, including Oracle, Computer Associates, Westmount, Texas Instruments and Software AG.

ICL is committed to increasing the choice of packaged business applications available on OpenVME and has created the **OpenPLUS** organisation to address this objective. **OpenPLUS** has established close relationships with third party software developers to provide practical assistance in the porting of applications to OpenVME.

OpenPLUS is also enhancing ICL's client/server software portfolio on OpenVME. This will provide customers with the benefits of windows-based access to applications, and increase the range of client/server based applications on OpenVME.

OpenVME already conforms to the X/Open standard, XPG4. This provides an open application development environment for software developers. OpenVME will continue to track the latest open systems standards, including conformance to X/Open's SPEC 1170 standard. SPEC 1170 mandates the essential interfaces required to be branded as a 'UNIX' operating system.

OpenVME will also support the emerging industry standards, including interworking facilities with Windows NT and Windows 95 from Microsoft. OpenVME already supports TCP/IP for UNIX interworking, in addition to the major OSI interworking standards.

Applications and Relational Databases

Series 39 was designed to support traditional hierarchical databases, such as IDMSX. For many customers, with large databases and predictable data enquiry demands, hierarchical databases will continue to provide the best solution in terms of cost per transaction and performance.

ICL is committed to the long term development and support of IDMSX and TPMS, including introducing open interfaces and interworking facilities through the OpenTP programme. Open versions of IDMSX and TPMS are both currently under development, enabling the integration of IDMSX with new business systems using relational databases.

Organisations wanting to carry out 'decision support' enquiries on their data are increasingly looking to exploit the greater flexibility provided by relational database technology. For this reason, ICL has provided support for a range of relational databases - currently Oracle, CA-Ingres, Informix and Adabas - on Series 39.

Existing Series 39 customers are encouraged to develop new relational applications on OpenVME. General purpose servers, such as Series 39, are, however, designed to optimise the performance of hierarchical databases. There will therefore come a point where price/performance considerations will dictate moving the relational database element to a specialist relational database server - like ICL's MPP-based *GOLDRUSH Mega***SERVER**.

The point at which the move to a specialist server becomes more cost-effective will vary significantly, depending on the database product, the nature of the specific application and other workloads running on Series 39.

Series 39 - The Next Generation

The next generation Series 39 processor - codenamed SY - will deliver a range of models providing price/performance benefits across the Series 39 range, from DX Systems to the largest SX Systems. The SY processor, based on CMOS technology, will represent another important milestone in ICL's on-going commitment to reducing the total cost of ownership for Series 39 customers.

SY will run the OpenVME (Version 2) operating system, fully compatible with OpenVME Version 1 released in 1994. SY will also support the high performance Series 39 **SMART**fibre I/O architecture, including the **SMART**array disk systems introduced in 1994.

The SY processor will provide further price/performance improvements over the current Series 39 range, enabling larger relational databases to be supported. It will deliver OpenVME functionality with a hardware price/performance that competes directly with UNIX systems.

New Series 39 peripheral developments currently include the development of a new fixed disk product for DX Systems customers and a new tape library (**SMART**tape) providing support for connection to **SMART**fibre. These products give improved price/performance and reliability at lower cost of ownership.

7.2 UNIX Data Centres

Overview

ICL's product strategy for the growing UNIX data centre market is centred around the Nile Series, based on SMP technology, and *GOLDRUSH Mega***SERVER**, based on MPP technology.

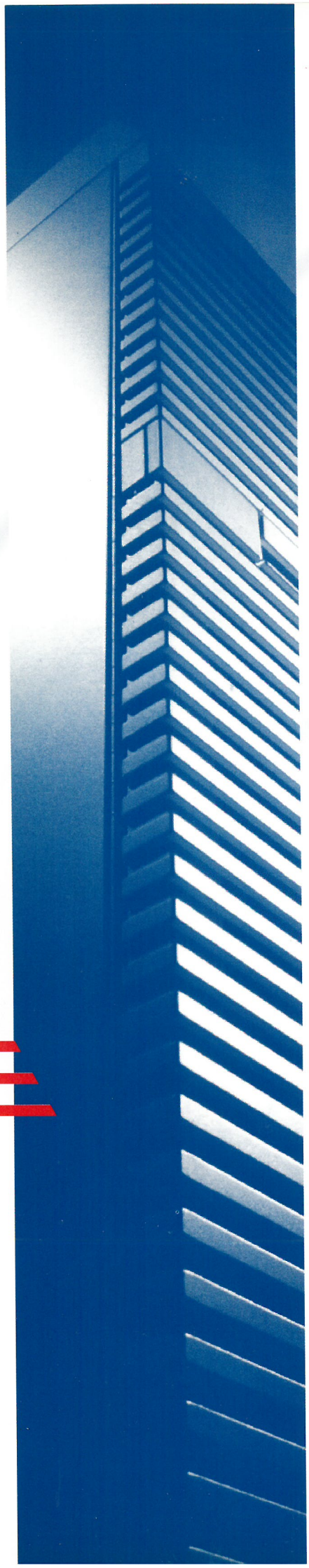
Nile Series

Nile Series provides general purpose data centre functionality, offering a wide choice of business applications running on all the major relational database platforms. Nile Series is differentiated from other SMP systems by its combination of high performance and advanced data centre attributes, including Reliability, Availability and Serviceability ('RAS') features.

Nile Series is a UNIX SVR4-based system running DataCentre OSx (DC/OSx). Nile exploits symmetric multiprocessor (SMP) techniques to provide scalable performance for business applications and large relational databases.

Recent enhancements to the Nile Series have included new 4 Gigabyte disks, faster processing elements and an increased range of system administration tools and business applications.

ICL will market the latest Nile processor, storage and software developments to maintain competitive price/performance figures coupled with the latest business applications and relational databases required by the UNIX data centre marketplace.



*GOLDRUSH Mega***SERVER**

Requirements to develop systems capable of producing more accurate, detailed customer information have fuelled the rise in the use of relational database technology at the heart of new business systems.

*GOLDRUSH Mega***SERVER** is a specialist relational database server. As an open server, *GOLDRUSH* supports the latest database products from Oracle, CA-Ingres and Informix. Other Software Partners on *GOLDRUSH* include Information Builders, providing open SQL-based connectivity between business applications and *GOLDRUSH*-based data.

GOLDRUSH exploits massively parallel techniques to provide scalable performance for the largest relational databases. Currently marketed models provide up to 59 *GOLDRUSH* Processing Elements (PE), each PE housing two 90 MHz microprocessors. The disk capacity on *GOLDRUSH* currently spans the range from 216 Gigabytes to 2912 Gigabytes.

Recent enhancements to *GOLDRUSH* have included new 4 Gigabyte disk arrays and the new Prospector models, providing a choice of entry level *GOLDRUSH* systems. *GOLDRUSH* developments will continue to focus on exploiting new processor and disk technologies, to improve system price/performance, and providing support for the widest choice of relational database products.

GOLDRUSH is designed to support :

- Decision Support Systems (DSS)
- high performance Transaction Processing (TP)
- a combination of TP and DSS workloads.

The integration of new systems based on relational databases with existing data stores is enabling organisations to make the maximum use of their data. The concept of data warehousing has emerged to provide this integration. An early example of this trend is provided in the retail sector, with the development of "precision retailing" applications. These provide detailed information on buying and selling patterns, enabling new degrees of control over product placement, inventory management and targeted sales campaigns.

By providing support for open (SQL) standards, *GOLDRUSH* is particularly suited to the role of a 'data warehouse', providing a central repository of data which can be accessed from a range of applications across a range of disparate hardware and software platforms.

Media Servers

The basic MPP-technology developed for *GOLDRUSH* has potential applications beyond the data centre. These include the new generation of interactive media and information servers, providing a range of services on demand. A server based on *GOLDRUSH* technology is currently playing a central role in the Cambridge Interactive TV Trial, the UK's most advanced trial of interactive media services.

UNIX Data Centre Choices

Organisations operating a UNIX-based data centre strategy will need to consider the optimum point to introduce MPP-based servers to hold their corporate databases. This section clarifies the current positioning between ICL's top end SMP and MPP offerings - Nile Series and *GOLDRUSH*.

The following guidelines reflect two scenarios - single application working and a decision support system. If both of these are required concurrently, the applications will typically reside on the Nile Series with the databases on *GOLDRUSH*.

Single Application Working

Nile Series will typically handle up to 500 concurrently active users on a single application. Beyond 500 users, *GOLDRUSH* will generally be introduced to hold the data, with application processing remaining on the Nile. For multiple applications, the management overheads implicit with SMP architectures would demand a lower decision point in terms of total users. For example the performance equivalent of 500 users on a single application may be 450 users spread over two applications, or 420 spread over three.

No. of Concurrent Users	Application	Database
< 500	Nile Series	Nile Series
> 500	Nile Series	*GOLDRUSH*

Decision Support Systems

For Decision Support Systems, the size of the database is a more relevant measure than the number of users (by definition the number of users will be unpredictable, but the queries themselves will be more complex).

For Decision Support workloads, Nile Series will generally handle databases up to 150 Gigabytes. Since these databases often grow much faster than anticipated, customers should consider building such databases on *GOLDRUSH* unless it is known that the database is unlikely to exceed 150 Gigabytes. This will allow the maximum flexibility to grow through the inherent linear scalability of MPP.

Database Size	Application	Database
< 150 Gigabytes	Typically PC	Nile Series
> 150 Gigabytes	Typically PC	*GOLDRUSH*

7.3 Open Middleware

The need to integrate disparate computer systems has led to the development of a new generation of middleware products. These provide facilities to communicate between different systems, enabling the free exchange of information within and between local, national, international and global networks. Middleware products build above the operating system level, providing "platform independence" and so simplifying the development of distributed applications.

ICL is exploiting its skills in advanced software engineering to develop a range of new world class open middleware products. These products are portable across a wide range of hardware platforms and operating systems. This is a significant investment area for ICL, with product strategies based both on direct sales activities and on worldwide partnership and OEM agreements.

The major ICL product areas at present are DAIS, the Distributed Application Integration System, and *i500*, ICL's X.500-based Enterprise Directory Server.

DAIS provides an Object Request Broker based on CORBA standards. DAIS enables the development of distributed applications, integrating existing systems and databases into new solutions based on object oriented technology.

i500 enables the development of new enterprise wide directory systems. These directories may hold a wide variety of information, for example details of names and addresses, photograph libraries, skills databases or complex parts lists. These directories can be accessed by a wide variety of end systems spread across many different geographic locations.

These products have established a leading position in their respective markets. Forthcoming products include distributed security, transactions, systems management directory and repository services and application development tools. Continued development investment, adherence to the latest standards and new partnership agreements will retain this lead.

7.4 Professional Services

ICL's ASPYRE range of professional services is being expanded to provide comprehensive consultancy advice for ICL customers. ASPYRE services cover consultancy, planning, development, demonstration and exploitation of IT systems. These services, which were originally developed for Series 39 customers, are being expanded to cover a wide range of data centre hardware platforms and operating systems.

These services have already led to significant cost savings for many ICL customers, both through the more efficient exploitation of their existing systems and the introduction of new, more cost-effective, hardware and software solutions.

ASPYRE services are delivered by consultants from ICL *High Performance Systems* based in West Gorton, Manchester. These staff are experienced in the development and implementation of large systems solutions.

8. PRODUCT ROADMAP

This section provides a summary of product deliverables from ICL *High Performance Systems* between September 1995 and September 1996. The dates shown reflect the current forecast availability.

1995	PRODUCT
September	Series 39 Disk Systems. These systems will provide improved price/performance disk systems for Series 39 DX Systems customers.
September	DAIS Release 2.2. This release increases the range of platforms supported by DAIS, including Windows NT and Windows 95, Novell UnixWare and VMS on Alpha. New functionality will include support for C++.
September	OpenTP Release 3. This will be a development release, providing open application development interfaces for IDMSX/TPMS customers.
November	Support for Oracle 7.2 on *GOLDRUSH*.
December	*i500* enhancements to support Nile Series UNIX data centre servers.
December	IBM channel connection to Nile Series using ESCON. This will allow high speed connection to IBM mainframes.
December	Series 39 **SMART**tape. This product, based on the Series 39 **SMART**fibre architecture, provides an upgrade route for current Series 39 tape systems.
December	*GOLDRUSH* Release 1.2. This will provide an integrated archiver facility on *GOLDRUSH*, in addition to faster processors, improved resilience and performance facilities.
1996	
March	*i500* enhancements to include support for Microsoft Windows NT.
April	MicroFocus Workbench. This provides support for COBOL 85 on OpenVME to enable the development of COBOL-based client/server applications on OpenVME.
June	OpenVME Version 2. This version, available on SX and DX Systems, will also provide the software platform for the next generation processors.
June	DC/OSx SPEC1170 compliance on Nile Series. This will facilitate access to third party applications.
June	Nile Series Reliant Cluster enhancement, allowing clustering of more than four Nile Series nodes.

June	Informix on *GOLDRUSH*. This will provide support for the new Informix On-Line XPS product set.
June	DAIS Release 3.0. This release introduces support for several new platforms, including IBM's AIX. New functionality will include CORBA interoperability, enhanced security features and support for CORBA's Object Transaction Services (OTS).
June	OpenIngres on OpenVME. This will provide support for OpenIngres Release 1.1.

Note: *GOLDRUSH* Systems 480 and 640 will be available during 1996 for customers requiring this level of *GOLDRUSH* performance.

ICL reserve the right to change the availability dates as stated above. Please consult your ICL Sales Team for the latest information.

9. GLOSSARY

CASE	Computer Aided Systems Engineering.
CORBA	CORBA (Common Object Request Broker Architecture) is an open mechanism for programs to communicate with one another regardless of their location or the language in which they have been written.
CMOS	Complementary Metal Oxide Semiconductor.
DAIS	Distributed Application Integration System. DAIS is a set of CORBA based software tools to create and run distributed applications.
DSS	Decision Support System, also sometimes referred to as Management Information System (MIS).
DX Systems	Series 39 DX Systems provide full OpenVME functionality in an office environment cabinet. DX Systems span the power range from 2 to 12 mainframe MIPS.
ECL	Emitter Coupled Logic.
GOLDRUSH	*GOLDRUSH Mega***SERVER** is ICL's high performance, open database server for relational databases. *GOLDRUSH* is based on massively parallel processing (MPP) architecture.
IDMSX	Integrated Database Management System Extended.
i500	*i500* is ICL's enterprise directory server, based on an open implementation of the X.500 directory standard. *i500* enables users to hold, manage and access large amounts of frequently changing information.
MIPS	MIPS ratings indicate Series 39 performance relative to IBM mainframe systems and give approximate relative positioning.

MPP	Massively Parallel Processing (MPP) architecture, also referred to as 'Share Nothing' architecture, enables a workload to be shared across a number of processors, each with its own store, IO capability and instance of the operating system. A key feature of MPP is the linear scalability in achieveable performance over a wide power range.
Nile Series	UNIX data centre servers sold by ICL in selected markets around the world. This follows a joint Marketing agreement between ICL and Pyramid Technology Corporation.
QuickBuild	QuickBuild is a package of tools for designing and developing business applications on Series 39. The QuickBuild package enables transaction processing and batch applications to be generated using IDMSX databases.
OEM	Original Equipment Manufacturer.
OLTP	On-Line Transaction Processing.
OpenVME	OpenVME is an open operating system, providing the baseline for all future developments of Series 39 processors and their successors. OpenVME supports open applications by incorporating both open systems and industry standard interfaces and interworking protocols.
Series 39	Series 39 is ICL's range of mainframe systems, spanning a power range of 2 to 259 mainframe MIPS. Series 39 has won 3 Queen's Awards for Technological Achievement and twice (1993 and 1994) been voted Mainframe of the Year by the readers of Computing magazine.
SMARTarray	**SMART**array is a high performance disk system for Series 39 SX Systems based on connection to **SMART**fibre, ICL's high speed IO architecture.
SMP	Symmetric Multi-Processing (or 'shared store') architecture involves a number of processors operating on a shared system bus and shared store. SMP systems, such as Nile Series, are ideally suited as general purpose UNIX data centre servers.
SQL	Structured Query Language.
SX Systems	Series 39 SX Systems provide OpenVME functionality for running corporate IT workloads. SX Systems span the power range from 8 to 259 mainframe MIPS.
TCP/IP	Transmission Control Protocol/Internet Protocol.
TPMS	Transaction Processing Management System.

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