

Presentation Kit



INFORMIX-OnLine XPS Multimedia Presentation

A complete kit for preparing your XPS animated electronic presentation.

INFORMIX-OnLine Extended Parallel Server Multimedia Presentation

Presentation Materials

This customizable INFORMIX-OnLine Extended Parallel Server (OnLine XPS) multimedia presentation gives a lively electronic introduction of OnLine XPS features and benefits. It also contains optional slides on INFORMIX-NewEra 2.0, INFORMIX-OnLine Dynamic Server, and INFORMIX-OnLine Workgroup Server.

The Presentation

A version of this presentation was given by Phil White July 18, 1995 to launch OnLine XPS. A video of Phil White's presentation was sent to each office worldwide. Please ask your office administrator for the video if you would like to view Phil White giving this presentation.

The provided script is not meant to be verbatim—feel free to use your own words. However, this multimedia presentation contains several animated sequences, and adequate rehearsal is required so that your verbal timing complements activity on the screen. Rehearse the presentation so that you can talk over the action occurring on screen, not waiting for an effect to start or finish. Timing is everything!

Installing the Presentation on a PC

In an envelope in the back of this kit, you will find two PC disks which contain several compressed files. Once these files are expanded and installed, they must all remain in the same subdirectory in order for this program to run. This program needs no other application to run besides Microsoft® Windows™ version 3.11. It has not been tested with Windows95. It will show best

on a 640 x 480 monitor set to 256 colors driven by a fast 486 processor. It will play fastest on a machine which is not running any other applications, note in particular many power-up sequences automatically load some communication software and connect to a LAN or WAN. These applications negatively impact performance of this program.

1. Insert disk one in floppy drive.
2. From Program Manager in Windows, under File choose Run.
3. In Command Line, if A: is your floppy drive, type: A:\setup
4. Follow screen instructions to expand and install application to your hard disk.
5. Set your monitor to 640 x 480, 256 colors.
6. From within Windows, find the subdirectory you chose in step 4 and open the file XPS.exe and follow the instructions below to run the presentation.

Installing the Presentation on a Macintosh

Macintosh files are located on fox/home/corp/mktg/present/21009. Or you can phone or email me and I will send them to you on Macintosh disks: Brian Cutter, bcutter@informix.com, 415.926.6195. Once these files are expanded and installed, they must all remain in the same folder in order for this program to run on a Macintosh. It will show best on a 640x480 (choose 256 colors in the Control Panel called Monitor) screen with at least a fast 68040. It will play fastest on a machine which is not running any other applications, note in particular many power-up sequences automatically load some communication software and connect to a LAN or WAN. These applications negatively impact performance of this program.

1. Insert disk in floppy drive.
2. Open "XPS.sea". This will expand to a file called "XPS Presentation."
3. Open "Monitors" control panel under the Apple menu Control Panels and set colors to 256.
4. Open "XPS" and follow the instructions below to run the presentation.

Controlling the Presentation

The presentation is divided into five main points and several subsections. The presentation includes a way to jump to any slide at any time—for example in response to a question from the audience. In order to spontaneously make those jumps, you will need to become familiar with the main content sections or even memorize the first slide of each major heading.

| <u>Presentation Settings</u> | <u>Navigation Hints</u> |
|---|---|
| Select those sections you would like to include in following presentations. | Here are some ways to move around in this presentation. |
| <input type="radio"/> New Era (1-5) | <input type="button" value="→"/> Forward |
| <input type="radio"/> Extending DSA (6-7) | <input type="button" value="←"/> Back |
| <input type="radio"/> DSA Proof Points (8-12) | <input type="text"/> Use the Spacebar to return to this Presentation Settings menu. |
| <input type="radio"/> DSA Pyramid (13-17) | <input type="text"/> 2 1 You can also enter the number of the slide (e.g., 21) you would like to view, and then press Return to jump to that slide. |
| <input type="radio"/> Workgroup Server (18-22) | <input type="button" value="RETURN"/> |
| <input type="radio"/> HPS (23-26) | |
| <input type="radio"/> Performance/Scalability (27-34) | |
| <input type="radio"/> Management and Availability (35-43) | |
| <input type="radio"/> DSA Roadmap (44-49) | |
| <input type="radio"/> Extending DSA (50-51) | |
| <input type="radio"/> Close (52) | |
| <input type="button" value="View Presentation"/> | <input type="button" value="Quit"/> |

Before presenting this material for the first time, it helps to memorize the numbers (1, 6, 18, 23, 52) and titles (NewEra, Extending DSA, ...) of the first slide of each major heading so that you can quickly move to any area of the presentation should your customer have questions about specific material.

Simple keyboard commands will help you navigate through the presentation or go directly to any portion of the presentation:

Function

Keyboard

To go to the Presentation Settings Menu
To advance one slide
To go back one slide
To go to a specific slide

Press the Spacebar
Press the → key
Press the ← key
Enter the slide number and
press <Return>

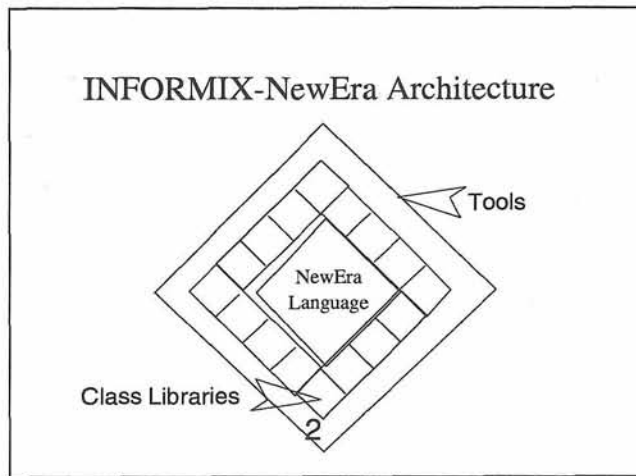


INFORMIX-NewEra

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INFORMIX-NewEra

The INFORMIX NewEra product has been extremely successful. Major corporations around the world have adopted it, and many applications are now deployed. In addition, many partners are moving their applications from INFORMIX-4GL to this powerful new tool.



INFORMIX-NewEra Architecture

What makes INFORMIX-NewEra so powerful is its architecture. NewEra is a client/server development environment designed from the ground up for creating business-critical, highly scalable client/server applications.

- NewEra Language—the heart of NewEra is its powerful, flexible database application language
- Class Libraries—building blocks of code that allow you to easily add new functionality and features to your applications
- Visual Programming Tools—NewEra provides a complete suite of visual programming tools for developing graphical client/server applications
- All within a client/server-ready package that supports open connectivity to non-INFORMIX relational databases.

In fact, NewEra has become widely adopted by our partners who support NewEra architecture with a wide range of third-party class libraries.

NewEra Partners

| | |
|--------------------------|-----------------------------------|
| American Netronic | PERT, Flow, Org Charts |
| AT&T GIS | TopEnd TP Monitor |
| Autodesk | Business Graphics |
| Cadre | CASE Tools |
| Excalibur | Imaging |
| Frontec AMT | EDI |
| ILOG | Rules-Based Programming |
| Intelligent Objects Corp | C++ Database Access |
| Intersolv | Software Configuration Management |
| Lenel Systems | Multimedia |
| Mercury Interactive | Automated Testing |
| MITI | Report Writer |
| Network Images | Fax, Imaging, Workflow |
| Novadigm | Software Distribution Management |
| Optical Technology Group | Imaging, OCR, Optical Devices |
| Performix | Load Testing |
| Sof-Tek | Business Graphics |
| SQA | Windows Client/Server Testing |
| Staffware | Workflow |
| TMS | Imaging |
| Transarc | TP Monitor |

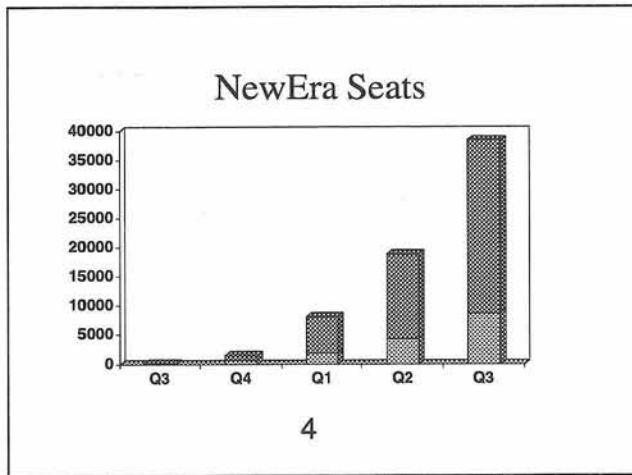
NewEra Partners

These are just some of our partners who are integrating their technology with NewEra.

- These partners have created a robust market for functional class libraries that extend the power and functionality of NewEra. They offer tools to aid development—such as CASE and testing tools. They provide vertical functionality for accounting, manufacturing, inventory, and shipping applications. And they offer tools that deliver horizontal functionality for report writing, imaging, workflow, workgroup computing, interactive video and voice recognition applications to name just a few.
- Only 00-based environments like NewEra enable you to easily add functionality to new and existing applications.

Note to presenter, just for your information, here is the complete list:

| | |
|--------------------------|-----------------------------------|
| American Netronic | PERT, Flow, Org Charts |
| AT&T GIS | TopEnd TP Monitor |
| Autodesk | Business Graphics |
| Cadre | CASE Tools |
| Excalibur | Imaging |
| Frontec AMT | EDI |
| ILOG | Rules-Based Programming |
| Intelligent Objects Corp | C++ Database Access |
| Intersolv | Software Configuration Management |
| Lenel Systems | Multimedia |
| Mercury Interactive | Automated Testing |
| MITI | Report Writer |
| Network Images | Fax, Imaging, Workflow |
| Novadigm | Software Distribution Management |
| Optical Technology Group | Imaging, OCR, Optical Devices |
| Performix | Load Testing |
| Sof-Tek | Business Graphics |
| SQA | Windows Client/Server Testing |
| Staffware | Workflow |
| TMS | Imaging |
| Transarc | TP Monitor |



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NewEra Seats

NewEra has shown explosive growth since its inception. As of Q3 1995, NewEra is now established with more than 38,000 "seats" around the world. NewEra customers are leaders in virtually every industry and include companies such as:

AT&T Network Systems Group
 British Aerospace
 Cray Research
 Eagle Star
 GTE Telephone Operations
 Lockheed Martin Skunk Works
 Motorola Cellular Subscriber Group
 New Zealand Kiwifruit Marketing Board
 Pliktverket (Sweden)
 Siemens Electronics
 State of Utah Department of Admin. Courts

Applied Micro Circuits Corporation
 Citicorp
 Diputacion Coruna
 Electronic Data Systems
 Kuwait Petroleum
 Mobile, Alabama County Commission
 National Quotation Bureau, Inc.

What's New in NewEra

- Ease of use
- Partitioning
- Mobile
- Graphical development, graphical *and* character-based deployment

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What's New in NewEra

So what's new in NewEra? (Please refer to the INFORMIX-NewEra 2.0 Tech Brief or Sales Kit for more details)

- *Ease of use*—pre-built GUI building blocks facilitate development by giving you ready-to-use objects and flexible capabilities.
- *Partitioning*—NewEra allows you to separate distributed applications into discrete manageable client and server components to maximize application performance.
- *Mobile*—NewEra partitioning also facilitates mobile computing, which is a fast-growing market and also the way many of us will be working in the near future. Mobile users don't want to carry around extraordinary amounts of disk space and processing power. So NewEra lets you put the processing-intensive tasks on the server, making it easy for mobile clients to access what they need.
- *Graphical development with graphical and character-based deployment.* While developers need to develop and deploy many business-critical applications in graphical, client/server environments, a significant number of installed customers still need to deploy and support character-based applications. In fact, within Informix's own installed base, we've found that 25-30% of our customers need to support ASCII terminals for certain business needs—e.g., back-office data-entry, batch reporting, etc. That's why NewEra lets you develop graphically, *then* gives you the choice of deployment environments—graphical and/or character-based.

ⓔ Extending the Power of DSA

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Extending the Power of DSA

Our focus is extending the power of our industry-leading parallel processing architecture. This is how we're doing that.

Dynamic Scalable Architecture



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Dynamic Scalable Architecture

As many of you know, in November 1993 we introduced Informix Dynamic Scalable Architecture™ (DSA), which was the result of three years of engineering effort to create a parallel database technology that could meet the scalability and performance demands of open systems. What we did was make parallel processing a core internal capability within our database architecture. This architecture was designed to fully exploit the power of multiprocessor hardware for database processing, especially the complexities associated with batch and decision support processing. The analysts quickly picked up on the value of DSA for customers, and they all agreed that this was something that would alter the playing field.

DSA in Action

- AT&T
- Barclays Bank
- DHL
- Deutsche Telekom
- Federal Express
- GTE
- Holiday Inn
- Home Depot
- Hyatt Hotels & Resorts
- MCI
- Motorola
- Samsung Aerospace
- SAP
- Shinhan Bank
- Time, Inc.
- Transamerica
- United Airlines
- UK Royal Air Force
- VISA
- WAL*MART
- Wells Fargo

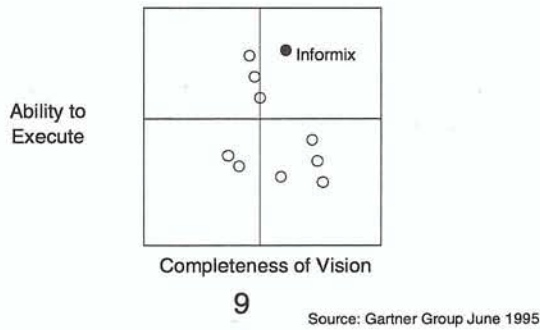
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DSA in Action

That pioneering effort resulted in DSA's adoption by companies around the world who wanted to run very large and complex data processing applications on open systems. Some of the most noteworthy projects on open systems have selected Informix as the database platform because of our parallel processing architecture. Here's some examples:

AT&T
Barclays Bank
Deutsche Telekom
DHL
Federal Express
GTE
Holiday Inn
Home Depot
Hyatt Hotels & Resorts
MCI
Motorola
Samsung Aerospace
SAP
Shinhan Bank
Time, Inc.
Transamerica
UK Royal Air Force
United Airlines
VISA
WAL*MART
Wells Fargo

Parallel DBMS Vendors



Parallel DBMS Vendors

Parallelism is key to the market moving forward, and our success with DSA has been recognized by the industry. The Gartner Group produced this chart, showing our position relative to other database vendors. The left axis is the ability to execute. That's primarily based on the size of the company. The bottom axis is the vision of the company. And the higher and farther up to the right you are, the better off you are. And guess where we are? Right up here in the upper right-hand corner, where all of our competition is falling away.

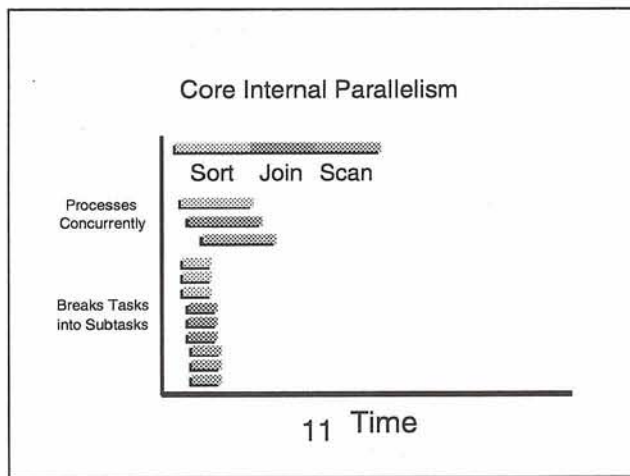
The other thing we've noticed is that we're extremely popular with other technology companies who want to leverage our performance to add value to their solutions—this holds true for hardware companies as well as companies such as SAP and Peoplesoft who are selling complete application packages, as well as all of the major hardware manufacturers.

Informix DSA is the leader in
open parallel processing.

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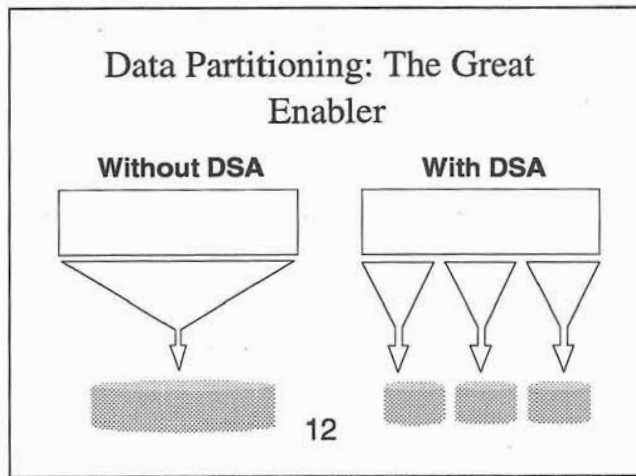
Informix DSA is the leader in open parallel processing.

It's clear if you talk to anyone who's following the development of parallel computing, that Informix is the leader in open parallel processing database technology. Another validation of this fact is that our competitors have all pledged to achieve what we've already delivered. They plan to do that by making parallel processing an inherent part of their core database architecture, just as we have. It's been great news for Informix that our investment to crack the nut of parallel processing has paid off so handsomely.



Core Internal Parallelism

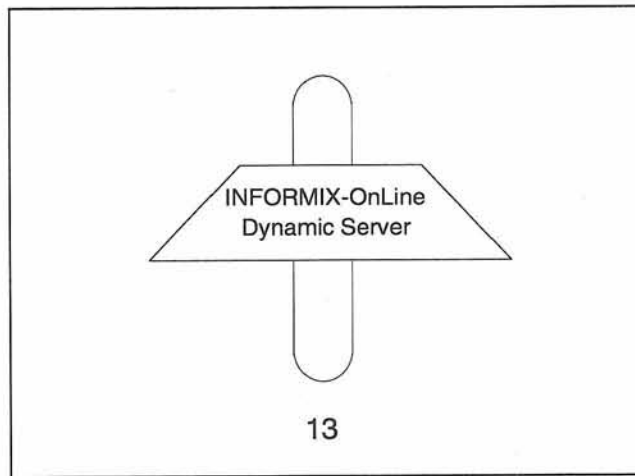
What's so unique about our parallel processing architecture? At its heart, the core internal parallelism of our DSA technology enables us to take any number of database tasks that used to occur sequentially and process them in parallel—which by itself is a remarkable speedup in performance. But the real kick is the second step: DSA then takes those tasks and breaks them into subtasks that can take advantage of the multiple CPUs available in a multiprocessing computer environment.



Data Partitioning: The Great Enabler

Equally important to the development of core internal parallelism was our delivery of a data partitioning capability—the ability to subdivide large tables into partitions that can take advantage of the parallel processing performance of DSA.

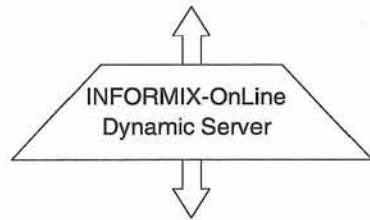
At the same time, we wanted to be able to take large blocks of data, large tables, and partition them across other disk drives—something our competitors think is not important. Those two pieces of technology—core internal parallelism and data partitioning—ensure our high performance and scalability.



INFORMIX-OnLine Dynamic Server

For the past year and half, INFORMIX-OnLine Dynamic Server has been available on the market for both uniprocessor and SMP environments. In fact, OnLine Dynamic Server 7.1 is available on at least 15 different platforms.

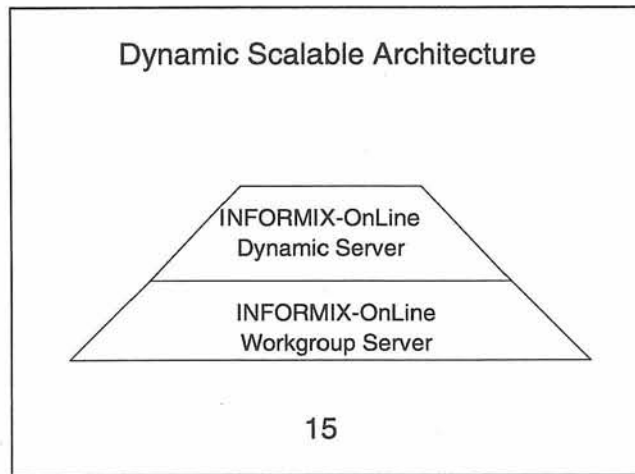
Extending DSA



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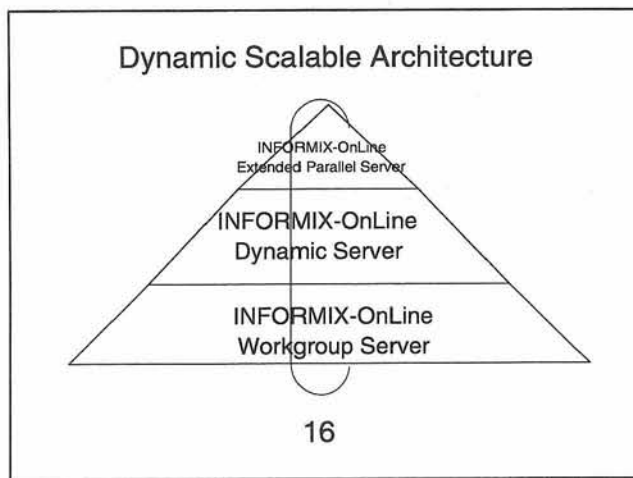
INFORMIX-OnLine Dynamic Server

Our focus this year is to extend the power of DSA to meet complete needs of the enterprise by making its core benefits available from the workgroup on up to the most demanding data warehousing and OLTP environments.



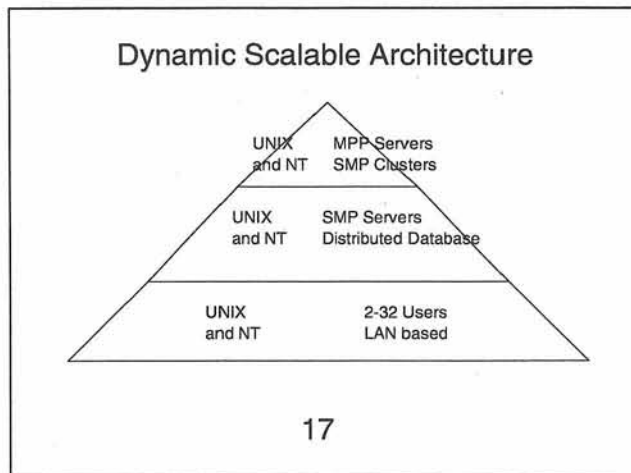
Dynamic Scalable Architecture

Today we are presenting a complete picture of our DSA-based server product line that includes INFORMIX-OnLine Workgroup Server at the workgroup end; INFORMIX-OnLine Dynamic Server in the uniprocessor and SMP range; and...



Dynamic Scalable Architecture

... INFORMIX-OnLine Extended Parallel Server at the emerging MPP end. Let's clarify where these products fit within your business.



Dynamic Scalable Architecture

OnLine Workgroup Server is targeted for computers supporting 2-32 users in a LAN-based environment, either Windows NT or UNIX.

INFORMIX-OnLine Dynamic Server is targeted at uniprocessor and SMP machines and is ideal for distributed environments based on either Windows NT or UNIX.

INFORMIX-OnLine Extended Parallel Server is targeted at the high end for MPP servers and SMP clusters.

And for anyone who's wondering about our focus on UNIX and Windows NT to the exclusion of other environments, we see these as the primary environments customers are using for database application development and deployment.



INFORMIX-OnLine
Workgroup Server

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INFORMIX-OnLine Workgroup Server

Before talking about our workgroup strategy, which we introduced on May 1, 1995, let's talk a minute about the workgroup market, which drove that strategy.

Evolving Workgroup Market

Traditional

- alpha-numeric data
- standalone
- small DSS applications
- single CPU
- ease-of-use important

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Evolving Workgroup Market

Development of our workgroup product has been driven by the evolution we've seen in the workgroup market. Traditionally, the workgroup market was host-based applications running text and numerical information in small, mostly stand-alone work groups. The workgroup world was essentially character-based and focused on decision support. Workgroups ran on single processor platforms. The primary requirements were ease of use and ease of deployment.

Evolving Workgroup Market

Traditional

- alpha-numeric data
- standalone
- small DSS applications
- single CPU
- ease-of-use important

New Directions

- multimedia data
- enterprise
- business-critical apps
- Intel-based SMPs
- ease-of-use important
- scalability important

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Evolving Workgroup Market

Today, that is evolving. We see larger workgroups working on new types of applications. For example, business-critical applications are being distributed down to the workgroup level. Multimedia applications are increasingly important. As a result, performance, scalability and the ability to handle different data types are critical criteria. Ease of use continues to be important—particularly for users who are expected to manage workgroup applications within their workgroups. They need graphical administration tools.

Workers now require access to information sources outside of the immediate workgroup, so connectivity and access to enterprise-wide services are important. And when it comes to platforms, the trend is moving away from uniprocessors to SMP, particularly two-way and four-way systems. In addition, while UNIX remains a strong operating environment, Windows NT has made its way into the workgroup environment, and we expect to see a dramatic upsurge in Windows NT—primarily on Pentium-type platforms—at the workgroup level where it is best suited.

INFORMIX-OnLine Workgroup Server

- Easy to use, install, and administer
- Based on DSA
- Same power and sophistication of enterprise databases
- High availability (24x7)
- Scalable to accommodate growth
- Multimedia datatypes

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INFORMIX-OnLine Workgroup Server

Once the decision was made to develop INFORMIX-OnLine Workgroup Server, the number one criterion was to make it easy to use, easy to install and easy to administer. OnLine Workgroup Server is designed for users with little or no database administration experience. A set of GUI tools hides the complexity of database operations, greatly simplifying tasks such as database loading and configuration, as well as more complicated tasks such as backup and recover.

But providing ease of use doesn't mean we're compromising the power of DSA parallel processing database architecture. In fact, OnLine Workgroup Server includes advanced functionality such as stored procedures, triggers and true multithreading. OnLine Workgroup Server also includes high availability features allowing users to reconfigure, backup and restore on line. And because it's built on DSA, applications built on OnLine Workgroup Server can easily scale up to OnLine Dynamic Server or OnLine XPS.

And finally, to support the next generation of workgroup applications, OnLine Workgroup Server supports multimedia data types, enabling the storage and retrieval of data such as images, audio and video.

Two Powerful Workgroup Solutions

Traditional

INFORMIX-SE

New Directions

INFORMIX-OnLine
Workgroup Server

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Two Powerful Workgroup Solutions

So now Informix has two strong workgroup solutions. While INFORMIX-OnLine Workgroup Server addresses the new directions of the workgroup market, INFORMIX-SE continues to be an excellent solution for traditional workgroup environments.

INFORMIX-SE is also available on Windows as a client database within a workgroup environment.



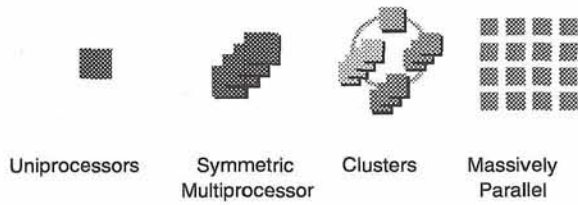
INFORMIX-OnLine
Extended Parallel Server
(XPS)

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INFORMIX-OnLine Extended Parallel Server (XPS)

And now I'd like to show you how we've extended the power of DSA to the high end with our INFORMIX-OnLine Extended Parallel Server.

DSA: Designed for Multiple Hardware Architectures



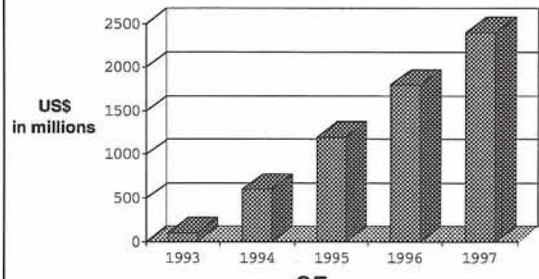
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DSA: Designed for Multiple Hardware Architectures

When we introduced DSA, we announced that it had been designed to run across all hardware architectures—from uniprocessor through massively parallel. Our conscious decision was to concentrate *first on SMP and uniprocessor computers*, because that's what our customers needed and were demanding. Yet when we announced DSA at the end of 1993, we also promised to deliver a version of DSA for loosely coupled and massively parallel computers in 1995.

Not only have we done that by delivering OnLine Extended Parallel Server, but as you will hear, the product is meeting the expectations we set for it.

Worldwide Parallel Processing: Market Size

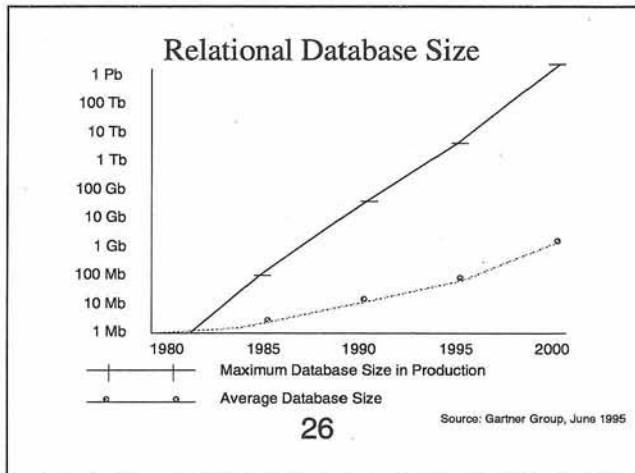


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Source: Gartner Group, 1994

Worldwide Parallel Processing Market Size

Today we see a high-end market that is ripe for significant growth, as reflected in these Gartner Group projection for the overall size of the MPP market.



Relational Database Size

What's driving this growth is the vast amount of data that customers plan to run on their enterprise systems. Here are Gartner's latest projections on the size of databases as we approach the year 2000.

(Explain chart—highlight the fact that database sizes are scaling upward. Point out the appearance of the petabyte at the high end.)

Now why do we need massively parallel to address these trends?

- First, as powerful as SMP computers have become, there has been a clear realization across the industry—by customers, by vendors, by analysts—that open systems require yet another hardware architecture in order to handle today's biggest data processing applications—such as large-scale OLTP and data warehousing—let alone the even bigger applications being planned by customers for the future.
- Second, with the development of UNIX-based MPP computers, a complete range of hardware architectures for open systems can address all of an enterprise's present and future data processing needs.

INFORMIX-OnLine XPS

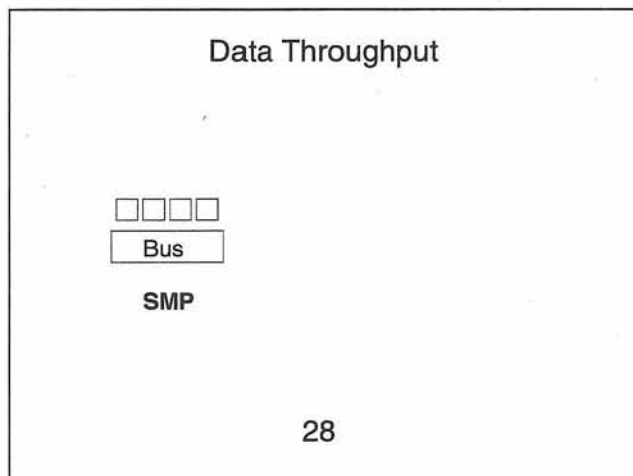
- Performance/Scalability
- * Manageability & Availability

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INFORMIX-OnLine Extended Parallel Server

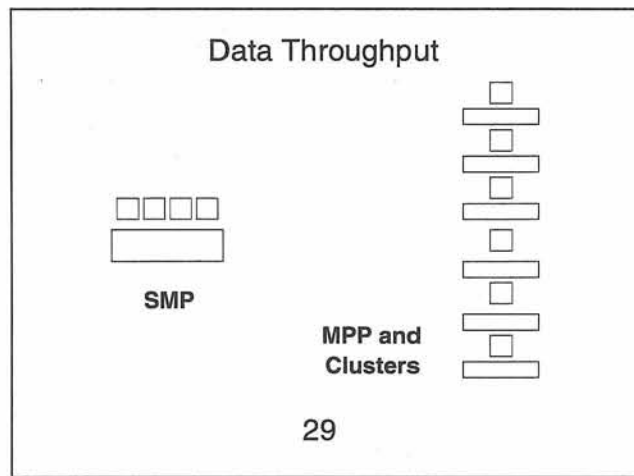
The challenge for our OnLine XPS project was to take DSA, which has been very successfully implemented on SMP environments, and map all its capabilities for performance, manageability, and availability, to the massively parallel clusters architecture.

Let's first talk about performance and scalability.



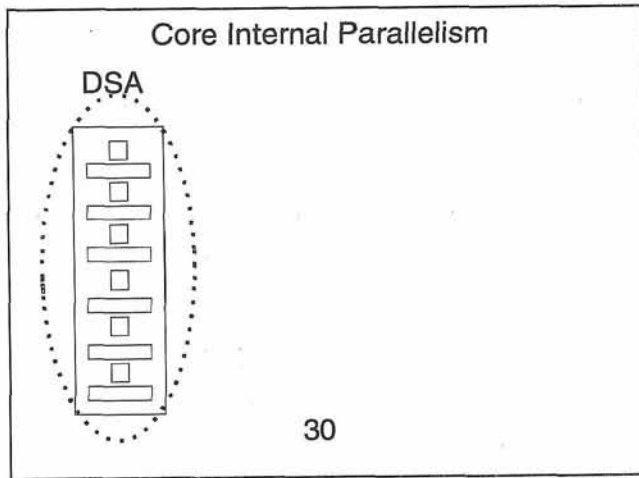
Data Throughput

With an SMP shared-everything environment you have the power of multiple processors sharing a common bus environment for data throughput.



Data Throughput

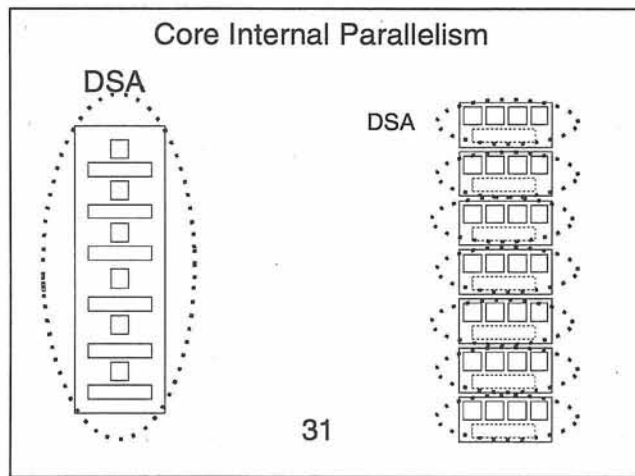
In a massively parallel shared-nothing environment, each node, with either a single or multiple processors, has its own bus, thereby providing multiple channels for data throughput.



Core Internal Parallelism

The two key elements of DSA—core internal parallelism and data partitioning—are both fully utilized in our OnLine XPS product, greatly enhancing performance and scalability.

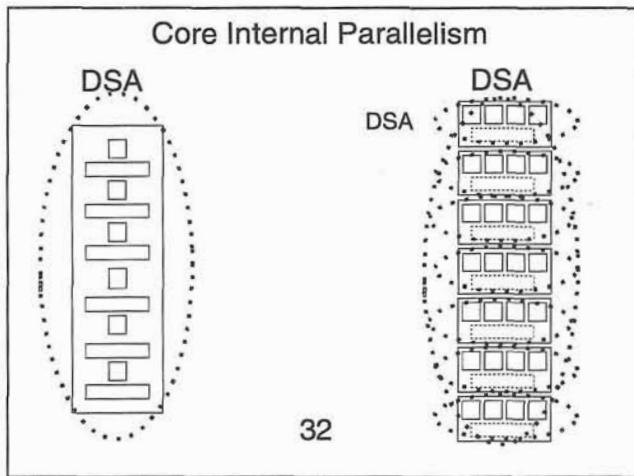
With OnLine XPS, the core internal parallelism is used to manage shared-nothing nodes as a single, powerful multiprocessing system.



Core Internal Parallelism

So just like in an SMP system, we can take a single database task and break that into subtasks across as many processors as are available.

Each node in this architecture can be, in effect, a multiprocessor SMP by itself. DSA's core internal parallelism can be used for maximum parallel processing on each node...



Core Internal Parallelism

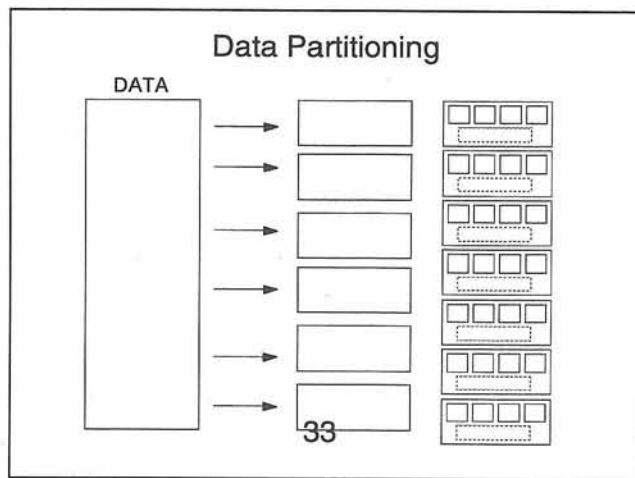
...as well as managing processing across the nodes.

Competitive

Our competitors have focused on:

- providing parallel processing within a node but not across nodes OR
- providing parallel processing across nodes but not within each node.

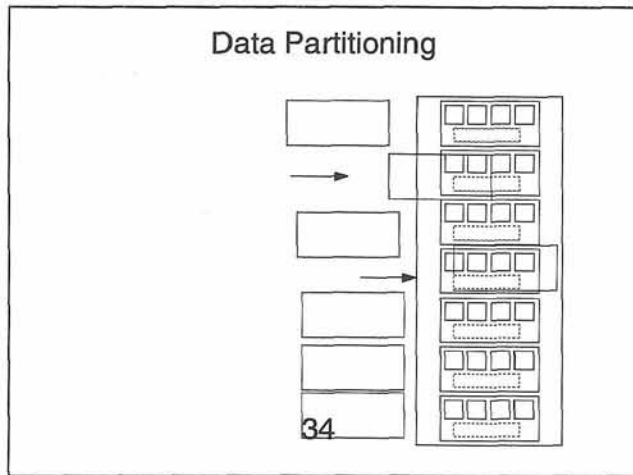
Informix is the only vendor to provide both levels of parallel processing, which are essential for scalable performance on the range of multiprocessor systems available today and in the future.



Data Partitioning

In addition to the advantages of core internal parallelism, data partitioning also plays a key role in taking advantage of MPP for performance. Here we have a block of data.

- With our OnLine XPS, that data is first partitioned...
- Once it's partitioned, OnLine XPS lets you pre-assign data to nodes within the MPP environment for quick processing.



Data Partitioning

DSA, knowing how that data's been partitioned and preassigned, can take the data direct to the appropriate node, and speed it through the appropriate bus or channel, providing yet another boost to performance and scalability. In fact, partitioning is the only way to optimize throughput and performance when you have N number of processors on N number of nodes.

INFORMIX-OnLine XPS

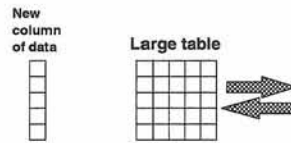
- * Performance/Scalability
- Manageability & Availability

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OnLine XPS

But performance is only part of the picture when talking about very large databases, and with OnLine XPS we've put a lot of work into features that make the management of very large database both easier and more cost effective. Here are a few examples of what you can expect in manageability and availability from OnLine XPS.

Database Reorganization



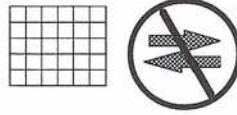
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Database Reorganization without OnLine XPS

DSA has been acclaimed by the analysts for its extensive on-line management capabilities. With OnLine XPS, we're strengthening that lead. An example is our approach to database reorganization.

Say you have a large table—hundreds of gigabytes or a terabyte of data—which is being accessed by users, and you want to add a new column to that table.

Database Reorganization



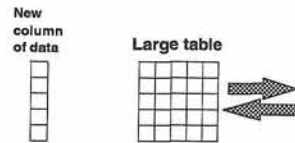
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Database Reorganization without OnLine XPS

The existing approach requires that you take the target table off line, keeping your users from the gigabyte or terabyte of data they need.

Second, you have to have enough available duplicate disk space to copy the targeted table in its entirety as you add the new column. So as your database grows, you need greater and greater amounts of duplicate disk space every time you need to do an reorganization like this.

Database Reorganization with OnLine XPS

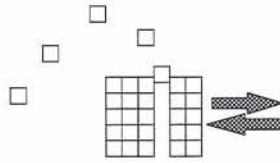


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Database Reorganization with OnLine XPS

With OnLine XPS, Informix is introducing new technology for performing database reorganization in place and on-line. This new technology will be included in the entire OnLine product family.

Database Reorganization with OnLine XPS



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Database Reorganization with OnLine XPS

With OnLine XPS, you won't have to take the table off line to add a column, nor will you need to have a duplicate disk space available. You save significant money on excess disk storage and the system is continuously available.

Dynamic Failover with SMP

□□□□ SMP
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Dynamic Failover with SMP

Dynamic Failover is another example of how we're focused on availability.

Dynamic Failover with SMP

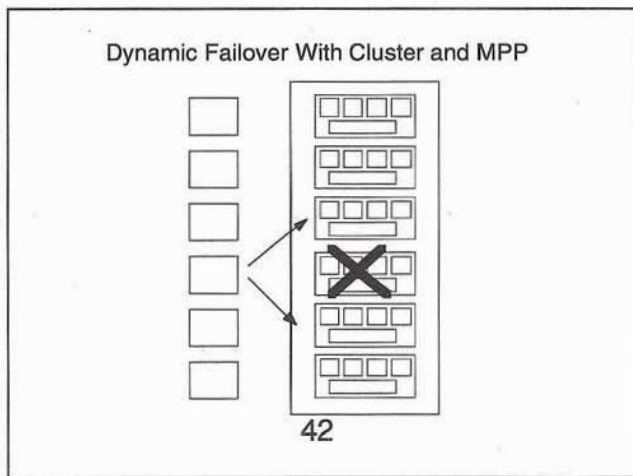


SMP

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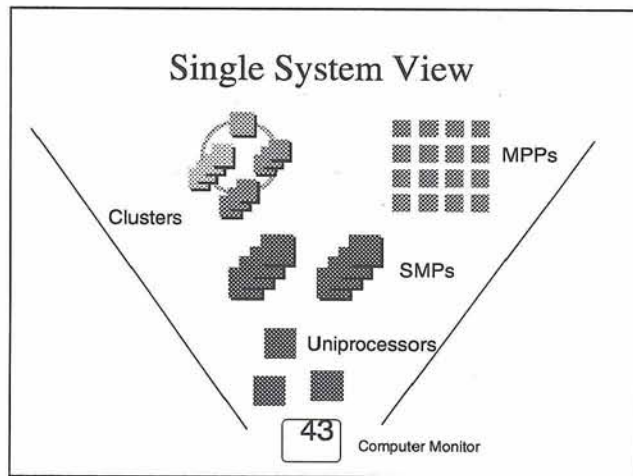
Dynamic Failover with SMP

With the shared everything SMP architecture, system failover requires a duplicate backup system that essentially remains idle unless your primary system goes down, in which case you switch over to your backup system. That was considered to be high availability.



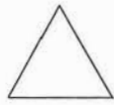
Dynamic Failover with Cluster and MPP

With the shared-nothing MPP and cluster environment, each node is independent. If there is a problem with one node, OnLine XPS automatically shifts the data assigned to that node to other available nodes on the system. You don't need a duplicate system for dynamic failover. Not only that, all nodes can be fully utilized when the system is fully available.



Dynamic Failover with Cluster and MPP

To enhance manageability, Informix is committed to supporting system management solutions designed for increasingly complex heterogeneous distributed computing environments. OnLine XPS includes the Tivoli framework, which provides a single system view. We also support other system management solutions, both internally and via our third-party partners.

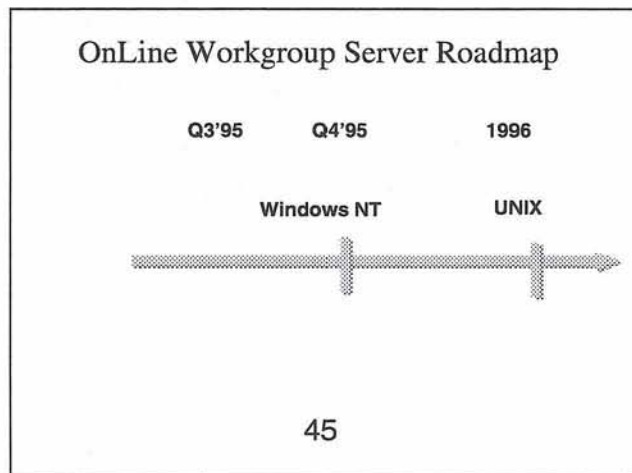


DSA Roadmap

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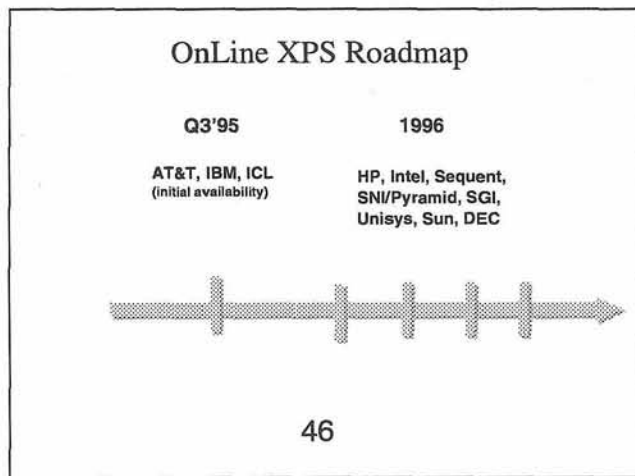
DSA Roadmap

As you can tell, we've been busy developing a whole lot of technology, and I just want to wrap things up by laying out a roadmap of our server products.



OnLine Workgroup Server Roadmap

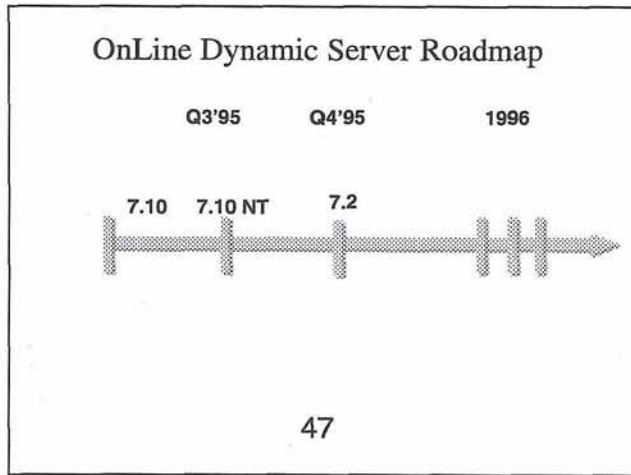
In late 1995, we began shipping the Windows NT-based product, which addresses the market where ease of use and easy installation are the key requirements. Shortly after that, in '96, we'll ship the UNIX equivalent of the same product. You can develop on either side—develop on UNIX and migrate to Windows NT; or develop on Windows NT and migrate to UNIX. That's our commitment.



OnLine XPS Roadmap

OnLine XPS is initially available on our three development partners' platforms—ICL on the Gold Rush, AT&T on the Intel-based product; and IBM on the SP product, Power PC-based.

In 1996 we'll continue to migrate it to other platforms. Some of these platforms are new, from our standpoint. One is a generic Intel platform. We've been working with Intel on a joint-development effort. SGI is another new partner that's moving aggressively into the commercial segment for IN, SMPs and clusters. Unisys, with the Opus machine is another MPP based on Intel. Our other partners include HP, Sequent, SNI Pyramid, Sun and DEC. Those will be the first wave of platforms we see being available.



OnLine Dynamic Server Roadmap

Let's talk about what's coming. We'll enhance our current product for running Windows NT on SMP machines. In addition, we'll have a workgroup product running on Windows NT in late 1995 or early 1996; and we'll announce some more major releases as we move into 1996.

OnLine Dynamic Server

- 7.2
 - 64-bit very large memory
 - Inplace, online reorganization
 - Global language support
 - SNMP and storage manager support
 - Parallel load utility
- 1996
 - Continuous replication
 - Free-text search extension
 - Extensible framework
 - Tivoli systems management
 - Parallel updates, deletes

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OnLine Dynamic Server

Let me tell you what will be contained in some of these releases.

- 64-bit architectures—to support very large databases and memory requirements
- On-line reorganization—letting you reorganize a database and stay online
- Global language support—supports multibyte customers, particularly useful for our friends in the Asia Pacific region
- SNMP and storage manager support
- Parallel load utility

In 1996 we'll be adding continuous replication and piloting that with a major user. We'll add an extensible framework in Tivoli to give a single system's view of an entire complex system. We'll update the parallel processing. We're really taking everything we learned on high-performance MPP and clusters and putting it into the SMP mode for very powerful SMP machines.

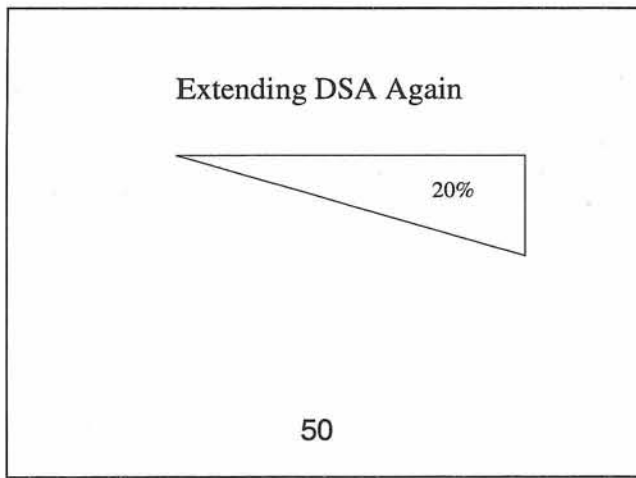
DSA and Emerging Technologies

- 64-bit architectures
- Mobile computing
- World Wide Web

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DSA and Emerging Technologies

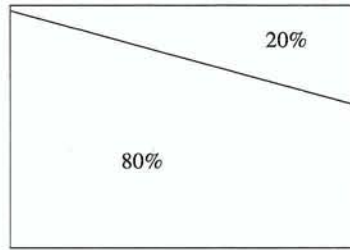
- 64-bit architecture—with the 64-bit version of OnLine Dynamic Server, we'll take full advantage of very large memory addressability to provide significant performance increases over 32-bit environments. This allows businesses to run very large database applications in a cost-effective symmetrical multiprocessing environment. Informix also adds capabilities that provide I/O efficiency and query optimization techniques.
- Mobile computing—we'll enable a wealth of new applications for mobile computing, using the same tool used to build major client/server applications. We see the future of mobile computing as being able to move data from a mobile computer, to a desktop computer to an application server to a database server seamlessly.
- World Wide Web—our architecture is designed to support global communications infrastructures and opportunities like electronic commerce, the Internet, mobile computing, multimedia etc. So we're partnering with a number of innovative technology vendors—such as Netscape Communications—who are on the leading edge of providing solutions for electronic commerce.



Extending DSA Again

So how will DSA expand into the future? Some of you may be familiar with the statistic that only 20% of business data today resides in a database of some form or another. That means that all the other things that a company needs to run its day to day operations—approximately 80% of its data—exists in other forms.

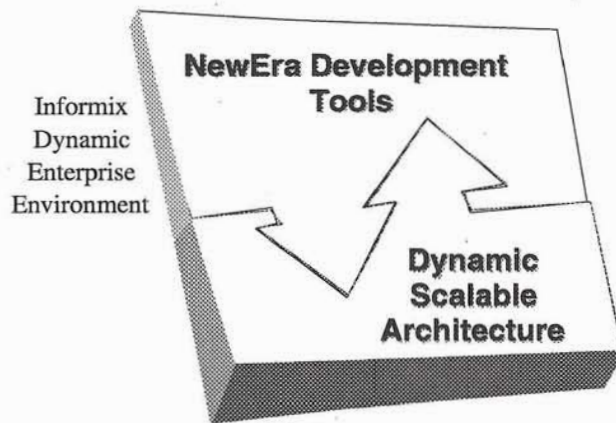
Extending DSA Again



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Extending DSA Again

This data resides in unstructured data types such as faxes, e-mail, voice mail, fingerprints, video, x-rays, and images. We are intent on extending the power of DSA again in all of its versions to address that other 80%. The key technology that we have underway for doing this is a project that we've code-named the extensible framework. We're already working with other technology vendors to implement this technology, and you'll hear some announcements from us in the very near future.



Informix Dynamic Enterprise Environment

(This is the “haymaker” slide where you pull both of our product lines together.)

At Informix, we believe the most effective way to address your current and future needs is through core product technology that encompasses a complete enterprise-wide RDBMS solution. Our goal is for this solution to help customers create next-generation, object-oriented applications accessing powerful parallel databases in an open client/server computing environment.

No one else can offer the productivity of the premier object-oriented development architecture of our NewEra product combined with the leading parallel processing database environment of our DSA products.

Deploy it all in an open, heterogeneous world and you have a powerful combination for a total enterprise solution.

Thank you.

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