



CONNECTIONS

Winter 1996, No. 31



IUA WORKSHOP '96: The Rhythm of the Future

April 28-30, 1996
Hyatt Regency Chicago
Chicago, Illinois

IUA Workshop '96 Program Highlights: Maximize Your Benefits

The Rhythm of the Future is at IUA Workshop '96!



IUA Workshop '96, the nation's premier interactive educational event held exclusively for CA-IDMS, CA-DB and CA-CAS users, guarantees IUA members the solutions, ideas and insights into current and future technologies needed to meet your customers' needs. IUA Workshop '96 is your chance to meet with vendors to discover what's available to meet and enhance your software and hardware needs.

IUA Workshop '96 offers two days of education sessions led by professionals who have successfully implemented the technologies they discuss, letting you learn from IT's most targeted and powerful re-

sources: your peers. You can attend a number of sessions devoted to one topic, or expand the rhythm of your future by attending sessions on a variety of topics. The following is just a sampling of the sessions available at IUA Workshop '96.

NOTE: Sessions are subject to change. Please consult the final agenda for information.

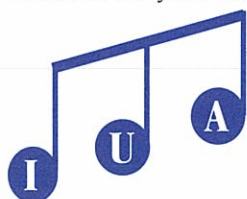
Century Support for CA-CAS and Other CA-IDMS Applications

Speaker: Chris Hoelscher, Liebert Corporation

How many IS departments have dreaded the year 2000 because of its

ramifications to the date fields within existing data structures and applications? Many CA-CAS sites were faced with a dilemma of wanting to migrate to CA-CAS Release 3.0 for century support, but heavily-modified CA-CAS databases and applications made that migration path unfeasible. Liebert Corporation, one such site, has developed and is implementing a comprehensive migration plan to modify CA-CAS Release 1.3 and other CA-IDMS applications for each date field on the database and within applications. This presentation shows what Liebert Corporation did and how they did it.

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The resource you need to work smarter.

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IUA Connections is a quarterly publication of the Information User Association (IUA), designed to promote its members' objectives. IUA Connections is not responsible for the opinions expressed by its writers and editors.

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James Winn

CA, IUA Promote CA-IDMS Growth



James Winn

With the maturation and growth of CA-IDMS Release 12, the need to further enhance Release 10.2 has diminished. Over the past several years the IUA, prompted by suggestions provided by its members and because a majority of CA-IDMS users were still running Release 10.2, encouraged Computer Associates (CA) to extend support for Release 10.2. However, CA has indicated there will be no future maintenance releases or additional development for Release 10.2. Therefore, development support for Release 10.2 ceased with the end of last year.

This past year, CA implemented Campaign '95, which was designed to assist companies migrating to Release 12. As opposed to completely dropping support for Release 10.2, CA is offering a package called Premium Support. Premium Support, available after December 31, 1995, is based on service packs and will provide consulting assistance, fixes for Release 10.2 problems, and access to TCC for Release 10.2.

It is essential that CA-IDMS remain an important player in the DBMS market. To ensure its visibility, CA plans to continue to enhance the product with new technology. As users of CA-IDMS, we actively participate in this process in several ways. Users encourage the strategic direction for CA-IDMS by communicating their needs and directions to CA. In addition, users assist each other by attending CA-IDMS user groups at the local and national levels.

This participation extends beyond working on user group committees. Presentations at IUA workshops and CA-World conferences, participation in the UCL program, as well as the articles we provide in *IUA Connections* and the Expanded Page, also contribute to the product's enhancements. Finally, users also aggressively promote the viability of CA-IDMS by sharing with other users successes in the use of new technologies. ♦

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Business Issues Forum Updates Critical Issues, Outlines Strategic Initiatives

The Business Issues Forum, conducted on July 19, 1995 in New Orleans, was well attended. Carol Abbott, Don LeClair and Mark Combs represented CA at the meeting, which focused on Quality, Documentation and Maintenance & Life-Cycle issues. For detailed information on the meeting, refer to July 19, 1995 minutes and the Fall 1995 issue of *IUA Connections*.

Quality

Michelle Czosek, IUA Membership Services Manager, has obtained the phone numbers for Mark Combs and Jay Martinson, who replaced Kurt Seibert and Ron Noll, respectively, as points of contact for quality issues. Any problems with Quality should be forwarded immediately to the following CA owners:

- CAS/MFG/FIN/HR

Jay Martinson
408/562-6000, Fax: 408/562-8115

- Database
Mark Combs
516/342-2381, Fax: 516/342-6861
- R&D/Overall Responsibility
Russ Artzt
516/342-2762, Fax: 516/342-6958

Quality remains a very important issue and will be addressed again in the April 1996 meeting.

Don LeClair was charged with developing a high-level overview of the CA quality process. LeClair responded with the draft of the *Quality Assurance/Guidelines Extracts* (QA). Below are some highlights of this excellent draft document:

As a general process, the development groups produce deliverables in the development and test phases that QA reviews as follows:

- Design and Development Meetings

QA suggests new features, critiques external designs for compatibility with existing CA products and gathers information to be used in the testing phase.

- Enhancement (DAR) Reports

QA receives the DAR report from development for all the enhancements that have been included in the release.

- Product Documentation

QA utilizes the product documentation for construction of the test plans and ensures that the documentation, product and design are aligned.

- Division of Testing among Development, QA and Betas

QA and development agree on what is to be tested and testing schedules, and what will be tested at Beta locations.

- Development Testing Results

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CASAC/ADAC Humbert Piscitelli

CASAC, ADAC Unite for Specialized Presentation

On November 12, 1995 in Nashville there was a combined meeting of CASAC and ADAC, featuring a presentation from a company that is in production with CA-CAS/UNIX and CA-IDMS/UNIX, and was previously in production on the mainframe with CA-CAS. The presentation guided us through the project life cycle and gave us valuable insight into a client/server implementation. In addition, Jeff Straw, Technology Owner-CAS, provided CA's perspective.

The IUA Workshop '96 planning committee has been busy preparing a successful and informative workshop, finalizing the agenda, and focusing on obtaining CA-CAS presentations. A combined CASAC and ADAC committee meeting will be held on Sunday,

April 28 from 12:00 p.m. - 3:00 p.m. Straw and his staff will participate in a roundtable discussion. The IUA Workshop '96 planning committee also has provided several SIG sessions as part of the Monday and Tuesday agendas.

The BAC96 planning committee has also been active in the CA-World '96 agenda. A. Scott Rosales, John Hunter and I will be soliciting presenters for the conference. Please consider presenting at the conference and the numerous benefits afforded to speakers! The team will begin contacting clients early in 1996. Future issues of *IUA Connections* will provide additional conference information. ♦



IUA Workshop '96 Highlights

Continued from the Cover



An Introduction to TCP/IP

Speaker: Robert Davia, Hewlett-Packard Co.

This talk will NOT get you to the point of designing TCP/IP networks, but it will show you how the basic elements of a TCP/IP network work — addressing network definition, routing and universal services. We will start with a historical perspective: the design principals of IP (Internet Protocol), and where and when the work was done. Then we will look at the structure and definition of an IP network, and close with a look at the services typically used.

Dynamic Routing in a Multiple CV and CPU Environment

Speaker: Janet Schwartz, Alamo Rent-A-Car, Inc.

This presentation describes the techniques employed at Alamo Rent-A-Car to dynamically route CICS, batch and DC programs to the desired CV. The techniques employed eliminate the need for program/jcl changes when data bases are moved from CV to CV or CVs are moved from CPU to CPU.

Enterprise Data Access: The Evolving Data Warehouse

Speaker: Terry Wright, Ross Products Division, Abbott Laboratories

Modern business theory categorizes information as a critical enterprise asset. For years the industry has discussed the data warehouse and enterprise information access, but how does one actually make it happen? This practitioners session presents the tools and approach used to build its company's enterprise information highway. This session also discusses the hardware, software and peopleware necessary for a successful implementation. It's not easy, but it can be done.

Supplier Pull and Inventory Reduction

Speaker: Frank DeWolf, GE Transportation Systems

This session highlights how GE Transportation Systems (Locomotive Division) utilized CA-CAS and Kanban material ordering techniques to reduce inventory, shortages and cycle times, all while improving supplier forecasts.

CA-CAS/AD MRPII Metric

Speaker: Humbert Piscitelli, Loral Defense Systems - Akron
Using CA-CAS/AD 2.2 data structures, SQL Data Tables were developed to support a quest to provide the enterprise with metrics that follow the MRPII industry

model. The following CA tools are being used to accomplish the purpose: CA-IDMS/SQL IDMS Server, CA-CAS Workbench and CA-Visual Express. The presentation also addresses experiences with the development process, participation as a Workbench Beta site and progress to date on phased implementation.

ODBC Access of CA-IDMS Network Databases

Speaker: James Cone, Fel-Pro, Inc.

This presentation details the software and hardware components, system parameters, set-up and administration of access to CA-IDMS network databases through ODBC using CA-IDMS Server 3.0.

From Data Model to Data Warehouse

Speaker: Carol Silberstein-Locker, First InterState Bank

What are a Data Model and Data Warehouse? How do you get both your application design and your data from a data model to database and finally to a warehouse? How do your models help get you there? Attend this session to learn the answers to the above questions.

Migrating CA-CAS Enhancement Applications to CA-IDMS UNIX

Speakers: Bill Watkins and A. Scott Rosales, ASR Computer Services

This session discusses some of the opportunities encountered when migrating an application developed to coexist within CA-CAS 1.3 Mainframe (CA-IDMS 10.2) to CA-CAS 3.0 UNIX (CA-IDMS UNIX). Specifics concerning the changes in CA-CAS 3.0 are addressed in addition to CA-IDMS UNIX. ♦

IUA Vendors Offer Technology Enhancements, Education

During the Vendor Program at IUA Workshop '96, you will have the opportunity to speak with or attend sessions led by some of the leading providers of CA-related software, hardware and services. IUA would like to thank the following vendors and encourages attendees to take advantage of the educational value available at vendor sessions.



The A Consulting Team, Inc. (TACT)

200 Park Avenue South, New York, NY 10003
800/433-8228 (TACT)

TACT Software will sponsor two (2) technical overviews featuring:

DB-EZReorg allows CA-IDMS users to re-organize their Production database while it remains on-line, fully available for Retrieval and Update. **DB-IMAGE** allows you to implement multiple "images" of CA-IDMS databases. These images permit end users, developers and operational support personnel to operate *as if they each have their own private copy of an entire database*, while only one copy actually exists. Dramatically reduce DBA workloads. No changes to Schema, Subschema or DMCL! **NEW duplex databases** and "**hot-backup**" feature. **VEGA-90's** allows you to access DB2, SYBASE, ORACLE7, etc. from ADS/O dialogs, IDMS-DC programs, CICS programs and Batch programs. **Win a Sony portable CD player. Help Us Name TACT Software's Newest Product!** Automatically create an MS-Windows diagram of your CA-IDMS, DB2 or Client/Server database. What's its name?

Allen Systems Group

750 11th Street South, Naples, FL 33940
800/977-2537

Allen Systems Group (ASG) is offering the following educational sessions during IUA Workshop '96:

Session I — Dennis Warren discusses various uses for ASG's Journal Reformatter, TRACER, including Data Warehousing; auditing USERIDs by element names and values for specific updates; and the newest application of TRACER, Asynchronous Data Propagation (Replication) from CA-IDMS to DB2 or other DBMSs on platforms such as SYBASE-UNIX.

Session II — Art Walker discusses how ASG-Virtual/DB can be an integral part of your corporate development strategy: testing, quality assurance, training, and problem resolution. The session also explains how Virtual/DB allows you to execute through production testing, using realistic test data, without affecting production.



ARCH Consulting Associates

1409 East Boulevard, Charlotte, NC 28203
704/335-8159

Founded in 1988, Charlotte, NC-based ARCH Consulting Associates specializes in consulting assistance, on-site education and on-site/remote support services for CA-IDMS database and associated products. ARCH Consulting's presentation outlines the database/application support activities and customized training events available from ARCH, with an emphasis on client success stories.

Hybrid Systems Ltd., Inc. (HSL)

200 University Park Drive, Edwardsville, IL 62025
618/692-2892

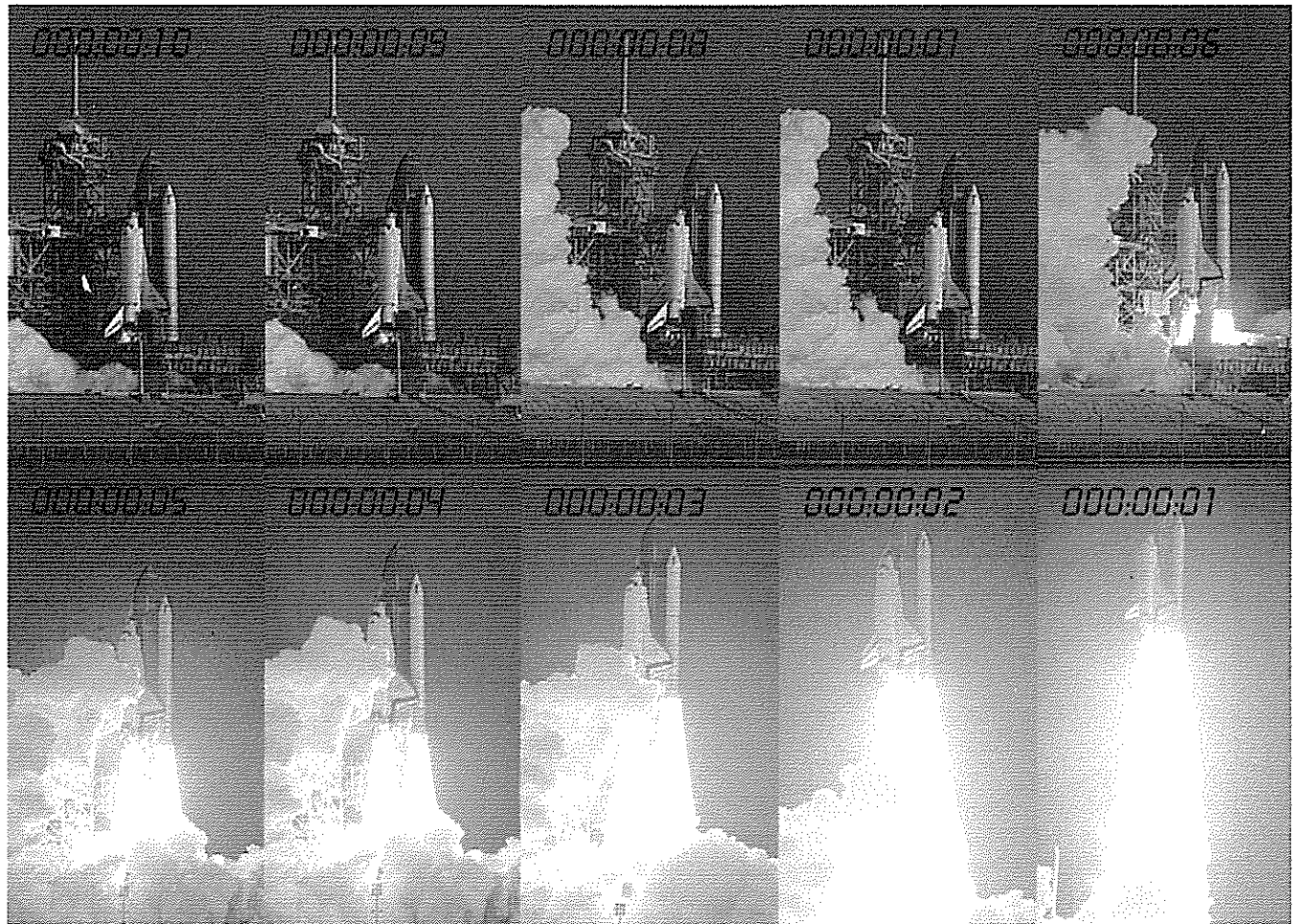
HSL profiles the following products during IUA Workshop '96:

Session I — HSL introduces the Visual Data Dictionary (VDD), a Graphical User Interface for application developers, system programmers, DBAs — anyone who uses the CA-IDD application. Using the power of the PC, programmers download dialogs and programs. Using point and

Continued on page 8

For more information, contact
IUA Headquarters
at 312/321-6827

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Business Issues Forum

Continued from page 3

QA ensures that the product can be successfully installed using the appropriate installation mechanism.

- Product Gen-Level Identification

QA verifies that bugs do not creep back into a product by running automated tests that were created for the GA version. This includes all fixes on the new release tape.

QA testing includes the following high-level activities:

- Activity: Test Product Install
Installed as a new client
Installed as an upgrade
- Activity: Test Product Features
As new client
As an upgrade
- Activity: Report Bugs
All problems reported to the development group
- Activity: International Considerations

Ensure items such as date format, currency fields, international punctuation formats, character sets and help facilities

- Activity: Testing Guidelines

Ensure expected output, inspection of results and work from high impact to low impact test environments

- Activity: QA Testing Reports

Internal reports describing the quality of the product tested, process problems and areas for future improvement

Frank Rios, Bob Haney, Jo Ann Gartland and Terry Wright will develop a survey to obtain user input in the areas of possible quality problems not covered by the process and activities mentioned above. Currently, this item is open and will be aggressively pursued to obtain user input.

Documentation

Carol Abbott was asked to better define the documentation process and information needed by customers related to CA-IDMS.

The following is an overview of Abbott's response:

Action and Request: Basic Documentation for CA-IDMS

Response: Each site receives two copies of hardcopy documentation with each license. Additional copies can be purchased based on pricing in *CA Documentation Pricing Guide*, available through your Customer Service Representative (CSR).

Action and Request: Documentation in Electronic Format

Response: Each licensed 12.x CA-IDMS or IDCORE site receives one complimentary documentation set on CD-ROM in IBM BookManager format. Additional copies may be purchased from CA. Call your TCC or CSR for ordering information.

Action and Request: Electronic/CA-DOCVIEW

Response: Eight separate tapes were created and given to corresponding license, orderable separately at no charge. Current plan is to create a master CA-IDMS DOCVIEW tape for mass mailing to CA-IDMS/IDCORE 12.x sites. The tape can be ordered at no charge. Call your TCC or CSR for ordering information.

Action and Request: Maintenance vs. Original Order

Response:

Maintenance - with each order of CA-IDMS 12.x, users will receive two hardcopies of documentation, one copy of CD documentation, and one copy of DOCVIEW documentation. Every maintenance cycle could involve documentation. If the documentation is revised, the two hardcopies per license are mailed. DOCVIEW and CD files will be kept on maintenance tape if possible or on separate documentation maintenance tapes for the equivalent gen-level.

Original - with each order of CA-IDMS 12.x, users will receive two hardcopies of documentation.

Maintenance & Life-Cycle

Bob Haney and Don LeClair will review and reformat the response

submitted by Kurt Seibert for publication in *IUA Connections* and conduct a review at the April 1996 Business Issues Forum meeting.

The following is an overview of the original submission:

The standard life cycle designations for a product are:

- In development

During the first phase of a product's life, a preliminary schedule for a particular product is developed and adjusted as the product travels through the different phases. This phase consists of design, development, packaging, initial testing and initial client documentation. The product stays in this phase until the product works correctly and is complete.


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Mark Your Calendars!

The Ohio Valley (CA-IDMS) Users Group (OVUG) announced their upcoming meeting, scheduled for Monday, March 18 - Tuesday, March 19, 1996 at Alverno Administrative Systems, Indianapolis. If you would like additional information, please contact OVUG's new chairperson Robert Kantor, Mead Corporation, at 513/495-3263.

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Continue your IUA Workshop '96 experience and plan to attend the CA-IDMS Midwest Users Group (CMUG) Spring 1996 meeting scheduled for Wednesday, May 1, 9:00 a.m. - 3:30 p.m., at the Hyatt Regency, Chicago.

An agenda and meeting registration form will be sent out a few weeks before the meeting. For additional information, please contact Regina Schurman, Comprehensive Business Solutions, at 708/717-7005. 

CA-IDMS: The Next Release

by Ken Reiff, CA

The evolution continues. CA-IDMS has been continually developed to satisfy demands and requests from clients in order to take advantage of new technologies. As the ultimate in mainframe DBMS servers, CA-IDMS has exploited the enterprise access architecture of mainframe, midrange and desktop systems. With Release 12, CA-IDMS was introduced to the wonderful world of relational processing and client/server access. Now with Release 14, CA-IDMS is taking full advantage of the newest advances in mainframe technologies. However, CA-IDMS does not forget its roots.

One of the main objectives of this CA-IDMS release was to make sure it would have as little impact as possible on production systems. With that in mind, the upgrade path to Release 14 will be almost as simple as installing a maintenance tape. Upgrade requirements will be limited to changes needed by only those clients who wish to exploit a new feature of this release.

To help simplify the use of SMP/E when applying maintenance, patch space has now been added and expanded to most of the modules in the CA-IDMS product family. This lessens the dependence on the CSA patch space when applying fixes. CA also added internal code to some of the modules to help expedite the debugging process for faster problem resolution.

Since the typical CA-IDMS client is one with a high volume of transactions, 24x7 processing, a downsized MIS staff and end users demanding open access to the data, CA has targeted the features in Release 14 to the following areas:

- Performance
- Parallel SYSPLEX
- 24x7 support
- Productivity
- SQL processing

Performance

To continue the quest to free up conventional storage and provide overall improved throughput, CA has moved the TCE stack area to XA storage; added a new low level operating system interface module (RHDCOESA); created DBMS engine modules that support multitasking; and designed Storage, Scratch and Security managers to support multitasking.

Parallel SYSPLEX

Transaction throughput will be taken to a new height with the exploitation of IBM's Parallel SYSPLEX environment. Parallel SYSPLEX is a multisystem environment that acts like a single system. Parallel processing in the SYSPLEX is made possible by utilizing many processors based on CMOS chip technology, where each processor is running its own image of MVS/ESA 5.1.

The Coupling Facility within the SYSPLEX is a dedicated processor that is connected to the other processors in the SYSPLEX via high speed fiber optic coupling facility links. This facility enables multiple systems executing separate MVS images to communicate and share data.

Within CA-IDMS, the DBA will define a **DBGROUP** that consists of several "server" CVs. Each CV will be capable of executing any retrieval run unit that is passed its way. The System Programmer will define the List Structures in the Coupling Facility that CA-IDMS will use to balance the workload. Each time a retrieval run unit is bound to a nodename with an access method of group, CA-IDMS will post the request to the input list in the Coupling Facility. It is from here that the group of "server" CVs will look for work.

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Vendors

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click, source changes are quick and easy. No knowledge of DDDL syntax is required. Productivity is improved, dictionary access is simplified, training costs are reduced, and mainframe cycles are saved.

Session II — This session profiles HSL Information System, an end user tool that integrates all of a user's options into easy-to-use menus that may contain reports, documents, bulletin boards, E-mail, calendars and applications; DBSTATS, a tool that quickly isolates batch performance problems — statistics at each DML statement are detailed, pinpointing the exact cause of excessive run times; and DBREPAIR, which helps ensure database integrity.

Information Builders

1250 Broadway, New York, NY
10001-3782
212/736-6250

The FOCUS 4GL language is exceptionally easy to use, generating comprehensive reports in record time from either host-based, menu-driven FOCUS applications or GUI-based FOCUS PC tools. Learn how the FOCUS CA-IDMS Interface works and enhances the ability to report from the CA-IDMS database. Also discussed are the features of the new FOCUS CA-IDMS SQL Interface which allows the end user to transparently access relational and/or network databases using the CA-IDMS 12.0 SQL OPTION database.

International Software Products

5100 Erie Street, Racine, WI
53402-2140
414/821-7798

Since Jim Phillips' presentation of the building of the CA-IDMS to Relational Data Replication Product at IUA Workshop '95, he has been involved with data warehousing projects across the United States and Europe. This year, he will share anecdotes and experience gained, as well as updated information on the process.

EUDTAC Introduces *CULPRIT User's Guide*

by Carol Silberstein-Locker

EUDTAC/IUAXX/Workshop '96 Chair

The End User and Development Tools Advisory Committee (EUDTAC) discusses and supports the CA products that enable end users to access their data (i.e. CA-SQL Server and CA-Visual Express) as well as PC based development tools (i.e. CA-IDMS-PC). EUDTAC represents business perspectives as well as user interests and expertise, promoting and uncovering topics related to End User and Development tools. The following outlines EUDTAC's current agenda.

We Keep Documenting

In response to the overwhelming success of the *OLQ Menu Mode User's Guide*, EUDTAC is preparing a *CULPRIT User's Guide* for those developers and users who use CA-CULPRIT to obtain data. Look for more information and an early release of this document at IMC96 at CA-World '96. The *OLQ Menu Mode User's Guide* is available at IUA Headquarters. Look ahead! What would you like next? Let us know the various documents that would benefit IUA members and CA users. Do you have an idea? Outline? Rough draft? Finished document? that you would like to share? All contributions are greatly appreciated and may be submitted to IUA Headquarters.

Tell CA Your Priorities

In order to inform CA of what improvements the end users require, EUDTAC is currently preparing a ballot to prioritize and vote on the outstanding enhancement requests and DARs. If there are features you would like to add, change or delete for your CA products, send an enhancement request to IUA Headquarters or submit a DAR to CA. All enhancement requests and DARs received through January, 1996 will be

included in the Spring-Summer Ballot. For more information, contact IUA Headquarters at 312/321-6827 or via the Internet at IUA@sba.com

IUA Workshop '96

IUA Workshop '96 is shaping up to be an exciting, educational event. This is an opportune time to meet with your peers. Find out what they are doing and learning, and how they are coping with similar challenges. These and other topics will be addressed at the SIGs focusing on End User Access and SQL Applications. Among the many educational sessions, of special interest will be a session called "Data Modeling to Data Warehouse - How to Get There." The technical side features Robert Davia with "An Introduction to TCP/IP." Learn how to contact

users on the Internet from Val Morgan, ASG/Computer Power Group, who introduces the IUA HOME PAGE at the workshop. CA presents features of CA-IDMS Release 14.0 and future directions on Monday morning, April 29, at the Product Direction Forum (PDF). Attendees have much to anticipate and I look forward to seeing you in Chicago!

Volunteer

Register at IUA Workshop '96 on Sunday, April 28, and attend the EUDTAC committee meeting where we will discuss hot issues and plan current and future activities. Volunteer! You too can voice an opinion and influence product direction as well as IUA activities and products. EUDTAC's current "hot topic" is end user access to their data - how can we make it better and faster? ♦

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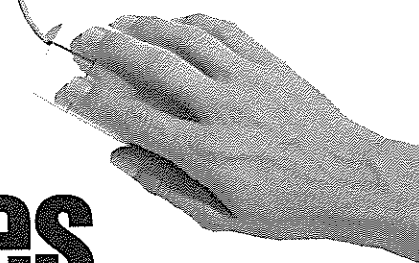
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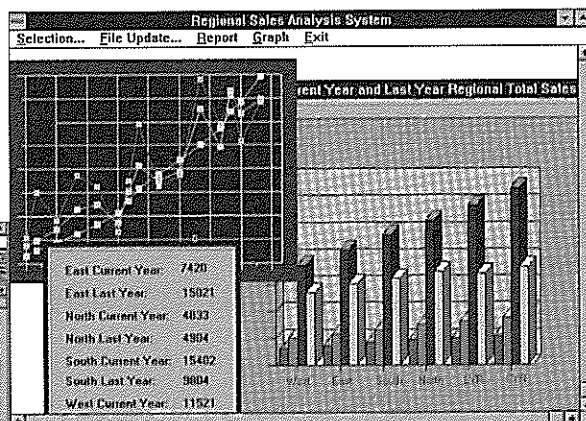
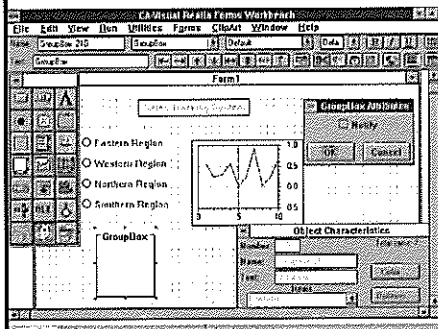
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CA-Visual Express Tips and Techniques


The following tips and techniques were provided by the CA-Visual Express Technical Support group. These tips can help you work with the CA-Visual Express product more effectively.

- For CA-Visual Express users, the EXACTNAME=YES setting in the CAVXPRSS.INI file is almost always necessary. When this option is used, double quotes will be placed around all column and table names in the generated SQL. This is necessary when the column or table name contains a nonSQL character, such as a hyphen (-), or is an SQL keyword. See the CA-Visual Express Release Notes for more information.

- Network sets cannot be used through the CA-Visual Express Quick Query or Query-By-Example, but can be used in the SQL editor. It is best to create your query with Quick Query or QBE, parse it to SQL and edit the SQL to add the set. For example, if the set is called MY-SET, edit the WHERE clause so that it contains the set name: WHERE EMPID = 5 AND "MY-SET"

Note that double quotes were placed around the set name since it contains a hyphen. Remember, the spelling of the set name is important; CA-IDMS is case sensitive.

- Select the CACHE SQL TABLES option. This option is a CA-IDMS extension that instructs the Server to cache the table list returned from an SQL Tables call. Caching (which means saving temporarily) the table list occurs across SQL Table calls only if the parameters passed are the same from call to call. Using this option increases performance at the expense of not necessarily having the most current view of existing tables.

- If using LU2 emulation, use the DDE/LU2 protocol. It is faster than the LU2 module and contains many fixes. 

Business Issues Forum

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- **Informal QA Testing**

In this phase, QA verifies that the product is complete and works correctly.

Any problems with the product are formally tracked and any severity 1 or 2 problems must be corrected before the next phase is allowed to begin. QA has the primary responsibility for this phase and development has the responsibility of correcting any problems discovered.

- **Beta or Client Testing**

In this phase, the product is sent to a limited number of clients for further testing. Development is responsible for this phase, in which QA and the clients continue to test. When problems are discovered and fixed, they are tracked and updates are sent to the clients. The product is believed to be stable based on client and QA testing when it is allowed to leave this phase. The product is supported by development at the development center.

- **General Availability (GA)**

In GA phase, client orders are filled with the stable version of the product. Clients are encouraged to implement the new version. The drop date for support of the prior release also is established during this phase. Support is responsible for the product, including: client calls, resolving problems, and producing maintenance and gen-level installs. QA tests the product prior to release.

- **Dropped Support**

This is established when a new release is GA, and is typically in effect 12 months after the new release

becomes GA. Support calls are accepted, questions are answered, and previous published fixes are provided on a best-effort basis. In-depth diagnostics and new fixes are not provided by dropped support.

General Questions/Answers

- **What is the documentation development process?**

Documentation is established in the development phase of the project. All documentation is available and ready for GA. Corrections/clarifications during GA are produced as updates and Product Information Bulletins (PIBs).


- **How long is a product in a particular phase? A product is in a particular phase as long as it takes to fill the requirements. There is no set time, and it is based on the maturity of the product.**

General Issues

- Bob Haney will be keeping a history of issues of Business Issues Forum current and available for membership. The history was faxed to IUA Headquarters in August 1995, and will be available at all Business Issues Forum meetings.

- At each meeting, we will pass out an agenda, charter and process.

- Neil Toomb will publish CSR/TSR change notification and strategy for changes to customers.

Whenever a CSR change takes place, a turnover meeting at the client site should occur. This will be with the outgoing CSR, incoming CSR, and the primary point of contact for the site. If there is a breakdown in communications or if a client is unsure of the CSR identity, call the local CA office or CA corporate headquarters for assistance. 

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January 1995**

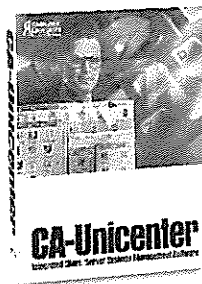
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There Seems To Be A Pattern Here.



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Viewing and Processing Data as a Table

by Judy Dillman, CA

A table procedure is a user-written program which allows any data accessible through CA-IDMS to be viewed and processed as a table. The parameters passed to and from the program are treated as the columns of a table which, once defined to CA-IDMS as a table procedure, may be operated on using SQL DML statements. The specifics of how the database is accessed in servicing these requests are hidden within the table procedure.

When to Use a Table Procedure

A table procedure may be used to process non SQL-defined data in a relational way even though the data does not conform to the rules established for such access. For example, table procedures can be used to: provide full update capabilities on member records which do not contain embedded foreign keys; access data with multiple definitions (redefined data); access data which does not conform to the data type defined in the non-SQL schema; and translate special data values into null values.

Table procedures can also be used to make the processing of complex structures, such as bill-of-materials, easier for an end user. Since the details of accessing the underlying records or tables are encapsulated within the procedure, less knowledge is required of the user to process the data.

Another potential use of table procedures is to allow access to all segments of a segmented database within a single SQL transaction. Since a table procedure

simultaneously opens more than one run unit or SQL session, it can access the appropriate segment based on the value of an input parameter. If no appropriate segment key is available, it can

serially access each segment. Table procedures also access remote data. This enables a single SQL transaction to access data distributed across different nodes within a

Continued on page 15



The IUA "Tips of the Trade" series continues...

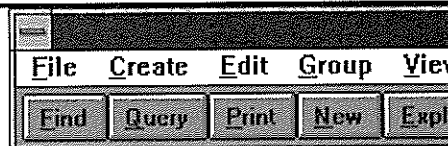
TAC Tip of the Trade

by Chris Hoelscher, TAC Correspondent

Did you ever want to deallocate an entire SEGMENT? Execute CA-CULPRIT with "standard" JCL, with the following changes: (use the output from this run as input to RHDCUCFB)

```
//SYSIN      DD*
DATABASE DICTNAME=SYSTEM DBNAME=SYSTEM
IN 2400 DB(D) SS=IDMSNWKG
PATH01 FILE-1039
01OUT 080 D PS DD=OFA
01SORT SORT-KEY
010 SORT-KEY
01510001 'DCMT V FILE'
01510013 DDNAME-1039 SZ=004
01510017 'DATA.'
01510022 DDNAME-1039 SZ=008
01510030 'CLOSE'
01520001 'DCMT V FILE'
01520013 DDNAME-1039 SZ=004
01520017 'DATA.'
01520022 DDNAME-1039 SZ=008
01520030 'DEALLOCATE'
01530001 'DCMT V SEGMENT'your-segment-name'OFL'
017      IF EOF EQ 100
017      MOVE 2 TO SORT-KEY
017      IF SEGMENT-1039 NE 'your-segment-name'DROP
017      PICK (1,2)
017      RELS
017      UNPICK (1,2)
017      DROP
017100 MOVE 1 TO SORT-KEY
017      PICK 3
017      RELS
017      UNPICK 3
017      DROP
```

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Customer Order Status

Form Row Field Help

41

Cust No: 1236 State: CA

Name: PC Publishing, Inc. Zip: 94708

Street: 72 Hopkins Court Contact: Evan Nichols

City: Berkeley

Escalation Status: None Low High

Order No	Order Date	Order Status	Order Lock
125	12-dec-1994	Closed	12
145	01-Jan-1994	Pending	3
246	18-Jan-1994	Pending	1
298	27-Feb-1994	Pending	24

Frame: Customer Order Status

File Edit Group View Arrange Appearance Size Frame Help

Cust No: State:

Name: Zip:

Street: Contact:

City:

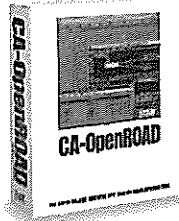
Escalation Status: None Low High

Order No	Order Date	Order Status	Order Lock
0	Pending	12	
0	Pending	12	
0	Pending	12	
0	Pending	12	

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Table Procedures

Continued from page 13

CA-IDMS network while hiding the location of the data within the procedure itself.

Defining a Table Procedure

A table procedure is defined using the CREATE TABLE PROCEDURE statement, for example:

```
CREATE TABLE PROCEDURE EMP.ORG  
(  
    TOP_KEY      UNSIGNED NUMERIC(4),  
    LEVEL        SMALLINT,  
    MGR_ID       UNSIGNED NUMERIC(4),  
    MGR_LNAME    CHAR(25),  
    EMP_ID       UNSIGNED NUMERIC(4),  
    EMP_LNAME    CHAR(25),  
    START_DATE   CHAR(10),  
    STRUCTURE_CODE CHAR(2))
```

EXTERNAL NAME PROCORGU;

The table procedure is named and associated with a schema; in this example, the schema is EMP and the procedure name is ORG. The name of the program to be called to service a DML request against the procedure is specified in the EXTERNAL NAME parameter; in this example, it is PROCORGU.

The parameters to be passed to and from the procedure are then listed. Each parameter definition consists of a name and data type.

Accessing a Table Procedure

Table procedures are accessed using SQL DML statements similar to base tables and views. They are referenced where a table reference is permitted.

Whether or not an SQL operation is supported by a specific table procedure is dependent upon the user-written program. It may, for example, support only retrieval operations and disallow INSERT, UPDATE and DELETE by returning an error if such an operation is attempted. Accessing a table procedure is controlled as if it were a table. GRANT and REVOKE statements on a resource type of TABLE are used to give and remove SELECT, INSERT, UPDATE, DELETE or DEFINE privileges on a table procedure.

Procedure Parameters

The parameters associated with a table procedure are treated like columns of a table. Specifications are found within the column list of a SELECT or INSERT statement, the SET clause of an UPDATE statement, the ORDER BY clause of a SELECT statement, or the search criteria of a WHERE clause.

Input parameter values are specified either within the procedure reference itself or through the WHERE clause. The following statements illustrate the two ways in which the value 1234 passes as the input value of EMP_ID:

```
SELECT * FROM EMP.ORG(EMP_ID=1234) or  
SELECT * FROM EMP.ORG WHERE EMP_ID=1234
```

By using WHERE clause references to generate input values, standard ANSI SQL is used to reference table procedures. Therefore, tools such as CA-Visual Express access table procedures as if they were tables.

Writing a Table Procedure

The program associated with a table procedure may be written in COBOL, PL/I or Assembler. Since it is likely a procedure will execute both within a batch address space because of local mode access and within the DC/UCF address space, it should be written independent of the run time environment.


When called, the program is passed a fixed parameter list containing the parameters specified on the procedure definition as well as additional parameters used for communications between CA-IDMS/DB and the procedure.

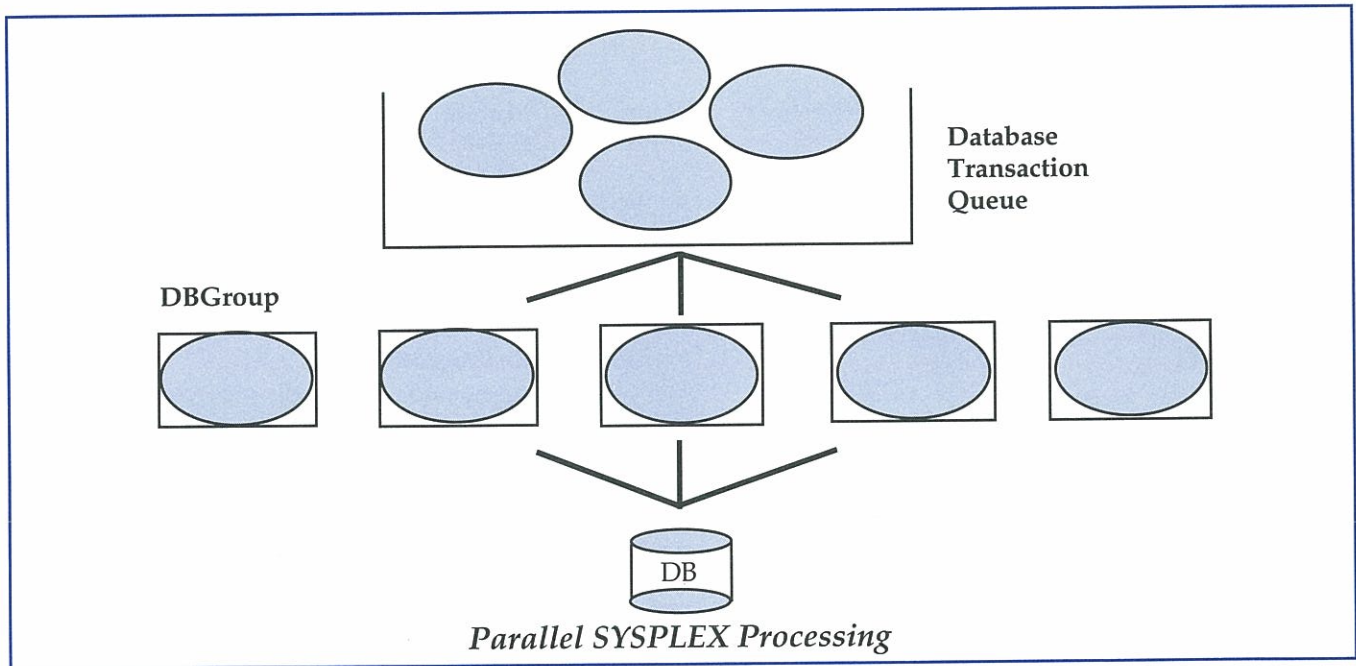
When a reference to a table procedure is made, CA-IDMS/DB calls the program associated with the procedure to service the request. Part of the information passed indicates the type of action the procedure is to perform, such as "return the next result row" or "update the current row." The procedure responds by performing the requested action or returning an error.

Transaction and session management are performed automatically by CA-IDMS/DB in response to requests issued by the originating application. Changes to the database made by a procedure are committed or rolled out together with other changes made within the SQL transaction. No special action is required of the procedure to ensure this occurs.

In the event an error is raised, CA-IDMS/DB rolls out all database changes made by the procedure while processing the SQL statement which caused the procedure to be invoked. The procedure is provided with two arguments to signal an exception condition back to CA-IDMS/DB. These arguments consist of a 5-character code known as SQLSTATE and an 80-byte message area.

Availability

Table procedures enhance the CA-IDMS SQL option and are available to all users who access a CA-IDMS mainframe database using SQL. This applies to mainframe tools and applications, CA-IDMS Server Windows applications, and applications using CA-OpenIngres Enterprise Access to CA-IDMS. This functionality is generally available as of the 9506 gen-level for CA-IDMS 12.01. 



CA-IDMS: The Next Release

Continued from page 8

The Coupling Facility also contains a global cache area where CA-IDMS can optionally keep database buffers for update. These buffers allow all of the CVs in the group to share data. Although only one CV may have update capabilities for an area, the updates will be available to the other CVs through the database buffers in the global cache. Because access to data in the Coupling Facility uses high speed fiber optic links, accessing pages from the global cache will greatly reduce the overhead otherwise incurred by doing I/O.

24x7 Support

It is vital for most businesses that their computing needs remain available 24 hours a day, seven days a week. To assist our clients in maintaining their systems without having to incur downtime, we have updated the following facilities:

- Dynamic SYSGEN gives you the ability to run the SYSGEN compiler to add new lines and terminals and place them into service via a simple DCMT command.
- Dynamic security refresh allows you to make changes in the SRTT

and implement them through DCMT commands. This will also refresh all run time security definitions.

- Dynamic resource allocation will automatically create secondary allocations of RCEs, RLEs and DPEs when the original supply is exhausted.

Productivity

As companies continue to downsize their operations and MIS staff, it is important for those remaining to pick up the workload and increase their productivity. CA has implemented the following changes to help CA-IDMS users become more productive:

- Segment level support has been added to the UNLOCK, BACKUP and RESTORE utilities.
- Run time LE370 support for programs compiled with the SAA PL/1 compiler is available.
- Dialog disablement is now done instead of program ADSOMAIN when an error threshold is reached.
- Multiple dictionary support has been added for the checkout facility in ADSC and MAPC.
- Numerous enhancements have been added for OLQ menu mode.
- OCF and BCF is enhanced to support DISPLAY and PUNCH

commands for SQL entities.

- Enhanced security display features have been added.

SQL Processing

SQL continues to be an important component of database access. It has become the true standard that makes applications and tools scaleable and portable. CA-IDMS embraces this movement and has expanded its support of the SQL environment.

- CA-IDMS SQL now supports the ANSI SQL2 standard SQLSTATE field for supplying SQL return codes and status.
- CA-IDMS/Dictionary Migrator supports SQL definitions and entities.
- OCF and BCF support for DISPLAY and PUNCH of SQL entities.
- DISPLAY TABLE AS RECORD option creates a valid work record from an SQL table for use by applications using on-line mapping.
- CA-IDMS SQL has improved optimization of access strategies.

Leveraged Exploitation

CA-IDMS users have the opportunity to exploit the new technologies of today while building on prior investments. This flexibility is the power of CA-IDMS. ♦