ADABAS
the Adaptable DAta BAse System

NEWSLETTER

Presentations Requested For San Diego Conference

The ADABAS Users' Group is now requesting formal papers for presentation at the Seventh International ADABAS Users' Conference, June 13-15, 1979, in San Diego, California.

Formal Papers may be presented by any person interested in ADABAS or related aspects of Data Base technology. The group is particularly requesting papers that relate to the various special interest categories, but papers on any Data Base subject may be submitted for consideration.

As previously announced in the ADABAS Newsletter, Software AG is pleased to offer a $100 award to each speaker making a formal presentation. In addition, Software AG is offering a $1000 award for the "Best Speaker" in the conference.

To be eligible for the "Best Speaker" award, the speaker must make a formal presentation, submit an abstract or outline and a formal paper at the appropriate deadlines listed below, and be a member of an organization that uses ADABAS. The Best Speaker is determined by ballot of the conference's attendees. (Employees of Software AG or its affiliates are not eligible for the awards.)

The procedure for making a formal presentation is an easy three-step process. First step is to develop an abstract or outline of the paper. Forward this abstract to Steve Greaves, Software AG, Reston, before *March 31, 1979*. As received, the abstracts will be copied and forwarded to the appropri-

PRESIDENT'S MESSAGE

Rob Macmillan
Simon Fraser University

We have a busy schedule of ADAGROUP activities for the next few months and I encourage you all to contribute in any way you can. The success of our group is assured when many contribute a little rather than expecting a few to contribute a lot.

Firstly, we have set a tight schedule for the publication of the next newsletter, it being the last before the annual conference. Send all articles directly to the editors (addresses on back cover) before April 1, 1979. While on the subject of the newsletter, I would like to see more short articles or papers submitted by ADABAS users. The Com-plete portion has had some excellent articles in the last two editions — let's not be outdone by our young relative.

The San Diego conference is only three short months away. A call for papers was issued in late January. If you have a

SAN DIEGO 79

7th ADABAS Users' Conference Planned for San Diego

The Seventh International ADABAS Users' Conference promises to be the most productive ever. Make plans now to attend.

Sessions will include presentations on the following topics:

- Software AG futures
  - Distributed processing
  - End User/Data Base interfaces
  - ADABAS, Natural, etc.
- ADABAS Release 4.1
  - North American User Experience
  - Implementation techniques
  - Release plans
  - Performance, etc.
- Data Dictionary
- ADAMINT
- DOS ADABAS
- Restart Recovery
- DBA Tools
- ADABOMP
- Retrievals and Interfaces
- Education
- Performance
- Natural
- ADABAS-M
- ADACOM

As usual, sessions on Changes and Enhancements to ADABAS will be held, where the users and the developers have the opportunity to interact directly. Plans are being

Com-plete

The International Com-plete
Users' Group Newsletter
begins on page 13.

Editor's Notebook

Thanks to all the Regional Representatives and Special Interest Group chairpersons for sending in their columns on time. Several of these columns request feedback from new users out there. Why don't you take a moment now to reply. Tell them what your installation is doing and how you can be of help. Remember no special interest group can function without demonstrated interest.

The reader will also note that we have one paper of application experience. This is an area we would like to see grow. Please send us your experiences to share.

Suzan Schultz

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Planned Software AG Product Release Dates

ADABAS Version 4.1	
Beta test	5/79
General release	8/15/79
*ADACOM	
DOS release to tech reps	3/79
DOS general release	4/79
*ADASCRIPT + Version 1.1	3/79
ADAWRITER Version 1.2	3/79
Reorder Associator Utility	3/79
Com-plete MVS Version	9/79
Com-plete VTAM/SNA Version	6/79
ADABAS-M Version 1.0	
Selected Beta test	2/79
General release	6/79
NATURAL Version 1.0	
OS release to tech reps	3/79
General release	5/79
DOS release to tech reps	5/79
General release	6/79

*Beginning with ADABAS Version 4.1 ADACOM, ADASCRIPT +, and ADAMINT will become part of the standard ADABAS release. There will not be any independent versions of these products.

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Software AG Developing Distributed Network Plan

Kenneth D. Rardin
Senior Vice President
Software AG of North America

We are currently in the process of developing a conceptual plan for the implementation of distributed processing. This plan will address networking different CPUs including: 370 to 370; 370 to 8100; 370 to DEC PDP; DEC PDP to DEC PDP; virtual machine to virtual machine; and 370 to any other machine. This conceptual plan will also address distributed data bases, redundant data bases and backend data bases. Prior to the IBM "E" series announcement, we anticipated that the 8100 mini-computer was IBM's answer to distributed processing. However, with the announcement of a 370 compatible processor with 512K bytes of storage for a purchase price less than $70,000, the distributed processing picture has changed. We suspect that these new processors will play a key role in any distributed processing plan. In order to better evaluate this new processor and insure compatibility with any new System Control Programs, we put in a first day order for a 4341 and a 4331 to be installed in Reston.

Our plan is to release a conceptual distributed processing plan to the user community by September 1979. This will give you a chance to review our directions in regard to distributed processing and provide your input.

PRESIDENT'S MESSAGE

paper to present, please contact Steve Greaves in Reston as soon as possible. A well-integrated orderly conference program will result if we know well in advance what material is being presented. Special Interest Group Chairmen are constructing sessions and are looking for people willing to participate.

A record number of Change/Enhancement requests have been received from ADABAS users and the processing of these requests is underway. You will have your opportunity to state your priorities in the voting to take place in March. Remember your ballot must be returned to Dan Skwarcan by April 1, 1979.

The ADAGROUP secretary, Bob Cole, is revising our constitution to bring it more in line with the way we operate today — which is a little different from four years ago. You will be asked to vote on acceptance of the new constitution shortly. A new Special Interest Group of government users is in the embryonic stages. These users expect to exchange both information and software common to government organizations. For details contact Joe Coogan at (206) 753-5465.

ADAGROUP is entering an interesting period. The "soon to be released" Natural will provide a bridge between ADABAS and the Com-plete users. The executive committees of the two groups plan to meet in San Diego to discuss the pros and cons of forming one group — A Software AG products user group. This being a major step for ADA-GROUP I want your opinion in this regard early in the planning stages, i.e. before the San Diego conference. Please write or call me at Simon Fraser University, Burnaby, BC, Canada, (604) 291-4898. I hope you would all do this for any problem or concern you have with the user group.

Sandra Silva, our California Regional Representative, has a new position with the Teale Data Center and has therefore resigned as regional rep. Steve Rollins has also resigned his position of ADAMINT SIG chairman. Many thanks to these two for their work for the User Group.

Software AG Unveils New Project Scheduling System

Kenneth D. Rardin
Senior Vice President
Software AG of North America

Effective February 1, 1979, Software AG of North America and Software AG of Germany implemented a new project control and scheduling system. This new system consists of a weekly review of detailed project tasks and monthly review of major milestones. Every product is divided into major milestones which are reviewed monthly by Software AG management. These major milestones are then divided into detailed tasks or units of work. These tasks are normally 5-10 man days in duration. Once the detailed tasks are outlined, the project manager assigns each task to an individual. These tasks are then reviewed weekly by the project managers. This new project scheduling system was implemented in order to improve Software AG's internal management of projects and to insure that meaningful release dates are established and communicated.

Software AG management recognizes that a credibility problem exists within the user community regarding release dates. This is one of the reasons we have developed and implemented this new scheduling system. During the next six months, we plan to distribute copies of the monthly milestones to the User Groups' Executive Committees.

Following is an example of the milestone schedules which will be distributed to the Executive Committees monthly:
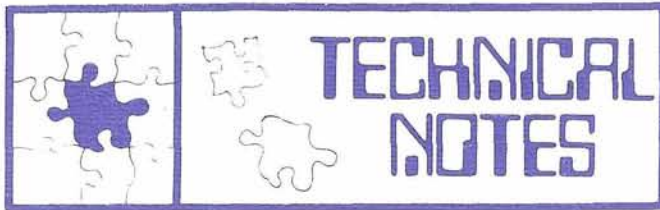
ADABAS Version 4.1 Milestone Schedule

Milestone	Completion Date
1. Finish testing all update commands	2/5/79
2. Finish testing Search/Read commands	3/15/79
3. Finish testing restart, backout, timeout and Synchronized Checkpoints	3/5/79
4. Finish testing hold logic	3/12/79
5. Finish testing of ET, BT, Open, and close	3/12/79
6. Finish testing ADALOG and Operator Communications	3/26/79
7. Finish testing of security	4/16/79
8. Finish testing of coupling	4/16/79
9. Finish testing on-line fix/dump	4/16/79
10. Finish testing all response codes	4/16/79
11. Finish testing multi-region communications	4/16/79
12. Finish final documentation verification	4/16/79
13. System test all functions and documentation*	5/1/79
14. Install version 4.1 at first Beta test site**	5/5/79
15. Install second Beta test site	5/12/79
16. Install third Beta test site	5/26/79
17. Install fourth Beta test site	6/23/79
18. Install fifth Beta test site	6/30/79
19. Reinstall all Beta test sites	7/28/79
20. General release of Version 4.1	8/15/79

*This test will use an existing user's data and existing 3.2.1. programs.

**This will be at a selected North American user's site.

At the 6th International ADABAS conference in Munich, Germany, we announced that ADABAS Version 4.1 would be installed in Reston for final Alpha testing during January 1979. However, as a result of the above scheduling exercise and the review of available computer resources, we have decided to finish all of the Alpha testing at our office in Darmstadt, West Germany. Since we have a dedicated 370 just for testing, we have decided to send the North American test team to Germany to complete this final testing. This will not only improve our capability for final testing, but will improve the technical training phase for the Version 4.1 test team.

ADABAS V4.1 Progressing Toward General Release

Ed Forman
Manager of North American ADABAS Development

Current activities in ADABAS Development can be divided into these three areas:

- Current Implementation and Enhancement
- Coordination of Release 4.1 of ADABAS
- Major Design Efforts

In the area of Current Implementation are such products as ADAMINT, Natural & ADACOM, the Data Dictionary, ADASCRIPT + 1.1 and MPM 56. Some of these have already been released, others are in the final stage but all require substantial development resources for their various interfaces and enhancements. By far the most significant of these products is Natural. We are confident that this will prove to be a very powerful tool in development projects and will be most interested in users' reactions to the product.

Work on Version 4.1 of ADABAS is progressing towards final release. North American development is involved directly in the release through the presence of North American development staff in Darmstadt, both for final development and extensive testing. Parallel development and testing are taking place in Reston on our other products to ensure their compatibility with Version 4.1 and to take advantage of some Version 4.1 enhancements.

Major design efforts are now directed towards more complete integration of our products. The key to this is a more comprehensive Data Dictionary. We actively solicit user input on this effort through the Special Interest Group and the Change/Enhancement System. We do not expect the user community to design this product, but we must call on users to tell us what features are needed or would be useful in the future.

Since many users do not know me very well, some background information may be of interest.

My association with Software AG began when I was asked to evaluate version 3.1.4 documentation. My report was quite critical and I was immediately hired to improve ADABAS documentation. I gradually shifted into full time technical support in the Northeast.

I then left Software AG and spent almost a year with Chase Manhattan Bank working on a major ADABAS application.

I returned to Software AG as director of Technical support for the Northeast and moved to Virginia to take over North America ADABAS development at the beginning of 1979.

I feel this background gives me some real advantages in managing future development. I have been an ADABAS user and have always worked directly with users. I know many of your problems and what you have to contribute towards their solutions. I encourage and solicit your written suggestions through the appropriate Special Interest Group and promise to give them both a thorough consideration and a detailed response.

Indices Access Method Redesigned for ADABAS-M

John Taft, Vice President
ADABAS-M Development

As you may already know, the first general release of ADABAS-M is a little behind schedule. June, 1979 is now the official release date for ADABAS-M Version 1.1.

The main reason for the delay is a re-design of the Indices Access Method. In addition to forward/trailing compression on all index levels, the new access method contains two techniques which will make large file handling more efficient. These techniques are Dynamic Level Creation and a Place Holder Scheme.

Of particular importance during searches which use descriptors is the point at which an index tree increases from three to four levels. Disregarding the value of the shared buffer pool, random processing performance is predominately a function of the number of levels in the indices tree. By using the Place Holder Scheme to increase #values/Block in upper level indices, we expect the change from three to four levels to be in the 300,000 to 450,000 Values/Index range.

Beta Testing under IAS (ADABAS-M Version 2.0) will begin in February and should be completed in March. Draft documentation for this test and for internal Software AG review has been produced. Comprehensive draft documentation will be available in early April.

We are planning to support Digital's new RSX-11M + if and when it becomes available. Advance information suggests that RSX-11M + will be an excellent operating system for PDP-11/70 users with large files and high performance requirements.

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(Continued from Page 1)

made to devote a session to directions in Data Base theory and technology.

ADAGROUP business will also be conducted, including:

- Consideration of constitutional changes;
- Consideration of merging with the Com-plete Users' Group;
- Election of new officers.

Users interested in contributing to the program may still do so. See the "Presentations Requested" article on page 1.

Users interested in attending the conference may sign up using the Registration form included with this newsletter.

The annual conference will be headquartered at the Town and Country Hotel and Convention Center in the Mission Valley area of San Diego.

The Conference activities will commence Tuesday evening, June 12, with a reception at the Convention Center. Formal Conference proceedings will begin Wednesday morning, June 13 and run through Friday afternoon, June 15.

Registration fee for conference attendees is $150. Registration fee for companions is $50. A late registration fee of $50 will be charged for registrations made after May 11, 1979.

Special convention room rates at the Town and Country are available during the conference as well as two days prior to and two days after the conference. Convention rates for singles will be $33 and will be $38 for doubles.

ADABAS Regional Reports

NEW YORK CITY/TRI-STATE REGION
Michael E. Berman
INCO, Ltd.
One New York Plaza
New York, New York 10004

The third New York City/Tri-State ADABAS users group meeting was held at Cuny/University Computer Center on November 8, 1978. Steve Robinson of S L Robinson and Associates described the education offering available from his firm. Michael Berman presented a report on the Sixth International ADABAS Users Conference and the Executive Committee Meeting. The report was a summary of the Munich Conference which took place in September. Mr. Berman and Virginia Sullivan described ADACOM based on a pre release at INCO.

Joseph Farrelly presented a paper on security by value as used at Cadence Industries. The paper described various approaches and implementation considerations to specific applications at Cadence.

The next meeting was at Simon & Schuster on January 10, 1979. Pat Graham, Karen Hughes and Terry Tanzer of Depository Trust Company gave a presentation on Software AG's Data Dictionary. Included were selection criteria, Installation and testing experiences, and DTC's plan to bring all computerized file information into the dictionary.

A round table discussion of ADAMINT experience followed.

Ed Forman, recently promoted to Manager of North American ADABAS Development, discussed how his new position would affect the reliability of release dates and scheduling of new products. Alvin Knott the new Technical Representative for the North East area was introduced. The next meeting will be held on March 7th at Chase Manhattan Bank. A presentation of an automated restart/recovery procedure will be given by Morgan Stanley, Co.

EASTERN CANADA & UPPER NEW YORK REGION
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The second quarterly meeting of the Eastern Canada & Upper New York State Users' Group was held in Toronto at the North American Life Assurance Head Office on the 5th of December. A total of 21 persons representing 14 ADABAS Installations attended. The highlight of the meeting was a presentation by North American Life Assurance on Complete. The other topic covered was ADABAS Educational Courses covering those commercially available as well as those developed in-house. Our next meeting is scheduled for March 6 to be held in Ottawa at Statistics Canada. Our major topic will be auditing the Data Base and possibly Version 4.1 of ADABAS — what it will mean to you. Please call Bob Taylor at (416) 597-7073 for further details.

EAST CENTRAL REGION
Dan Skwarcan
Associates Corporation of North America
1720 Ruskin Street
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The fifth East Central Regional Meeting was held November 9, 1978 at the Indianapolis Hyatt Regency Hotel in Indianapolis, Indiana.

The first item on the agenda was a recap of the October 27, 1978 ADAGROUP Executive Committee Meeting held in Reston, Virginia by Dan Skwarcan from The Associates.

Jane Weinkauf of Software AG then addressed the East Central users on the current status of Software AG product release dates.

Following lunch, Bob Becker of Foremost Insurance, recapped the events of the Munich Conference which he attended.

Mr. Becker then presented his thoughts on a performance monitor which he developed at Foremost. Bob will be submitting a Change/Enhancement Request for the development of an ADABAS Performance Monitor. The East Central Region is asking all ADABAS users to strongly back this Change/Enhancement during C/E voting. An ADABAS Performance Monitor is long overdue. With the support of all ADABAS users, an ADABAS Performance Monitor will become a reality.

Dan Skwarcan from The Associates then presented documentation on three utilities, DBSEARCH, DBUPDATE and DBUNLOAD, that were developed at The Associates. These utilities are available to other ADABAS users. To obtain these utilities, send a letter on your company letterhead with a tape to Dan Skwarcan at The Associates.

The last item on the agenda was a round table discussion of several items of interest such as MPM exist, Coupling pros and cons, and Adamint 1.3.

The next East Central Regional Meeting will be held May 17, 1979 in Madison, Wisconsin.

HAWAII REGION
Kenneth M. Kojima
Honolulu Federal Savings and Loan Association
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Honolulu, Hawaii 96809

An ADAGROUP-Hawaii meeting was held in October, 1978 in conjunction with an ADABAS/Com-plete Seminar.

Bob Preger of Software AG gave an informative presentation to twenty-three prospective users. Members of ADAGROUP-Hawaii also attended the seminar and provided technical information.

A few of the prospective users and members of ADAGROUP-Hawaii met at the University of Hawaii for a demonstration of a Generalized On-Line Data Base Retrieval System (MENU). Roger Angell, the Technical Support Manager from the Management Systems Office, provided a good overview of the system.

ADABAS Regional Reports

NORTHWEST REGION
Rob Macmillan, ADAGROUP President
Computing Centre
Simon Fraser University
Burnaby, British Columbia V5A 1S6
(604) 291-4898

Twenty-two users representing twelve organizations attended the December meeting of the Northwest ADABAS Users' Group. Jon Hudson co-ordinated the meeting which featured a demonstration of ADABAS-M at the Software AG offices in Seattle. John Taft and his cronies provided a most interesting presentation of the new product.

John Nikander of the Washington Data Processing Service Center discussed their experiences in implementing a pre-release of Adacom. WDPFG is generally pleased with the product.

Pete Pleger from Multnonah County DPA shared some of their experiences in using ADABAS to develop a voter registration system. For a relatively new user, Pete has a very thorough knowledge of ADABAS and appreciates its strong and not so strong features. He has had some problems with the S2 command.

Herluf Andersen (State of Washington Administrator for the Courts) has done some fascinating work in predicting future space requirements of expanding ADABAS files. Concise reports help the DPA plan the evolution of his data base. Predictions for data space growth are presently better than those for the growth of the associator. Work is being done to improve the latter.

Bob Preger (Software AG of North America) provided an update to Software AG's development projects.

Rob Macmillan (Simon Fraser University) reported from the Munich conference and the ADAGROUP executive committee meeting held recently in Reston. Minutes of this meeting should by now be in the hands of all users.

The meeting discussed the possible formation of a special interest group of government users with an aim to sharing information and programs. There are a number of government users in the Northwest so it seems an appropriate place for such a seed to germinate. Any user interested in this special interest group should contact Joe Coogan at (206) 735-5465. Our aim is to have this group active before the San Diego conference.

The next meeting of the Northwest ADABAS Users will be held in Vancouver, Washington on March 2, 1979.

WEST CENTRAL REGION
Charles L. Rolls
Texas State Department of Highways
    and Public Transportation
Division of Automation
38th & Jackson Streets
Austin, Texas 78731

The January meeting for the West Central Region had to be cancelled at the last minute. It apparently was a hectic month for many of our group. I apologize for the late notice

WEST CENTRAL REGION, *continued*

and hope it did not cause too much inconvenience for those planning to attend.

The next meeting is scheduled for March 22, 1979, with the following topics for discussion on the agenda:

1. Change/Enhancement Requests
2. Data Dictionary
3. ADACOM
4. Nomination and election of next year's Regional Representative
5. ADAGROUP Business

    a. Report on Executive Committee Meeting.
    b. Discussion of combining with Com-plete User Group.
    c. Problem reporting procedures
    d. Revised ADAGROUP Constitution

We are anticipating a well attended and productive meeting with all of our users represented.

UNITED KINGDOM REGION
Roger Martin
Allied Breweries, Ltd.
Station Street
Burton-on-Trent
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0283-45320, ext. 2649

Since the Boston Conference there have been two well-attended meetings of the UK Users' Group — on the 7th September 1978 at the ADABAS Software Limited in Derby and on 17th January 1979 at Phoenix Assurance, Bristol.

In summary, the main activities have been as follows:

1. To progress and agree with the UK Community a proposed 'Escrow' arrangement for submission to SAG. Similar to the U.S. Users, the UK Group wish to have a clause in their contracts to ensure the surrender of the Source Code from a third party in the case of SAG ceasing to trade.
2. The majority of UK User profiles have been completed and sent off to SAGNA.
3. There are now members of the UK Group responsible for liaison with each of the ADAGROUP SIGs.
4. Discussion culminating in a request to SAG to provide ASL with a read-only capability of the Source Code.
5. Discussion on User experience of ADACOM (Beta test version) led by Malcolm Robinson (Commercial Union).
6. Presentation of ADACOM/Natural by Peter Page. The initial features of both products were discussed as well as the planned development of Natural as a full fledged programming language. The possibility of using Natural as a DML linking to a 3 scheme Data Dictionary (Conceptual, Logical and Implementation) was also mooted.

During the next meeting(s) specific areas of interest such as Data Analysis, Physical Design, possible problem areas in conversion to MVS, Active Data Dictionaries etc, User use of subsidiary ADABAS products (ADAMINT, ADABOMP, etc) are to be discussed as well as taking time out to start SIG sessions.

The next UK User Group Meeting is to be held in Burton-on-Trent on 23rd May 1979.

Rocky Mountain Users' Regional Group Formed

Nick Gangwish
Jefferson County Public Schools
13300 W. Ellsworth Avenue
Golden, Colorado 80401
(303) 988-5810

On March 1, 1979, an organizational meeting was held to form the Rocky Mountain Region ADABAS Users' Group. Those invited to attend were all known users of ADABAS as well as prospective users in the states of Colorado, Utah, Wyoming, Nevada, N. Dakota, S. Dakota, Kansas, Nebraska, Arizona, and New Mexico.

The meeting, hosted by Jefferson County, Colorado Schools, was an opportunity for those attending to get acquainted with other users in the region and to express their ideas of how the group could serve their needs.

If you or your organization would like to be a part of this group, please contact Nick Gangwish.

Presentations Requested

ate Special Interest Group (SIG) chairperson. (If the topic doesn't fit into a Special Interest Group area, it will be forwarded to a designated member of the ADABAS Executive Committee.) The SIG chairperson or designated Executive Committee member will then offer suggestions directly to the author to help provide more continuity and less overlap between presentations at the conference.

The second step is the submission of the formal paper. A clear copy of the paper (preferably the original) must be forwarded to Steve Greaves before *May 1, 1979*. The paper may include copies of transparencies used during the presentation but should contain sufficient narrative in addition, to present the topic to a reader unable to attend the presentation. Copies of the formal paper will be printed and included in the formal conference proceedings.

The third phase is the presentation itself. The presentation will be scheduled during one of the conference sessions. (If time does not permit all presentations, the ADABAS Executive Committee will choose the most informative presentations for inclusion in the agenda.)

The opportunity to make a formal presentation is a unique one. It's a forum to express your ideas, to talk about how you or your organization solved some general problem, to discuss your organization's experiences, or to study a particular aspect of the Data Base environment.

Whatever the topic, making a formal presentation is an excellent way to grow professionally and to support the exchange of information throughout the user community. This exchange of information helps you and your organization do a better job.

Please encourage your coworkers to consider making a presentation.

Please also remember the two important dates:
    March 31 — deadline for submission of abstracts
    May 1 — deadline for submission of formal papers

If you have any questions or wish to talk over your ideas for a presentation, please contact Steve Greaves at (703) 860-5050.

Johannesburg User Develops Customer Information File

John Baker
Data Management Department
Standard Bank of South Africa Limited

Standard Bank Investment Corporation (SBIC), based in Johannesburg, Republic of South Africa, is a holding company for a number of companies operating in the Financial sector. These companies provide facilities in Commercial Banking, Merchant (Investment) Banking, Hire Purchase and Leasing, Factoring, Participation Mortgage Bonds, Mutual Funds, Trust and Will administration and Credit Cards. The Commercial Bank, Standard Bank of South Africa Limited has some 900 outlets throughout the country.

The corporation went through a dramatic series of acquisitions and it was realized that greater control was needed over dealings with customers across all subsidiary companies. The development of a Corporate Customer Information File was authorized and work commenced on designing the ADABAS files early in 1977. The user, Ian Strang of the Group's Marketing Division, was extremely keen and had a very good grasp of the results he wanted to achieve. This was a tremendous contributing factor to the success of the project.

The project was split into 2 phases. The first phase incorporated the updating of Company details including the nature of business activities, major shareholders subsidiaries and associates, loan facilities granted and securities held, as well as investments held by SBIC on behalf of the Company. The facilities made available from this phase were displays and prints of family trees of inter-company relationships, total direct and indirect borrowings of Companies within the SBIC group as well as from other lenders, and the individual segments of the Company details. In addition, a facility was made available to record and recall diary items to control overdue events and preparation for coming events. An immediate benefit was that the time consuming task of collating and preparing documentation for presentation to the Board when loan facilities were to be reviewed was replaced by the printing of the complete report from information housed in the data base.

Phase two provided for the capture of Balance Sheet and Income Statement information and for the calculation of ratios. Provision has been made for maintaining a 5-year history. Since Financial Statements appear in many forms, some method had to be found for handling them in a generalized fashion. The solution opted for was centered around a Legends file and a Balance Sheet Profile file. The legends file contains an expansion of a legend code plus instructions regarding the annualizing or expression of the amount as a percentage or as a ratio. The Balance Sheet Profile file contains a limited number of standard profiles which consist of sequencing numbers, legend numbers and line formulae. The line formula indicates the legend numbers and the arithmetic calculations to be performed where sub-totals or totals are to be calculated. In order to create a profile for a specific Company, one of the standard profiles is selected. changed if required, and entered into the Company's record. A screen layout is then displayed, showing the Balance Sheet headings applicable to the company, and the values are entered direct from the company's published Balance Sheet. The calculation of ratios is achieved by defining dummy Balance Sheet items, the legend numbers involved and the formulae required to calculate them.

The input to the system is via IBM 3270 screens and the facilities have been made available to companies in the Group and to Regional General Management of the Commercial Bank.

International ADAGROUP
SIG Chairpersons

ADAMINT

Vacant

CHANGE/ENHANCEMENT REQUESTS

Daniel R. Skwarcan
Associates Computer Center
1720 Ruskin Street
South Bend, Indiana 46604
Tel. (219) 236-3514

DATA DICTIONARY

Richard Tannor
INCO Limited
1 New York Plaza
New York, New York 10004
Tel. (212) 742-4157

DBA/TOOLS

Vacant

DOS

Rick Saindon
Munsingwear Inc.
718 Glenwood Avenue
Minneapolis, Minnesota 55405
Tel. (612) 340-4773 or 4787

EDUCATION

Vacant

PERFORMANCE

Bob Becker
Foremost Insurance Company
5800 Formost Drive, S.E.
Grand Rapids, Michigan 49501
Tel. (616) 942-3364

RESTART-RECOVERY

Bob Taylor
I. & C. S.
Shell Canada, Ltd.
505 University Avenue
Toronto, Ontario, M1E2H
Canada
Tel. (416) 597-7073

RETRIEVALS/INTERFACES
CO-CHAIRMEN

Virginia Sullivan
INCO, Limited
1 New York Plaza
New York, New York 10004
Tel. (212) 742-4165

Alan Martin
Computer Center
Burnaby Mountain
Burnaby, British Columbia
V5A 1F6
Canada
Tel. (604) 291-4578

Special Interest Group Reports

Data Dictionary

Richard Tannor
Inco Ltd.
One New York Plaza
New York, N.Y. 10004

The ADABAS Data Dictionary System is now available to ADAMINT installations and has been implemented at several.

There are a large number of useful facilities in this first release of the Dictionary including data and usage reports, preprocessing of ADAMINT macros, generation of ADAWAN control cards and ADASCRIPT+ HNAMES, and the ability to create basic Dictionary records from an existing data base.

Nevertheless, most of the information I am receiving from users concerns the shortcomings of the Dictionary. We are therefore looking forward to future releases with enhancements such as copy code generation for all programming languages, ADACOM C-names generation, additional fields for user-defined dictionary data and associated support in the update and report utilities, user exits in all dictionary programs, the ability to specify and use multiple verification criteria for a data element, and the ability to reference one set of data definitions for several file numbers.

There has been a small response to my suggestion in the last Newsletter that we meet prior to the San Diego conference to discuss Dictionary issues. Those users, however, that would like particular topics addressed, or would like to lead a discussion at the Data Dictionary SIG's session in June, should let me know as soon as possible so that an agenda can be prepared.

Change/Enhancement Requests

Daniel R. Skwarcan
Associates Computer Center
1720 Ruskin Street
South Bend, In 46604
(219) 236-3514

All Change/Enhancement Requests have been entered into the new ADABAS Change/Enhancement Request System (ACERS). Copies of all Change/Enhancements have been circulated to the appropriate SIG Chairpersons.

We are now in the process of evaluating ADACOM reporting capabilities for production of Change/Enhancement Reports.

At this point in time all scheduled target dates have been met. We are confident that future milestones will also be met.

Performance

By Bob Becker
Data Base/Data
Communications Administrator
Foremost Corporation of America
Grand Rapids, Mi
(616) 942-3364

Here at Foremost Corporation of America, we have developed software for reporting ADABAS performance. This was done because Software AG, at present, does not supply such a tool.

Basically two reports are produced by extracting the MPM Log File from HASP. The first report is a log file summarization which has the capability of reporting on specific selections. The second report evaluates response times. These reports are detailed as follows:

The selection criteria available are by 1) Job Name, 2) User Id, 3) Command Id, 4) File Number, and/or 5) Response Codes. Any combination of criteria, up to a maximum of ten (10) entries per selection for the first four selections, or the single Response Code, which reports all response codes greater than zero, may be entered in a single run. Each selection will report:

1) CPU Utilization — total CPU time, in seconds, of all commands logged on the log file.
2) Transaction Count — total number of commands logged on the log file.
3) Percent of Transactions — the percent of batch and teleprocessing transactions of the total transactions.
4) I/O Counts — actual I/O counts (EXCPS) for accessing the Associator, Data Storage, the Work data set, SIBA, and a total of all I/O.
5) Percent of ECBS — indicate, in percent, the number of commands waiting to be serviced while another command is being executed. These figures are a good indication of the value of multi-threading ADABAS.

Each command is individually summarized by:

1) Average EXCPS Per Call — average number of I/O's (EXCPS) for a command
2) Total Drain — percent of CPU utilization of a command to the elapsed clock time recorded on the log file.
3) Selection Drain — percent of CPU utilization of a command for a given selection criteria against the total clock time for that selection.
4) Average CPU Time Per Call — average CPU time, in seconds, for a command.
5) Average Clock Time Per Call — average elapsed clock time, in seconds, required for executing a command. The last line contains the average clock time of all ADABAS Commands.
6) Command Calls V.S. Selection Calls — percent of a command against all commands for a selection.

The Response Time report allows the setting of a specific start and end time and a specific time interval. Each time interval, from the start to the end time, will indicate the commands and the files they were processing for the minimum and maximum access time, and graphs and average com-

PERFORMANCE SIG, *(Continued)*

mand response time. A count of unique batch and teleprocessing users is also provided at each time interval.

These reports have already proved their worth. We have found that using the 'S2' command to find one record in a file of about 100,000 records requires 600-700 I/O. We replaced this with the 'S1' command and an incore sort reducing I/O to roughly 4 I/O's per call.

Retrieval/Interface

Virginia Sullivan (Co-chairman — Retrieval)
INCO, Ltd.
One New York Plaza
New York, New York 10004
(212) 742-4165

Alan Martin (Co-chairman — Interface)
Computing Centre
Burnaby Mountain
Burnaby, British Columbia V5A 1S6
Canada
(604) 219-4578

With the release of ADACOM in the last few weeks, I am sure you are all busy installing and testing it (and having all kinds of problems with it, as I am). I hope you will make use of our Special Interest Group as a channel to both Software AG and to your fellow users for your comments, questions and problems with ADACOM and with the new version (1.1) of ADASCRIPT+, which is about to be released.

I am sure other users could be helped by your comments on these or any other of the ADABAS query languages or report writers you may be working with.

I would also be interested in your ideas on having some kind of a mid-year meeting or forum of the members of this Special Interest Group to discuss the current status of the various ADABAS packages among ourselves and to have feedback from Software AG on future plans and developments. I know other of the Special Interest Group chairmen are also thinking along these lines. We would all be interested in your comments.

I would also like to invite Software AG to make use of this column to pass along information on any changes or plans for their packages, or to inform users of universal problems, such as the problem discovered in early January with the Dictionary, e.g., defaulting to the system date for the run date would cause the Dictionary to ABEND which meant that you had to use the RUNDATE parameter with each run for the remainder of the month. Such information is extremely useful to the users.

Restart/Recovery

Bob Taylor
Information and Computer Services
Shell Canada, Ltd.
P.O. Box 400
Terminal A
Toronto, Ontario M5W 1E1
(416) 597-7073

To date the response to our request for questions for Restart/Recovery has been disappointing. I would like to have a session at the San Diego Conference on this topic but I will need your input in order to do so. Please send or call your questions to me at: Bob Taylor, Information and Computer Services, Shell Canada, Ltd., P.O. Box 400, Terminal A, Toronto, Ontario M5W 1E1 (416) 597-7073.

Software AG Offers New & Revised Classes in 1979

Roy Wood
Vice President, Education
Software AG of North America

Software AG's 1978 training program was very successful. We held 107 classes and taught 1,769 people. This represents a 35% increase in classes and a 64% increase in students over 1977. Not only was public class attendance up from last year, but the number of classes held nearly doubled.

During the year the Data Dictionary System was released and incorporated into the classes. More emphasis was placed on ADAMINT programming in the Using ADABAS Class instead of direct call programming. Besides the usual upgrades to class material, several new classes were introduced and well received:

DBA — Technical Functions
DA — Administration and Control
Design Workshop
ADACOM Programming
Com-plete Application Programming

Judging from the initial registrations, 1979 will certainly surpass 1978. We plan to introduce many new classes. These classes are listed below along with the planned dates and location where it is known. Prior to each course an announcement will be published to all our users with more detail such as price, outlines, etc.

New Classes 1979

ADABAS Version 4 classes:
Concepts and Facilities . . . . 1 day
Internals . . . . 2 days
Com-plete Internals. . . . . 3 days
Natural Programming . . . . 2 days
ADABAS Design . . . . 3 days
   (Using the relational
   methodology)

The new "Data Administration and Control Seminar" taught by DBD Systems has been revised and will be offered as follows:

DATES	LOCATION
March 7-9	Reston
April 9-11	NYC
May 9-11	San Francisco
June 6-8	NYC
July 23-25	San Francisco

Watch for new education brochures which describe all these classes.

Vote Soon on Revised ADAGROUP Constitution

Bob Cole, ADAGROUP Secretary, recently forwarded copies of a revised Constitution for the International ADABAS Users Group to Regional Representatives for their comments. He is now bringing all comments together and producing a proposed new constitution. The proposed Constitution will be sent along with a ballot to all ADAGROUP members during March. To be counted, ballots must be returned by the end of April. The results of the balloting will be announced at the San Diego Users Conference.

New ADABAS Users Around the World

Australia

Dulux Australia Limited
11 Glenvale Crescent
Mulgrave, Melbourne
Victoria, Australia

Technical Contact:
   Mr. Bob Briggs
   (03) 561-4100

Software: ADABAS

Hardware: 3031

Operating System: VS1

Application: Order Processing

National Library of Australia
Canbera AA.C.T.
Australia

Technical Contact:
   Mr. Chris Hannan
   (062) 62-1111

Software: ADABAS

Hardware: 370/148

Operating System: VS1

Teleprocessing System: CICS

Application: Library Network w/ Washington Library Network Software

Middle East

National Insurance Institute
Head Office
13, Weizmann Avenue
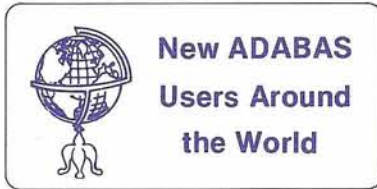Jerusalem, Israel

Technical Contact:
   Mr. Igal Ben-Shalam
   02-52811

Software: ADABAS

Hardware: 370/3031

Operating System: VM/CMS VS1

Teleprocessing System: CICS

(Continued from page 10)

North America

Sacramento County
Data Processing Department
700 H Street
Sacramento, California 95814

Technical Contact:
    Mr. Steve Clark
    (916) 440-6301

Installation Date: December 1978

Software: ADABAS

Hardware: 370/145

Operating System: VS1

Teleprocessing System: Com-plete

Application: Law Enforcement System

State of North Dakota
Central Data Processing
State Capital
Bismarck, North Dakota 58501

Technical Contact:
    Mr. Jim Heck
    (701) 224-3190

Installation Date: January, 1979

Software: ADABAS

Hardware: 370/158

Operating System: VS1

Teleprocessing System: CICS

Cooper Energy Services
West Chestnut Street
Mt. Vernon, Ohio 43050

Technical Contact:
    Mr. Jim Goughenour
    (614) 397-0121

Installation Date: April, 1978

Software: ADABAS

Hardware: 370/158

Operating System: VS1

Teleprocessing System: Com-plete

Applications: Manufacturing Application — Master
        Scheduling; Reg. Planning

West Publishing Company
50 West Kellogg
St. Paul, Minnesota 55102

Technical Contact:
    Mr. Jerry Peterson
    (612) 228-2738
    Mr. Jim Fulford
    (612) 228-2573

Software: ADABAS

Hardware: 370/158

Operating System: MVS

Teleprocessing System: INTERCOMM

Application: Law Book Processing; Case Card File;
        Digest System

Mayflower Corporation
9998 Michigan Road, P.O. Box 107B
Indianapolis, Indiana 46206

Technical Contact:
    Mr. Donald Barnett
    Mr. Vance Zartman
    (317) 299-1000

Installation Date: February, 1979

Software: ADABAS

Hardware: 370/158

Operating System: VS1

Teleprocessing System: Com-plete

Application: Equipment Mgmt; Order Mgmt; Traffic Systems

Houston Oil & Minerals Corporation
242 The Mail Building
1212 Main Street
Houston, Texas 77002

Technical Contact:
    Mr. Bill Bliss, DBA
    Mr. Paul Nugent, TP Systems
    (713) 651-3800

Installation Date: August, 1978

Software: ADABAS, Com-plete, Natural

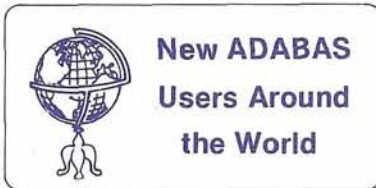Hardware: 370/148

Operating System: VM/VS1

Applications: Accounts payable using the MSA package
with on-line data entry; General Ledger; and
Oil & gas related applications

Keep Your Address Current

With all activities coming up, please ensure that the User Group has your current address. This will be of particular concern to European users to whom we would like to mail directly rather than through Darmstadt. Send any address changes to either your regional representative or Steve Greaves in Reston.

Europe

Gulf Oil
2 Portman Street
London

Technical Contact:
Mike Vandongen-DA Manager
B. Foster — Tech Support Manager
(1) 493-8040

Installation Date: October, 1978

Software: ADABAS

Hardware: 370/148, 3350

Operating System: VM370

Teleprocessing System: TASK/MASTER

Barclays Bank
Radbroke Hall
Knutsford, Cheshire

Technical Contact:
Migel Packer ext. 2862
Rob Harwood
(565) 3888

Installation Date: January, 1976

Software: ADABAS

Hardware: 2 x 370/168

Operating System: MVS

Teleprocessing System: TSO

Nippon Oil Seal
RAI - VIA Cernaia,
33 - 101000 Torino
Italy

Technical Contact:
Mrs. Piera Basso
011/57101

Software: ADABAS

Hardware: 370/158 and 145

Operating System: OS/VS1-VM

Consorzio Piemontesse Di Informatica
Corso Unione Sovietica 21
10100
Torino
Italy

Technical Contact:
Mr. Bruno Mazzoni
011/359279

Software: ADABAS

Hardware: 370/158, 3031

Operating System: OS/VS1

Cassa Di Risparmo DI Genova E. Imperia
Via Cassa DI Risparmio, 15-16123 Genova
Italy

Technical Contact:
Mr. Giorgio Loy
010/20911

Installation Date: January, 1979

Software: ADABAS

Hardware: 370/158, 3031

Operating System: OS/VS1

Gruner "JAHA AG" Co.
Druck-und Verlagshaus
Zentrale DV UND ORG
Alsterufer 1
D-2000 Hamburg-36

Technical Contact:
Herr Dr. Ing. Hoppe-Manager
Herr Spohr - ABT. ZDS
040/41181

Software: ADABAS

Hardware: 370/155, 3031

Operating System: OS/VS1

Teleprocessing System: Com-plete

Application: Subscriber Supervision

Druck-und Verlagshaus Frankfurt AM Main GMBH
Frankfurter Rundschau
Grosse Eschenheimer Strasse 16-18
D-6000 Frankfurt/Main-1

Technical Contact:
Herr Fraese-Manager
0611/21991-536

Software: ADABAS

Hardware: 370/135

Operating System: DOS/VS

Teleprocessing System: CICS

Application: Subscriber Supervision in Dialogue

Koelner Stadtanzieger
M. Dumant Schauberg GMBH "Co. KG
Exp. Der Koelnischen Zeitung
Breite Strasse 70
D-5000 Koeln-1

Technical Contact:
Herr Huelsmann
0221

Software: ADABAS

Hardware: Siemens 7.738

Operating System: BS1000

Application: Subscriber Supervision Online; Sale
Information System

New ADABAS Users Around the World

South America

Telomig
Telecommunica & OES Minas Gerais S/A
Praca Miltom Campos, 16
Belo Horizonte-M.E.

Technical Contact:
 Helvecio Alvim
 (5531) 221-8638

Software: ADABAS

Hardware: 370/145

Operating System: DOS/VS

Banco Lar Brasileiro S/A
Rua Do Ouvidar, 9811
Rio De Janeiro-M

Technical Contact:
 Tacio Rodriques De Carvalho
 (5521) 244.6112 R2

Software: ADABAS

Hardware: 370/148

Operating System: DOS/VS

CPDERJ
Fundacao Centro De Processamento De Dados Do
 Estado DO Rio de Janeiro
RUA SAO Francisco Xavier
524 Rio de Janeiro RJ

Technical Contact:
 Wagner Granja Ribeiro
 (5521) 284-8322 R.2512

Software: ADABAS

Hardware: 370/158

Operating System: OS/SVS

Teleprocessing System: Com-plete

CESP
Companhia Energitica De Sao Paulo S/A
AV. Paulesta
2064/2086
Sao Paulo-SP

Technical Contact:
 Joan Carlos Serran
 (5511) 285.3111 R. 129

Software: ADABAS

Hardware: 370/148

Operating System: OS/VS1

Teleprocessing System: Com-plete

Eletrosul
Centrais Eletricas Do SUL DO Brasil S/A
Rua Deputado EDU Vieira
Florianapolis-SC

Technical Contact:
 Alvaro Franco Porto
 (55482) 33-0022 R. 7290

Software: ADABAS

Hardware: 370/148

Operating System: OS/VS1

Far East

K. Hattori & Co., Ltd
1-10 2-chome
Kajimachi, Chiyoda-Ku
Tokyo 101 Japan

Technical Contact:
 Mr. Yoshio Yokwo/System #1 Section
 03-256-2111

Installation Date: September 29, 1978

Software: ADABAS

Hardware: 370/148

Application: Overseas physical distribution system

Port of Singapore Authority
EDP (Finance)
P.O. Box 300
Singapore

Technical Contact:
 Mr. Yee-Tang Jee Hong
 2217711/Ext. 522

Software: ADABAS

Hardware: 370/145

Operating System: DOS/VS

Teleprocessing System: CICS/VS (VTAM)

Application: Container Handling Information

Africa

Prudential Assurance Company Limited
Prudential Assurance Building
94 Main Street
Johannesburg
2001
South Africa

Technical Contact:
 Ken Ernstzen

Installation Date: October, 1978

Software: ADABAS

Hardware: 370/148

Application: On-line Life Insurance System

TRAINING SCHEDULE — MARCH - AUGUST 1979

MONTH \ CLASS	USING ADABAS	ADABAS INTERNALS	DBA	DESIGN	ADACOM	Com-plete APPLICATIONS WORKSHOP	Com-plete INTERNALS	DATA ADMINISTRATION and CONTROL SEMINAR (by DBD Systems)
MARCH	SAN FRANCISCO Sheraton Palace March 12 - 15	SAN FRANCISCO Sheraton Palace March 22 - 23	SAN FRANCISCO Sheraton Palace March 19 - 20	SAN FRANCISCO Sheraton Palace March 21	SAN FRANCISCO Sheraton Palace March 16			RESTON March 7 - 9
APRIL	RESTON Sheraton INN & International Conference Center April 17 - 20	RESTON Sheraton Inn & International Conference Center April 25 - 26		RESTON Sheraton Inn & International Conference Center April 24	RESTON Sheraton Inn & International Conference Center April 23	RESTON Sheraton Inn & International Conference Center April 2 - 6		NEW YORK Sheraton St. Regis April 9 - 11
MAY	NEW YORK Sheraton St. Regis May 14 - 17	NEW YORK Sheraton St. Regis May 24 - 25	NEW YORK Sheraton St. Regis May 21 - 22	NEW YORK* Loen's Warwick May 9 - 11 SAN FRANCISCO* Sheraton Fisherman's Wharf May 14 - 16	NEW YORK Sheraton St. Regis May 18			SAN FRANCISCO Sheraton Palace May 9 - 11
JUNE		SAN DIEGO Town & Country Hotel June 11 - 12		NEW YORK Sheraton St. Regis May 23		RESTON Sheraton Inn & International Conference Center June 18 - 22	RESTON Software AG Sheraton Inn & International Conference Center June 25 - 27	NEW YORK Sheraton St. Regis June 6 - 8
JULY								SAN FRANCISCO Sheraton Palace July 23 - 25
AUGUST				NEW YORK Sheraton St. Regis August 8 - 10 LOS ANGELES Sheraton Town House August 13 - 15				

*by Learmonth & Burchett Co.

PRESIDENT'S MESSAGE

Roy Decker
Manager of Technical Support
Foremost Insurance Company

I hope by now everyone is fully recovered from the holidays and the woes of year end processing. We have certainly been busy at Foremost. In mid-January we installed a 4 meg 168 to replace our existing 2 meg 158. It feels really good — somewhat like letting your belt loose after a big meal. We can finally breathe again. It had gotten to the point on the 158 that our daily processing cycle was taking more than 24 hours to complete. Considering that our commitment to our users was to turn the processing around in 14 hours time, things were getting tight. What with the 168 we've got that back down to about 6½ hours. Oh, to have been able to make the switch last October.

I am also pleased to report that we have installed Com-plete general release 3 — from a release tape I might add. Through the diligent efforts from our system programming staff and the ready assistance from Software AG via telephone we were able to implement release 3 over the course of two weekends. The release tape made it easy for us to install on our own time table with our staff rather than trying to crash it in overnight to accommodate the schedule of out-of-town Software AG representatives.

As you know, February 23 was the cut-off date for submitting your Change and Enhancement requests to Don Sickle, our Change and Enhancement chairman. I trust each of you availed yourself of this opportunity to make known what you see as your needs to make Com-plete an even better product. Our goal is to have the Change and Enhancement request edited and compiled and back to the users for priority voting by April 13 so that Software AG will be able to review and respond to them prior to the conference in June.

Speaking of the conference, the Call for Papers has been issued along with Software AG's award notification. With an incentive such as this we should have no trouble packing our conference agenda with some really good user presentations. Be sure to get your topic outline to Steve Greaves by March 15 and your completed papers by May 1 in accordance with the procedures outlined in the Call for Papers.

MVA is a hot topic with a lot of users I know. Perhaps as in my case, Com-plete is on the critical path to migrating to MVS. In lieu of a user profile list, I would like to act as coordinator of user contact in finding those users which are contemplating the migration to MVS. In this way we can begin talking among ourselves in sharing plans. Strategies, and concerns in the conversion process. We can also present a common front to software to identify our requirements as to the availability of MVS support for Com-plete. I should think MVS would provide an excellent discussion during the Conference.

SAN DIEGO 79

2nd Com-plete Conference Slated for San Diego

The Second International Com-plete Users' Conference promises to be an informative and educational experience for all who attend.

The conference will take place June 11-12, 1979 at the Town and Country Hotel and Convention Center in San Diego, California. The agenda is still in the planning stage, but there will be sessions on Change/Enhancement Requests, Com-plete futures, Performance, Security and Accounting, and Utilities.

If you wish to make a formal presentation, Software AG offers these incentives: a $100 speaker's bonus and a $1000 Best Speaker Award. To make a formal presentation, send an abstract to Steve Greaves, Software AG, Reston before March 31. The paper itself must be completed and sent to Steve Greaves before May 1. For a detailed description of how to make a presentation, see the related article on page 1 of the ADABAS Newsletter.

To attend the conference, please complete the enclosed Registration Form and return to Software AG before May 12, 1979.

Once again, remember to take part in the Change/Enhancement process, User presentations and other User communication vehicles such as this newsletter. After all involvement and participation are the ingredients which will make our group meaningful to each of us. I look forward to seeing you in June.

International Com-plete
Group Representatives

Roy Decker, President
Manager of Technical Support
Foremost Insurance Company
P.O. Box 2450
5800 Foremost Drive, S.E.
Grand Rapids, MI 49501
(616) 942-3369

Don Sickle, Change and Enhancement Chairman
North American Life Assurance Company
105 Adelaide Street W.
Toronto, Ontario M5H 1R1
(416) 362-6011, ext. 444

Jack Plowman, Security and Accounting Chairman
Systems Programmer
Evans Products
1411 S.W. Morrison
Portland, Oregon 97208
(503) 222-5592

Jeff Chroman, Utilities Chairman
Data Base Administrator
City National Bank
1801 W. Olympic Boulevard
Los Angeles, California 90006
(213) 480-7308

Tom Sloggett, Performance Chairman
Software Supervisor
Dow Chemical
14955 Sprague Road
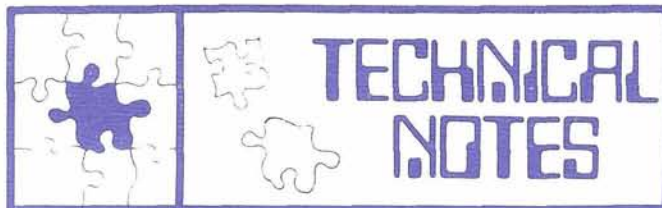Cleveland, Ohio 44136
(216) 826-6206

Alan Routhier, Newsletter Coordinating Editor
Systems Programmer
County of Sacramento
700 H Street
Sacramento, CA 95814
(916) 440-6301

*UM.essage From The *UEDIT.or

Alan Routhier
County of Sacramento

In each issue of the newsletter I try to include several articles which describe user experiences and which show how users solve their application problems by using Com-plete. I hope that in sharing these experiences with you it may encourage others to try similar applications or it may outline a solution to a problem you are having. If the article does not provide enough detail for you and you would like more information, remember that your fellow user is only a telephone call away and would like very much to talk with you.

I just read in the latest Datapro Reports that Com-plete has over sixty installations, and I have a feeling that many of these people are having great success using Com-plete. As a fellow user and editor of the Com-plete newsletter, I encourage each of you to share your experiences and concerns with the rest of us. We will all benefit by it and it is not that difficult to do. All that you need to do is submit a rough draft of an article to me and I will get it published. As you may have noticed, I have been able to cajole several articles for each issue of the newsletter out of the people I work with. But our experiences and knowledge are necessarily limited. Remember that this is your newsletter, not mine, and that I will make it as easy as possible for you to get into print (worldwide, no less).

TECHNICAL NOTES

Almost All Users
Now Running Version 3

Larry Jones
Director of Com-plete Development

At the time this article was written, every existing North American user, and all foreign affiliates have received Version 3. Almost all users around the world have made the transition and are now running it in production mode.

The items receiving the most enthusiastic comments are utilities, stability, and documentation.

Almost every existing utility was enhanced with Version 3, and the *UPDSML utility was completely rewritten (and renamed to *UPDS). In addition, 2 new utilities were written: *UDS, which is capable of performing almost all the functions of the IBM utilities IEHPROGM and IEHLIST; and *UED, which is our line-oriented editor. We're sure that, by this time, you're all familiar with our new and enhanced utilities, so we won't go into any detail here describing them.

The increase in stability has mostly come from better DASD error recovery, which was one of our main objectives in Version 3. Prior versions had recovery procedures which were adequate in most situations, but would sometimes fail when Com-plete's data sets resided on disk packs which consistently experienced successive failures. This was due mostly to the fact that (in an attempt to achieve maximum efficiency) many of Com-plete's channel programs are quite complex, making their error recovery even more complex. In Version 3, we finally "bit the bullet" and wrote extensive procedures for recovery, and it seems to have paid off.

Although the final documentation was a little late in getting out, the feedback we've been getting is that it was worth the wait. The two manuals which seem to be getting the most comments are the Installation Manual and the System Programmer Manual, both of which are completely rewritten by William Trueblood for Version 3.

The Installation Manual is extremely useful because it has made it possible for many of our existing Version 2 users to install Version 3 on their own. This means that we haven't had to tie up our support staff and subsequently we've been able to keep more people available for answering questions and fixing problems.

The System Programmer Manual has also helped our support staff, because it answers most of the user's questions, making it unnecessary for them to call us. In fact, one of our affiliates (Israel) had previously requested that we schedule a few days for their technicians to meet with us to discuss several questions they had about Version 3. After they received the rough draft of the System Programmer Manual, they telexed us to cancel the meeting because it had answered all their questions.

Some negative feedback has come from our users who were expecting features which were originally scheduled, but not initially released with Version 3. These items are PANVALET support for *UED and *UEDIT, and 2741 terminal support. As we approached our release date. it became apparent that

Com-plete, Datavote Support Online Election Results

Alan Routhier
County of Sacramento

Twice a year the County of Sacramento (pop. 750,000) conducts county-wide elections. The contests being voted on range from Special District, City, and County seats and measures to State and Federal offices and state-wide propositions (remember Proposition 13?). Since 1970, the County has been using automated ballot counting system (Datavote, marketed by Diamond International Corp.) which uses voter punched cards. In California the polls close at 8:00 p.m., at which time we count all the absentee ballots which have been received by election day. Between 9:00 and 9:30 p.m. we begin counting the ballots as they arrive from the precincts, and we usually finish counting ballots between midnight and 1:00 a.m.

Until the November, 1978 election, the results were reported by printing summary reports periodically throughout the evening, xeroxing them, and then distributing the copies to the press and public who congregate in the County Administration building cafeteria. The time elapsed between commanding the computer to print a summary report and handing out the copies is about 15 to 20 minutes. Precinct reports are printed in precinct order after the ballots are counted.

It is common knowledge that the press desires to report up-to-date election results over the airwaves on election night. Thus, we thought that we would supplement our normal election reporting with results displayed on a CRT terminal. The program which runs under Com-plete and which displays the results was not difficult to write. The Datavote System keeps the individual precinct and cumulative summary results on a pre-formatted ISAM file which is updated each time a precinct is successfully counted. It also provides an interface routine which reads the ISAM file (keyed on precinct number with a special key for summary results) and presents the results in three different formats. Therefore all the program needs to do is control the conversation with the terminal operator and place the data in the desired format on the screen.

On election night we placed a CRT terminal operated by a trained clerk in the cafeteria with the press and public. We also placed two terminals in private offices where clerks answer incoming phone calls and also report results to the Secretary of State's Office. We knew the terminals would be interesting as a novelty at least, but we were unsure how much practical use would be made of them. People were accustomed to the summary reports which report all contests (72 of them for this election) whereas the terminals display one contest at a time. However, the results on the terminal are literally up-to-the-second as the precincts are counted, and response time is fast (1 to 2 seconds on local 3270-type terminals).

At the end of the evening we were pleasantly surprised to see how the terminals were used. As in most human affairs, a few of the contests drew most of the interest, while the others were for the most part ignored. And to those people watching these contests in the cafeteria, this was as exciting as a horse race. Once they realized how current the results were, people (especially reporters) were stacked three deep around the terminal to watch the results as they changed with each flash of the screen. The terminal operator was able to successfully display everyone's request since they mainly consisted of a small sub-set of all the contests. Similarly, when people discovered that precinct results were available at the terminal, key precincts were displayed to help predict the winners in certain contests. People also enjoyed seeing how their own precinct voted on various issues.

One contest for a County Supervisor's seat was especially interesting because the two top candidates were very close. They changed places several times during the evening before one candidate finally pulled ahead at the end of the count. The people handling phone calls also found that the terminal displays were more convenient to use than the listings, and that the people who they talked to appreciated the fact that the results were current. The printed reports which still appeared every half hour satisfied most people's curiosity about the remainder of the election.

The result of this experiment is that on-line election results will be a permanent feature at the County of Sacramento in the future. The local news media and the Secretary of State's office have asked for the capability to dial into our system during subsequent elections. We will definitely supply more terminals for people to use in our cafeteria and in answering telephone inquiries.

Because of the nature of elections and the publicity they generate, our simple application helped promote the use of on-line systems in the County. The cost of this system was very low, less than one man-month was spent designing and programming it and we used terminals that were normally used by our staff for on-line program development (we just needed to run a few cables). We now have in the design phase an on-line voter registration system which will utilize ADABAS as well as Com-plete. Election laws and requirements change very rapidly and the County Registrar of Voters needs to be able to react to them quickly as well as provide fast and efficient service to County voters. Multnomah County in Oregon (another Com-plete and ADABAS user) is developing such a system (including on-line election results) and they are sharing their experiences with us.

Alan Routhier
County of Sacramento

TECHNICAL NOTES

these two items were not going to be ready, so we had to make a decision. We decided that it was more important to get the other features to our users, so we released Version 3 without these items. The PANVALET interface is currently being tested at Beta test sites in Germany, and we're now looking for a couple of Beta test sites in the U.S. Any Volunteers? 2741 terminal support will begin Beta test within the next week or so, and should be released soon.

One thing that some of you may not be aware of, is that, starting with Version 3, we're making an effort to allow the transferrability of application programs from one user site to another, without recompiling or re-linkediting. The problem we have had in the past is that each site has a different SVC number which is used to communicate with Complete. This meant that in order to transfer an application, all programs which used the MCALL MACRO had to be reassembled, and all high level language programs had to be re-linkedited. To solve this problem, we've implemented what we call a "Pseudo SVC", which is currently distributed as the default SVC for the MCALL MACRO and the high level language interface routines. This SVC (200) is not a "real" SVC because the operating system doesn't actually know that it exists (no IGCDDXXX routine in SVCLIB). However, Com-plete will trap it and honor it as though it were the "real" SVC.

We know that some of our users have some excellent applications which might be of interest to other users, and we want to do our part to get the exchanges going.

We hope that users are as happy with Version 3 as we on the development team are.

Strict Security System Serves Sacramento

Don Brown
County of Sacramento

Certain on-line application systems have stringent security requirements, especially if the data consists primarily of personal information on people. Examples of such data would be medical history information, criminal history information, and welfare case file information. The on-line nature of these systems makes this data readily accessible. It is kept on disk packs which can be read at any time by batch as well as on-line programs, and it can be presented in an easily understood format on terminals which are usually scattered throughout an organization.

One of the basic concepts of security is to assign the responsibility for different parts of a system to different groups so that no one has enough control or knowledge of the system to be able to access unauthorized data without the collusion of two or more people. This reduces the probability of a security violation. At our installation, those who work with on-line systems belong to one of four groups: computer operations, technical (software) services, systems analysis and programming, and finally the end user groups.

One of these user groups had a need for an on-line system with sensitive data that required us to use nearly all the security facilities that Com-plete provides. We also had to implement additional security which gives the user control over who can access the data, from where (at which terminal), and when. The basic security requirement we had to meet in this application was that only specifically authorized people would be able to view the data, a more restricted group of people would be able to update and delete the data, and all accesses to the data for whatever reason had to be logged.

The on-line disk data files are protected by the DASD security feature of Com-plete. This is maintained by the technical services group. Batch update and reporting of the data is under control of computer operations since they are required to 'Batch' and 'On-line' the disk files (the user is also aware that this occurs since the files are not then available to the on-line system which is in use twenty-four hours a day, seven days a week). Additionally, the data on the disk files (and thus on the backup tapes) is encrypted with a sophisticated algorithm which is only known to the application programmers (source programs for the system are kept on a heavily controlled PANVALET Library). Execution of the on-line program is restricted to specific TID's and to specific USERID's by various Com-plete security exits which are written by the technical services group. Similarly, access to any SD files (and the UDUMP file) used by this system is controlled by Com-plete security exits.

In addition to the above preventive measures, the application itself uses the CAPTURE function to write encrypted activity records to the log tape. This information is stripped off the tape and reported to the user daily, who then checks it for unauthorized or suspicious use of the system. Any security violations detected by DASD security or the security routines built into the application itself are immediately reported to the user via both a CRT and hard copy terminal in his area.

The application security routines which give the user control over who, where, and when his data is accessed on-line is implemented with the user of a control SD file. This file contains records which relate a user name with his password and three capabilities: control, inquire and update. Other records relate TID with these three capabilities. Control capability allows a user to update the control SD file. Inquire capability allows a user to inquire into the data files. Update capability allows a user to add, change, or delete data records on-line (a person may add a record without inquire capability, but he must be able to inquire in order to change or delete portions of a record).

A person is required to identify himself each time he accesses data relating to a different subject (which may consist of several records displayed in a series of screens). He does this by entering his password in a non-display field on the first (key) screen of a transaction. A violation is logged if the password is not in the control SD file or if a function is requested and the capability has not been granted to the user or the TID. In addition, for users with passwords on the file, the user record is flagged and the user is totally locked out of the system until a person with control capability investigates the situation and removes the flag.

In order to prevent this system from totally locking out the user, there must be at least one control user and TID. The system will not allow a user's or TID's control capability to be turned off if it is the last one. In addition, the system will allow a control user to turn off his own security violation flag (although the violation is still logged). The control SD file is protected from access outside of the system by a Com-plete exit, and the records on the file are encrypted.

These security routines allow the user to control who accesses and updates the data and from which TID, and it also permits him to determine when this can occur by manually manipulating the flags in the control SD file. Part of this capability would be provided through the Com-plete log-on facility and security exits. However, these facilities control all on-line systems. Therefore, use of ULOGM and security exits are restricted to the technical services group which would not allow the user to have the control he desires. Also, this method is faster than the normal log-on, log-off procedure in a situation where many users walk up and share a few terminals. All they do is enter a password on the initial screen along with the transaction information when they begin and press a PF key to return to the initial screen when they are done.

In order to test this system, a set of test files are used since the programmers are not normally allowed to see the production data. The programs are written to use on two sets of files—production or text. The files are selected at execution time based on the program name (which is retrieved, along with the TID number, using the GETCHR function). Thus once a program in this system is tested, it can quickly be put into production by re-naming and re-cataloging it.

New Com-plete Users Around the World

(Continued from page 18)

Dallas County Community College District
1931 North Industrial Blvd., Suite 127
Dallas, Texas 75207

Technical Contact:
  Mr. Paul Jackson
  (214) 746-2141

Software: Com-plete/ADABAS

Hardware: 370/148

Operating System: SVS

Applications: On-line student registration system

Evans Products
P.O. Box 3295
Portland, OR 97208

Technical Contact:
  Mr. Jack Plowman
  (503) 222-5592

Installation Date: February, 1978

Software: Com-plete

Hardware: 360/65

Operating System: MVT

White Stores
3910 Callfield Road
Wichita Falls, Texas 76308

Technical Contact:
  Mr. Tommy DuPriest
  (817) 692-3410

Installation Date: November, 1978

Software: Com-plete

Hardware: 370/148

Operating System: VM/VS1

Applications: Fixed Assets

Mayflower Corporation
9998 Michigan Road
P.O. Box 107B
Indianapolis, Indiana 46206

Technical Contact:
  Mr. Donald Barnett
  Mr. Vance Zartman
  (317) 299-1000

Installation Date: February, 1979

Software: Com-plete

Hardware: 370/158

Application: Equipment Mgmt; Order Mgmt; Traffic Systems.

Massachusetts Institute of Technology
77 Mass. Ave.
Rm-12-190
Cambridge, MA 02139

Technical Contact:
  Marilyn McMillan
  (617) 253-1347

Software: Com-plete

Hardware: 370/168

Applications: Alumni Fund Raising

Cooper Energy Service
West Chestnut Street
Mt. Vernon, Ohio 43050

Technical Contact:
  Mr. Marvin Blair
  (614) 397-0121

Installation Date: January, 1979

Software: Com-plete

Hardware: 370/158

Operating System: VSI

CESP
Companhia Energitica de Sao Paulo S/A
AV. Paulesta
2064/2036
Sao Paulo-SP

Technical Contact
  Joan Carlos Serrano
  (5511) 285-3111 R.129

Software: Com-plete

Hardware: 370/148

Operating Systems: OS/VS1

CHANGE/ENHANCEMENT REQUESTS
Don Sickle
North American Life Assurance Company
105 Adelaide Street West
Toronto, Ontario M5H 1R1
416-362-6011

The following schedule has been set-up for Change/Enhancement Request Processing this year. The submission deadline is February 23, 1979. Following this the distribution to the users, along with the ballot, will take place by March 16, to be returned to me by April 13. The results are tabulated and sent to Software A.G. for analysis and returned to the users by May 23, in lots of time for the Conference. We now have 38 requests for releases 1 and 2 but none for release 3. All requests submitted so far will be processed even though many may be already satisfied by release 3. This serves to make sure none are omitted and also tests our method of processing and the timing of the various steps in the process. If you have requests after the deadline, send them anyway. They may not be received in time to process them formally or have them on the ballot but there may be a way we can have them discussed informally.

I feel we have to do this due to the fact that Release 3 was so late in getting out and I feel both you and Software A.G. would appreciate the opportunity to make your concerns known before spring 1980. So keep them coming and we hope to see you in San Diego.

Dates to Remember

Formal Conference Presentations:
* abstract due — March 31
* paper due — May 1

Conference Registration:
* registration forms due — May 11

Change/Enhancement Process:
* ADABAS
  * Ballots due — April 1
* Com-plete
  * Ballots due — April 13

ADAGROUP Constitution Revisions
* Ballots due — April 30

May Newsletter
* copy due — April 1

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