Software AG International Users' Group Newsletter

Contents

Las Vegas Conference

The 10th International Software AG Users' Conference was held May 9–13 at the Dunes Hotel in Las Vegas, Nevada. For four days, users of Software AG products attended product presentations, intensive tutorials on product application and usage, workshops hosted by Special Interest Group (SIG) chairpeople, and user presentations.

Highlights of the Conference included guest speakers Capt. Grace Hopper, James Martin and time management expert Dr. Merrill Douglas. Conference attendees also had an opportunity to hear from Software AG of North America's President John Maguire on corporate direction and the need to consolidate the development activities of SAGNA by moving Development from Seattle to headquarters in Reston. Development for North America will be placed in a newly formed Technology Division.

The president of the International Users' Group, Alan Routhier of the County of Sacramento Data Center in California, spoke on the importance of continued user participation and support of SAGGROUP. He emphasized that the Users' Group serves to help users share ideas and information. To be a success it requires active support from all.

The Executive Committee of the Users' Group met throughout the Conference to review the activities of the past year and make plans for the coming one. Topics such as product development, maintenance releases, change/enhancements and future product directions were addressed during the week. Among other items addressed by the Executive Committee: The Southeast Asian Region, consisting of Singapore, Hong Kong, and the Philippines, was formally granted regional status. The

Far East Area's name was changed to the Asian Area, and the Far East Region was changed to the Japan Region. Kansas was moved from the Southwest Region to the Midwest Region. The next Executive Committee meetings will be held the first part of November.

Results of the Conference Evaluation Questionnaire for Las Vegas show clearly that the

Conference was a great success and valuable to those who attended. Conferees agreed that the major highlights at Las Vegas were the keynote speakers, SAGNA tutorials and the Software AG staff from both North America and Germany. Companions praised their program as well. It seems that the "Great Expectations" of the 860 Conference attendees were well-satisfied.

"The Mayor of Las Vegas presents a key to the city (not the slots) to John Maguire."
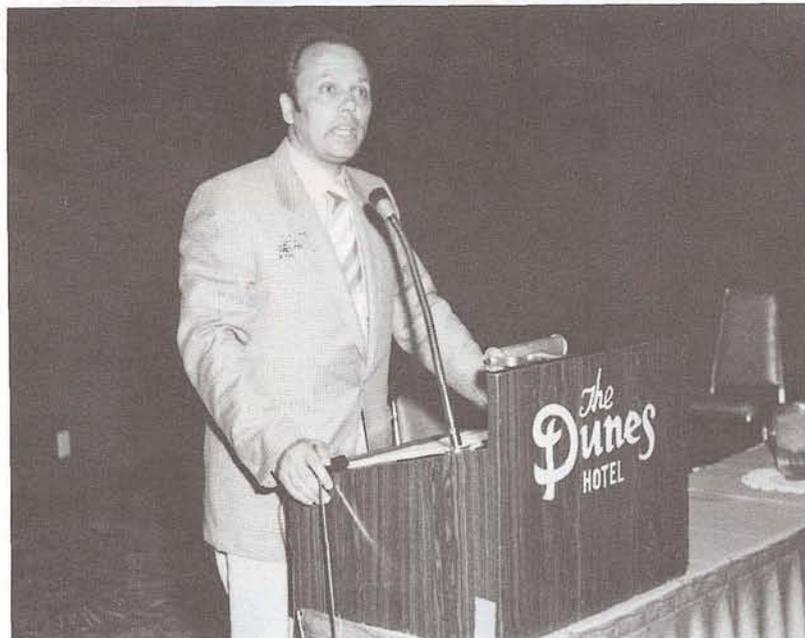
"Peter Schnell, President of Software AG Darmstadt, speaks on Reflective Data Bases."

Users' Group News

"Alan Routhier, former SAGGROUP President."

"Peter Page' of Software AG, Darmstadt, answers questions on NATURAL."
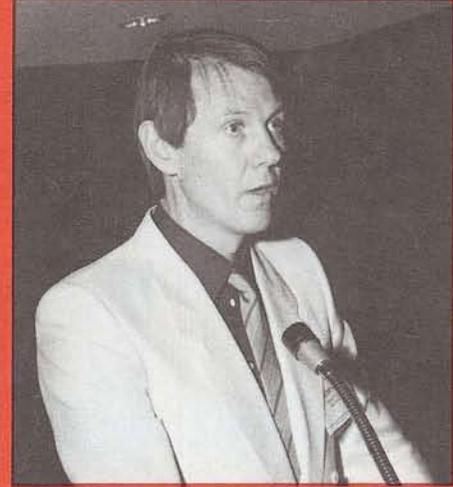
"Users' Group Liaison Jim Crawford and Corporate Meeting Planner David Schmidt."

"SAGNA's Ed Forman."

Great Expectations

"John Colthar, R. J. Reynolds."

"Capt. Grace Hopper."
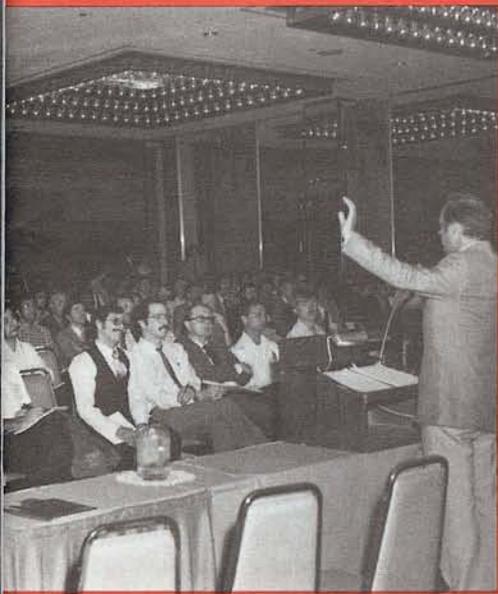
"Va Nga Do teaching a tutorial."

"ADABAS Change/ Enhancement Session."
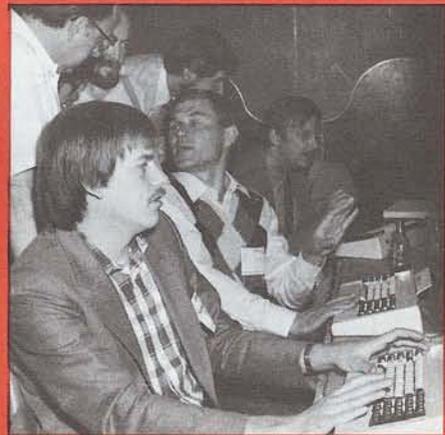
"A busy demo room."

"SAGNA Conference Staff at opening night." (l. to r. Sharon Chisolm; Ann Todd; Jim Crawford; Lynn Smith; Barbara Kern and Courtney Brooks.)

The Dunes HOTEL

"Bob Becker of Foremost Insurance with SAGNA staff."

"Standing room only."

"Greg Neunaber, University of Texas at Austin."

"User Presentation in progress."

"SAGNA's Grant Osasa leads the Banquet charge."

Conference Proceedings/ Papers Available

Proceedings from the 10th International Users' Conference are available for purchase through Software AG of North America's Publications Department. The Proceedings contain papers presented at the recent Conference. Cost for this publication is $50.00.

Papers are also now available for the following presentations given at Las Vegas:

• 'Reflective Data Bases' Peter Schnell, Software AG, Darmstadt;
• 'NATURAL as a Relational Model' Peter Pagé, Software AG, Darmstadt;
• 'Dynamic Database Selection and Access Security via COMPLETE' Roger Martin, International Airports Projects, Saudi Arabia.

These are also available through the Publications Department in Reston, Virginia.

President's Message

Jennifer Lee
The Aerospace Corporation

I would like to express my gratitude for the support so many of you kindly offered me at the Conference. The Executive Committee hopes to be able to accomplish a number of objectives this year. The Change Enhancement process was reviewed by the Executive Committee and a plan was developed to implement a number of improvements. The Technical Support Survey is being analyzed by a committee chaired by Michael Berman, who will compile the results of the analysis along with the committee's interpretations and recommendations for Software AG's response. A Product Review Committee is being formed to assist Software AG in reviewing product proposals. The procedures for nominating and electing officers and Product Representatives will be refined and a means of ensuring continuity on the Executive Committee is under consideration.

The Executive Committee is very much aware of the need expressed by sub-groups for enhanced visibility within the user group and for improved communications within the user community and with Software AG. One means of obtaining recognition is to form a Special Interest Group. The ADABAS product area recently welcomed the ADABAS VM Special Interest Group, which will be chaired by Timothy McGovern. The most effective means of communication within the user group is through the newsletter. Anyone desiring a forum for issues pertaining to special interests is encouraged to submit an article or letter to the newsletter through one of the editors.

Please contact me should you have user group concerns or suggestions. I may be reached by phone at The Aero-

space Corporation at (213) 615-4521. If I am out of the office, please leave a message for me to return the call. Unfortunately, phone support for my office is unavailable during the lunch hour between 11:30 a.m. –12:30 p.m. PST. I apologize in advance for any inconvenience you may experience in calling me and assure you I will return your call as soon as possible.

Jennifer C. Lee

Results of SAGGROUP Officer Election

Dian Odell
Evans Products

As a result of a constitutional amendment approved last year, the four SAGGROUP officer positions were filled by a membership-wide balloting for the first time this year. The Product Representatives had always been elected by ballot from all the users of the individual products, so this was not a change in this area. The procedure was a little shaky as we initiated the new processes of nominating candidates, getting candidate statements, mailing ballots, and receiving the returns, and it was all made doubly difficult by the international membership of SAG-GROUP and resultant communication delays. Of course, you can expect to see some changes in the particulars for next year, especially in improved and earlier time schedules, but the intent of expanding the user involvement in all facets of SAG-GROUP will remain very much in the foreground.

So now, the first once-through has been completed and the results are in. In all cases the balloting was very close, but the officers and product representatives for now through the end of the next annual Software AG user conference are:

President
Jennifer Lee, Aerospace
Corporation
Los Angeles, California, USA

Vice President
Brett Aubrey, TransCanada
Pipelines
Calgary, Alberta, Canada

Secretary
Dave Hawkins, City of Portland
Portland, Oregon, USA

ADABAS Product Rep
Bob Galley, Santa Fe Energy
Amarillo, Texas, USA

NATURAL Product Rep
Richard Judd, State of Alaska
Anchorage, Alaska, USA

COM-PLETE Product Rep
David Little, The Boston
Company
Boston, Massachusetts, USA

ADABAS-M Product Rep
Dick Gemoets, OMEX
Santa Clara, California, USA

To each of these persons we say "Congratulations!", and now on with the work of organizing and improving SAG-GROUP and its value to the users. To the other candidates and their installations, we say "Thank you for offering to help in this way"—we hope to have your continued support in other ways also. And to all of the others of you who nominated and voted and were a part of the process, we say thanks also because it will not work without you. SAGGROUP is what you make of it—increase your involvement and the value of the group to you and everyone else will also increase.

Registration Opens for Paris Conference

Registration for the 11th International Software AG Users' Conference in Paris has begun. The Conference will be held at the 'Palais des Congres' located in the heart of Paris and runs from October 19 through 22.

The Paris Conference offers a unique opportunity for users to exchange information and ideas while working closely with each other and Software AG in the spectacular setting of Paris in the fall.

The preliminary agenda for the Conference includes workshops on Restart/Recovery, Performance and Tuning for COM-PLETE, and Managing the NATURAL Environment. Tutorials

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USERS' GROUP   PARIS 82
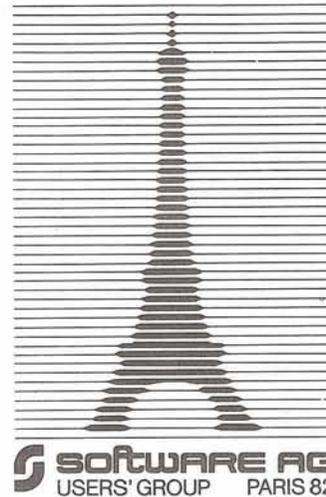
hosted by Software AG of Darmstadt cover Restart/Recovery, Debugging Tools and Performance and Tuning for ADABAS, NATURAL Techniques for new users and Advanced Techniques for the experienced, and COM-PLETE Performance and Tuning. Paris conferees will also be able to attend General Interest Sessions on a wide range of topics including "Reflective Data Bases" by Peter Schnell, "NET-WORK for Distributed Processing" by Peter Pagé, and presentations by other Software AG staff and users from around the world. All in all, some 30 sessions are scheduled along with an evening at 'Lido de Paris' and a 'Le Bistro' banquet

in the finest Software AG tradition.

Software AG of North America has selected a travel agency to assist North American users and North America's affiliates' users in making their travel arrangements and registering for the Conference. Users wishing to register or obtain additional information should contact:

Jim White, Coordinator
Software AG Paris Conference
Association Travel
    Coordinators
3128 M Street, N.W.
Washington, D.C. 20007-3775
202-333-1800

European users and affiliates of Software AG of Darmstadt should contact Darmstadt at the following address:

Paris Conference Registration
c/o Hilpertstrasse 20
D-6100 Darmstadt
Attn: Mrs. K. Rames
Tel.: 06151-84072
Telex: 4 197 104

Hotel reservations can be made through Association Travel or independently. A block of rooms has been reserved for the Software AG Conference at the following hotel:

Hotel Concorde-La Fayette
Place de la Porte des Ternes
F-75017 Paris
Tel.: 758.12.84
Telex: 650892

If you prefer another hotel or need assistance in making reservations in Paris, contact either Software AG Darmstadt or Association Travel Coordinators at the above addresses. Early hotel and Conference registrations are strongly encouraged as Paris will be very busy this fall and accommodations may be difficult to obtain. See you in Paris!

"ALL THAT JAZZ" Theme for '83 Conference

Preparations are well underway for "All That Jazz", the 12th International Software AG Users' Conference to be held June 5–9 at the Fairmont Hotel in New Orleans, Louisiana. Keynote speakers are being previewed and plans for Company and user presentations have begun. Both the Conference and Companion Programs are being enhanced based upon feedback from the Las Vegas Conference. The '83 Conference will once again give users the opportunity to meet each other, hear from industry and Company leaders, and work closely with Software AG to share ideas and learn about the products.

Registration materials for New Orleans will be mailed out early this fall, so get your toes tappin' and mark your calendar now to attend another great Software AG Conference—one which promises to be the most informative and enjoyable ever.

Call for Papers

The International Software AG Users' Group (SAGGROUP) invites its members to submit papers for presentation at the 12th International Software AG Users' Conference in New Orleans. The Conference offers a unique opportunity for users of Software AG products to present information on their individual systems and describe their use of the products.

Topics for the papers should focus on one of the major products. Suggested topics include but are not limited to the following:

ADABAS, ADABAS-M

Performance Monitoring and
    Tuning
File Design
Managing the DBMS
    Environment
Security
Data Dictionary
System Testing
Auditing
Multiple Data Bases
Restart/Recovery
Applications

COM-PLETE

Performance Monitoring
Tuning
Security
Applications

NATURAL

Programming Techniques
Training
Application Development
Managing the NATURAL
    Environment
Security
Interfaces
Case Study

Abstracts Due

A one- to two-page abstract or detailed outline is due for review no later than December 10, 1982. The purpose of the review is to determine the topic you are presenting, the type of audience you are addressing and the level of experience required to understand the materials. This will allow us to ensure variety in the presentations and assist in developing a preliminary agenda. The abstracts should be submitted to:

Users' Group Liaison
Software AG of North America,
    Inc.
11800 Sunrise Valley Drive
Reston, Virginia 22091

Important Dates:

Abstracts Due—
December 10, 1982;
Notification of Acceptance—
January 10, 1983;
Papers Due—
March 1, 1983;
Acknowledgement—
March 15, 1983;

CHANGE/ENHANCEMENT REQUEST FORM

Please forward completed requests to:

Product
_____

Mr. Peter R. MacRoberts
Pennzoil Company
Pennzoil Place
P.O. Box 2967
Houston, Texas 77001

Category
_____

Title of Request

Complete Description of Change/Enhancement (please type):

Identify Benefits:

Date:

Submitted by:

Name: _____

Company: _____

_____o

Address: _____

_____

Telephone: _____

For Users' Group Use Only:

Request Number: _____

Date Received: _____

Received by: _____

Consolidated with Request Number: _____

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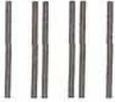
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Peter R. MacRoberts
Pennzoil Company
P.O. Box 2967
Houston, TX 77001

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8

Change/ Enhancement Process Revised

Due to difficulties experienced in the past with the Change/ Enhancement process, the SAGGROUP Executive Committee approved the following revisions:

1. A Change/Enhancement Request Form will appear in each issue of the Newsletter to allow users to submit requests throughout the year;

2. The deadline for requests to be considered for responses at the annual Conference will be November 30;

3. An interim detailed report will be prepared for the fall Executive Committee meeting to give both Software AG and the committee an idea of the nature of the requests coming in.

These changes should alleviate past problems by allowing users to submit C/E requests throughout the year. Also, the interim report will allow Software AG of North America and Darmstadt an opportunity to review the incoming C/Es and assist the Users' Group Product Representatives in consolidating the requests—a difficult and time-consuming effort. Finally, distribution of the ballots for those requests to be responded to at the annual Conference will take place in early December to avoid the mailing difficulties encountered last year.

The Executive Committee also acted on the distribution of the final responses and voting by approving the following:

1. Change/Enhancements and replies are company confidential;

2. Change/Enhancements and replies will not be published in the Proceedings to the annual Conference;

3. Change/Enhancements and replies will be distributed only to authorized licensees of each product.

We hope that the revisions will alleviate previous difficulties.

Eastern Canada Region

Gene Miklovich
Systemhouse

On March 30th, 26 users met in Toronto hosted by Shell Canada. The meeting began with a presentation and follow-on discussion led by Cliff Wietzel of R. D. Nickel on recovery. Cliff made the following points:

1. In a number of cases recovery is designed, or only appreciated, after a failure occurs.
2. In the development of a system, recovery frequently is not mentioned as an objective but is implied and represents overhead both to the development and operation processes.
3. Most recovery situations can be defined and planned for.
4. Design of a system should include the differences between an online enquiry and an online entry system.
5. Design may also consider separation of static and volatile data items onto separate files, etc.
6. Programs must notify users and/or operators of recovery situations and actions required.
7. An operator can effect a restore/recovery process if precise instructions are available.
8. There should be an identified person in the DB group as a contact for users, applications or operations.
9. When planning for recovery, some of the important points to consider are:
• how long can each cycle be delayed;
• identify length/risk of each phase;
• list possible failures;
• calculate costs of recovery.
10. ET/BT recovery
• needs exclusive control of those transaction items;
• all or none are applied;
• applicable to small groups of transactions;

• partial transactions are backed out;
• storage of user data with ET is possible;
• an ET releases records;
• must open with userid;
• if failure is detected by program, a BT may be issued;
• is automatic (only if the database and work are okay);
• cannot work with Cluster at same time;
• cannot backout once ET is issued;
• inappropriate where holding a large number of records.
11. Cluster recovery
• appropriate for long lists of records;
• use C2, C3 to identify points of restartability;
• close must be issued on current users;
• if 2 or more programs involved they must checkpoint at the same time;
• checkpoints are automatic by time or number of updates;
• recovery is automatic only if database is okay;
• no simultaneous file use is possible by ET/BT and cluster users;
• there is a risk of backout if program fails because of non-database reasons;
• if system fails another program may get control before the first;
• there is no BT command (this is effected by an abend or a forced time out).
12. Exclusive use
• no automatic recovery i.e., manual
• no hold logic is done/required;
• ADABAS does not recover.
• In the discussion that ensued, the following points were discussed:
13. NATURAL 1.2
Some of the features expected in the next release of NATURAL were:
• handling response codes;
• read and write of ET data;
• full screen editor;
• dynamic definition of OPRB parameters.
14. Problems
• Multi User ADAFIX dump of a single file abends when ex-

tended to 2nd reel. Current bypass is to dump in SU mode.
• If a utility receives a response code the step system completion code is still 0.
15. Dual Logging
• automatically switches to alternate logging with no control ensuring log has been copied (this must be controlled by the installation).
16. Security
• Regenerate of entire database requires rerunning security.
17. The User field/Additions in the Control Block is sometimes being set to binary zeroes or blanks by ADABAS.

The next presentation was by Paul Reino of Shell Canada on their plans to put ADABAS on 3380s. He started by explaining the architecture of the 3380s and their capacity. He indicated they estimated the cost per access on 3380s to be approximately the same as 3350s and it was recommended they be used for online access. Shell also indicated they would be running on a 3081 under SP1.1 and some discussion followed.
• Brian Lee indicated the Assembler/Linkage Editor required a ZAP from IBM.
• Ted Hillis estimated that based on their experience it took 1 hour to unload 1 million records but 6 hours to load and it was advisable to split sort and temp areas. Ted also recommended overestimating size of TEMP, SORT and amount of CPU time. Also consider putting ADALD1 output to tape.
• Brian Lee led a discussion of tuning where a number of topics were addressed:
1. in design put the fields most frequently accessed at the front of the record and put NU fields together;
2. when retrieving MU or PE fields read the average number of occurrences plus the count;

3. load data in primary sequence in which it will be accessed;

4. consider doing logical deletes i.e., clear or set key field and delete overnight;

5. NATURAL 1.2 with a GDDM graphics interface was in alpha test.

On June 15th, 24 users met in Ottawa hosted by PAC/DSS. The meeting began with a review of the conference in LAS VEGAS. Administrative changes within SAG were announced including moving Development to Reston. The format of the conference was reviewed and an agenda was circulated for reference by those who did not attend. New Product announcements were discussed including NATURAL 1.2 and GRAPHICS, X-IMAGE, COM-PASS, REVIEW and ACCESS. A question which was raised whether ACCESS was the equivalent of what was known as NATURAL/AF was unanswered and Harry France of R. D. Nickel indicated he would find out.

The meeting proceeded with a review of the new features/enhancements coming in NATURAL 1.2. It was also indicated that it was expected to be available shortly (end of JUNE for tech support) and it was in BETA test at 15 sites, however, none of these are CANADIAN.

Sharon Conners of PAC gave a presentation and demonstration of ADABAS-M at PAC. She indicated they were running on a PDP 11/70 under RSX11-M V3.2 and they were developing their first application. After discussing and illustrating the functions and capabilities of ADABAS-M, Sharon asked Francine Legault to demonstrate this application. Development of a billing system, Francine explained, was proceeding using ADABAS-M and DEC's F.M.S. (screen formatter).

In discussing problem reports, Tom Okrainek indicated a problem testing the RE-GENERATE function under VS1. He indicated Cliff Wietzel of R. D. Nickel was working on the problem. It was suggested Tom

report the problem to Denver to see if anyone else had experienced similar circumstances (Rep's Note: the problem has been reported to SAG under T. L. #39321). ITC inquired if anyone knew whether ADABAS would run under MVS/SP3 (Rep. Note: Cliff Wietzel informs me Version 4 will run with no problem and there are users doing this but that Version 3 will not). Phillip Morelli asked if anyone knew a way of restricting the number of records that can be added by a test application without awaiting for the number of extents to be exceeded. One suggestion was to pre-allocate all DB space thus limiting space available on a file basis, however, it was apparent there was no direct way of having a maximum number of records on a file.

In the afternoon Gene Miklovich reviewed an application system developed almost entirely in NATURAL for the Canadian Electrical Association. The review included discussion on a NATURAL Bill of Materials structure, batch NATURAL updates and guidelines for use of NATURAL. A workshop on the role of the DBA followed in which as a group the users profiled their responsibilities. It was apparent that the roles varied considerably with the only almost unanimous role being the running of utilities. It was concluded that the roles depended on the organizational structures in each organization and that the scope that the DBA (group) handled or was capable of handling depended on the size of the group and commitment of the organization to the DBA role. Before adjourning it was agreed that we should meet early September in Ottawa and December in Toronto. (The dates and places will be confirmed as soon as available). It was also agreed to have an Ottawa area picnic July 25th at Vincent Massey Park.

Japan Region 9th General Meeting

Yasuo Shimizu/President
Fuji Photo Film Co., Ltd.

The 9th General Meeting of Far East Region Users' Group was held on June 15, 1982 in Tokyo. The number of users increased, and there were 74 attendees from 43 organizations.

The newly selected officers of Users' Group, the activities in the last fiscal year and the balance of 1981 fiscal year were reported and approved by the member companies. The accounting secretary explained the budget, and the officers announced the activities plan for this year. All users approved them unanimously. The Far East Users' Group is planning more active activities this year; for example, the users would like to have joint development and research projects.

Software AG reported briefly regarding the 10th International Users' Conference held in Las Vegas.

In the latter half of the general meeting, Software AG invited Dr. Hideo Suzuki of the University of Tokyo as a guest speaker. Dr. Suzuki presented his thesis on the different ways of thinking between the West (the world of Logos) and the East (the world of Lemma) from geographical, historical and religious point of view. We found it very interesting, and its basic idea would be useful in educating the computer system engineers who mainly deal with things structured logically.

In the afternoon ADABAS/NATURAL, COM-PLETE and A-AUTO users had their own meetings respectively and discussed detailed activities plans. Also hot technical discussions were held.

11

Japan Region ASSIGN Meeting

Hiroki Kawamura
Nippon Kokan K. K.

I. 30th ASSIGN (the ADABAS Special Interest Group of Nippon) met on April 22, 1982 in Tokyo. 37 persons from 28 companies attended the meeting.
1) The presentations were on the software tools developed by the users. The subjects and the speakers were as follows:
a. "ADABAS Automatic Recovery and Command Log" by Mr. Takahashi, Nippon Kokan K. K.;
b. "ADABAS Operation Tool" by Mr. Kikuya, Fuji Photo Film Co., Ltd.;
c. "Test Supporting Tool" by Mr. Katsura, Nissan Motor Co., Ltd.
2) As for the activities plan, the users requested the items such as described below:
a. Users' presentations on their applications and/or research;
b. Report on the Las Vegas Conference;
c. Presentation by Software AG;
d. Joint research & development (users will form a group(s) to research on their special interest.)
   Five meetings are planned to be held in Tokyo during the year and the next one is scheduled on June 15.
II. On June 15, 31st ASSIGN was held in Tokyo. 44 persons from 30 companies attended.
1) Users approved that Hiroki Kawamura/Nippon Kokan K. K. continues to lead ASSIGN as a chairperson, and Mr. Kenji Terada/Kyoko Oil Company was elected as vice-chairperson.
2) Users discussed possibility of joint research and development for this year, such as:
a. Writing ADABAS self-learning book (PI-method);
b. Comparative study of DBMS;
c. Study on the relationship between ADABAS and MVS;
d. Presentation of interface developed by the users.
3) Mr. Juichi Hotta from Fuji Telecasting Co., Ltd. who attended Las Vegas Users' Conference briefly reported the conference.
4) Mr. Masahiro Shimada, Senior Analyst of SAGFE, gave a technical presentation on "ADABAS FUTURE PLANS AND NETWORK" and SAGNA's reply to Change/Enhancement Request reported at 10th International Users' Conference.
5) Mr. Susumu Okoba from JGC Corporation, who also attended International Users' Conference, reported NATURAL Version 1.2 and its future version.
6) Each attendee introduced himself and explained his installation's configurations, etc.

Japan Region COM-PLETE Meeting

Yasuhiko Katada/Tokyo Sangyo Credit Association

The COM-PLETE Meeting was held on June 15 in Tokyo. 16 persons from 8 companies attended.
1) The following activities plan for this year were discussed:
a. Presentation on COM-PLETE usage;
b. Technical Information from SAGFE;
c. Technical discussion on specially interested subject;
d. Discussion on Change/Enhancement Requests;
e. Information exchange on effective usage of COM-PLETE;
f. Exchange of generalized programming tools user developed;
g. Joint development and enhancement of generalized programming tools among COM-PLETE users.
2) SAGFE briefly reported the SAGNA's reply to Change/Enhancement Requests.
3) Users gave short presentations on generalized programming tools which they developed. And programming tools provided through International Users' Group were introduced by SAGFE.
4) As users want to know each other for smoother technical communication, the members of COM-PLETE Group decided to prepare a data sheet on their machine configuration, transaction processing system, etc.
5) Next COM-PLETE Meeting will be held in September at Taisei Corporation.
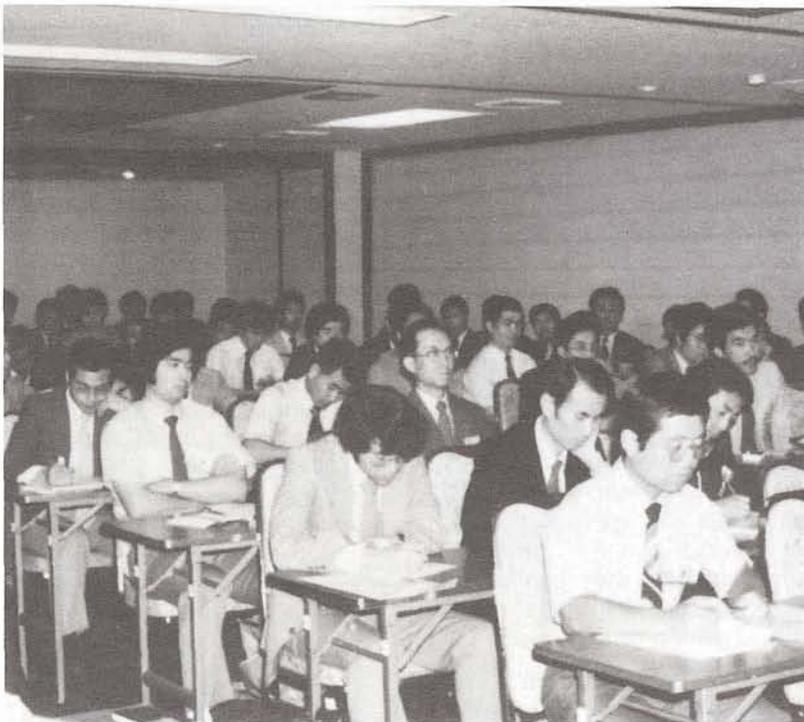
New England Region

Tim McGovern
Massachusetts Institute of
Technology

1. The Boston Company graciously hosted our eighth meeting on April 22, 1982 which was attended by 17 persons from 10 member organizations.

2. The following general business items were discussed and/or resolved:

• Our organization should be called the New England Regional Software AG Users' Group, or NE SAGGROUP;

• The next meeting of our organization will be hosted by Alice Schafer at MITRE in Bedford on June 17, 1982. Tim McGovern and Alice will coordinate the agenda for the meeting;

• The nomination and election of the NE Regional Representative for the next year, as mandated by the SAGGROUP Constitution, was deferred until and will be resolved at the Annual Conference in Las Vegas.

3. Overlooked past business . . .

• At the December 1981 meeting, Lino Sullivan of the State of Vermont made an excellent presentation on the capabilities of NATURAL for end-product systems development, and we thank him for sharing his thoughts and accomplishments with us.

4. Dick Jones of Software AG attended the meeting.

• He comes to us from the Hasbrouck Heights, N.J. office now and was attending to give us the benefit of his technical background and experience;

• We were disappointed to see that the thrust of Dick's presentation was strictly non-technical and was instead a marketing pitch for the Sales, Education and Consulting Services available from Software AG;

• Dick reemphasized that although the SAGNA support for Version 3.2.1 has been diminshed (that is, terminated), customers who have been unable to upgrade will not be slighted in Tech Support;

• Dick announced that the DBA Skills courses have been redesigned, and other courses will be likewise upgraded. The course evaluation has also been upgraded to allow the attendee to evaluate the instructor and the course independently;

• No database design course per se is now available from SAGNA Education and the prognosis for such a course is not bright;

• SAGNA is investigating a variety of alternative educational media other than the overhead transparency, but the near term promises more of the "foil" approach;

• On the subject of on-site education and custom-tailored education, Dick emphasized that "reasonable" tailoring was possible, and that in all cases, the customer has the right to negotiate with the Education office;

• Dick announced the resignations of Senior Financial VP John Okulski and Executive VP Ken Rardin;

• Dick mentioned in passing that the staffing level in the Education area is down somewhat due to the rapid expansion in the last year or so, and that the net profit problems at SAGNA will crimp the expansion required to truly serve the needs of the customer base;

• Dick's final point was a question to the attending members as to how best delineate where Sales Support and Tech Support leaves off and where billable Consulting Support picks up. No unanimous sentiment surfaced, except that the issue is of great interest to the membership.

• Problems and/or displeasures expressed, discussed with Dick:

• Some attendees recounted some serious problems that they have had or are experiencing with new products, notably the SM1 of COM-PLETE V4.1;

• The issuance of updates for and correction for the documentation is too sporadic or nonexistent;

• The volume of Early Warnings and zaps which accompany product tapes (be they new versions or SMs) is too great, places a needless burden on the customer and potentially delays possible implementation of the new product tape.

5. The Education Committee reported substantial, positive feedback on the most recent Advanced NATURAL Course sponsored by NE SAGGROUP. Other views and news . . .

• Some participants felt that some of the topics covered were of an intermediate nature but that their inclusion did not affect the usefulness adversely;

• It was the consensus that two courses were perhaps derivable from the existing syllabus, one which would be an Intermediate or Advanced NATURAL Programmer level and one which would address NATURAL functionality from the point of view of the DBA's traditional concerns;

• The scheduling of another Advanced NATURAL course will be postponed until we as a group evaluate the changes which we might like to see in the syllabus as a result of NATURAL Version 1.2 and how our third-party education vendor will be able to address those changes;

• On the subject of the Introduction to NATURAL Course recently held at MIT and not sponsored by NE SAGGROUP, there seems to be substantial interest throughout the group in scheduling another such course under the aegis of NE SAGGROUP;

• The ADABAS Operations Course which we began to discuss in February has not been finalized. The content of the course has been proposed and rewritten and will be

mailed to you during the week of April 26. Your speedy response to Alice Schafer will be appreciated. Dick Jones of Software AG responded to the original course syllabus with an offer of basically a one-day ADABAS Internals course based on existing course foils. The price of Software AG's offering was met coolly. After the group finalizes our own syllabus, we expect to entertain bids from third-party firms;

• A number of attendees expressed an interest in an ADAMINT for Programmers course, which would address the growing disinvolvement of the DBA in the ADAMINT macro generation process. The Education Committee will research and report on possibilities in this area.

6. DBA Tools Committee Report . . .

• Tim McGovern and Buck Shaw, both of MIT, reported on the current developments in the DBA Tools Exchange for the NE SAGGROUP;

• Acceding to Software AG's wishes to decentralize the DBA Tools distribution and collection process, the DBA Tools Exchange will obtain and catalogue the semi-annual releases of Tools from the DBA Tools SIG in Reston;

• Any member of the NE SAGGROUP can request tools from the Exchange—either the SIG Tools or the regionally developed Tools;

• The Exchange will provide a Tools Catalogue to the membership on a bimonthly basis;

• All members were encouraged to submit whatever tools they have developed to assist the DBA process regardless of the form they are in.

7. Recovery/Restart Presentation. Marilou Sazon of the Boston Company gave an excellent presentation on her experiences in the area of Recovery/Restart. Among the more salient points:

• Any RR plan must be equipped to deal with crashes of the ADABAS nucleus, either warranted or not, and with crashes of user programs;

• For crashes of the nucleus or the supporting hardware/software, the Autorestart/Autobackout procedures, coupled with daily (nightly) ADAFIX dumping or some sort of Fast Dump/Restore procedure, usually provide adequate protection;

• For application systems, ET recovery at the transaction level coupled with daily (nightly) unloads of the affected files usually provide adequate protection. Recovery to an ADAFIX dump is yet another option but is trickier because of the problem of RABN availability;

• Marilou stressed the importance of incorporating the dual logging mechanism in any RR plan. Specifically, she advises the placement of the logs on volumes not occupied by the WORK dataset and the use of USER EXIT 2 for backing up the logs automatically;

• The Backout/Regenerate procedure currently being used at The Boston Company was detailed;

• Lastly, Marilou suggested some further alternatives to the RR problem including using the checkpoint file to store off 'user checkpoint' data, using the AUDIT utility to create a logical backout procedure, and using partial mounts to create temporary data bases for offloading and reloading the damaged file(s).

8. Discussion of NATURAL Version 1.2. Bob Myers of The Boston Company presented some of the early news on the functionality of the NATURAL Version 1.2 based on his review of the Beta NATURAL 1.2 Reference Manual, albeit incomplete. The Boston Company is a beta test site for NATURAL V1.2. For example,

• Substantially more powerful error handling;

• External storage of NATURAL maps for multiple-use maps;

• Full PF/PA Key support;

• An exit for the installation of NATURAL security;

• A STACK verb for a NATURAL 'macro' capability;

• RETAIN SET command for more efficient loop processing logic;

• NOERASE option on map definition;

• Map painting capability . . . still undocumented;

• More powerful edit masking.

9. Bob Myers also presented a summary of Jim Bagby's (of Software AG) remarks on ADARUN parameter tuning which Jim presented to the SAGGROUP 7 meeting in February.

The MITRE Corporation graciously hosted our ninth general membership meeting on June 17, 1982. 34 persons from 11 member organizations attended.

General Business

• Nominations were accepted for the position of Regional Representative. Tim McGovern was the only nominee and was elected RR for the next year. His term ends with the close of the Conference in June 1983.

• The next meeting of our organization will be hosted by Mel Bemis at Northeast Utilities in Hartford, Connecticut on September 16, 1982. Despite the long layoff between meetings, the group is expected to continue to keep the lines of communication welloiled during the summer hiatus.

• The question of whether consultants and other Software AG affiliates should be allowed to attend our meeting was raised. Tim McGovern suggested that the consultant exclusion policy which was decided at the February 1982 meeting should be modified to allow consultants who are actively engaged (or otherwise affiliated) with member organizations to be welcomed. The change to existing policy was accepted. A suggestion to designate one or more meetings as "consultant-attended" meetings was not adopted. No other changes were suggested.

Committee Reports

• Alice Schafer discussed the status of the ADABAS Operations Course Survey. She has closed the survey period. She will collate the results, prioritize the topics, develop a syllabus and begin to entertain bids for the course. We hope that such a course could take place sometime in the fall.

• Buck Shaw discussed the status of the DBA Tools Committee's efforts. The Committee is waiting for Release 3 of the Tools Tape from Reston. Jim Crawford has assured Buck that the tape will be in hand within 30 days. Immediately upon receipt, Buck will advise the membership of the contents and availability. The collection of Tools from the NE SAGGROUP is still in its infant stages.

• Buck Shaw distributed the first version of the NE SAG-GROUP Member Profile. Comments and criticisms are expected and encouraged. An official version of the Profile will incorporate member suggestions and be published for the September meeting.

• The changes in the NATURAL environment due to NATURAL V1.2, it was generally believed, would seriously obsolete Roy Wood's existing Advanced NATURAL syllabus. The availability of NATURAL V1.2 third party education is still unsettled.

Rodger Mattlage of the Boston Company has the most experience in the group now because of his beta testing responsibilities, and the group might seek an arrangement with the Boston Company where Rodger would hold a course on the NATURAL V1.2 and how it changes (or should change) the on-line applications development process.

The MITRE Security System

Alice Schafer made a presentation of the MITRE approach to ADABAS file and field security.

• MITRE's Security system was created in response to typical security demands:
-to protect data from unauthorized access and/or update;
-to restrict access and update to certain authorized programs or utilities.

• MITRE found that vanilla ADABAS Security contains certain limitations, including:
-the overhead involved in frequently changing large numbers of passwords is severe;
-the various ways in which a user must supply the password (via NATURAL, user-program or utilities) is inadequate and can easily be compromised.

• The MITRE Security system then has the following characteristics:
1. MVS passwords are used on ADABAS ASSO and DATA.
2. ADABAS passwords are used on all ADABAS logical files.
3. Access or update privileges are granted on a program name and authorization code basis.
4. These authorization codes must be safeguarded similarly to ADABAS passwords and normally would not change.
5. A password-protected encrypted ADABAS file contains the program to authorization code to ADABAS password relationships.
6. A source-protected Password Lookup Subroutine is used to "authorize" a user and to temporarily insert the ADABAS password in the submitted JCL stream. The temporary JCL is deleted after use.
7. The Password Lookup Subroutine is also used to perform the Security Administrator function via calls from the NATURAL-based Authorization Update Subsystem.

• In summary, the advantages of the MITRE Security System are that password modification is performed with relative ease and that passwords are suppressed from printed or viewable output. Together, this provides an adequate level of data protection.

• A potential disadvantage of the MITRE system is the need for several hours per week of part-time administrative support for the system.

Projections of the Software AG Product Environment.

Bob Myers of The Boston Company presented some of his views of what a typical ADABAS environment might look like in the September 1982 to September 1983 timeframe. Participating by proxy was David Little (also of The Boston Company). Given the current development information and the levels of testing efforts of various SAG products, Bob believes a possible environment as consisting of:

• ADABAS, with VTAM or CTCS for inter-machine communication. The support of the multi-machine environment is now a reality. In the future, the possibility of such an environment might be required by corporate policy, performance needs or security and disaster planning or others.

• NATURAL V1.2 with NATURAL Security feature. The NATURAL V1.2 product changes the nature of the NATURAL product radically, and the Security add-on permits the DBA, or other Security Administrator, to manage the adhoc programming environment without disturbing the production system environments in NATURAL.

• COMPASS and ACCESS facilitating TP and system development. The COMPASS (COM-PLETE Parallel Access and Security System) is perhaps the most exciting new feature of the product line. It relieves the need for an SPF-like front end to COM-PLETE. Further, it allows and facilitates the multiplexing of tasks. Thus, one can be running more than one NATURAL session, along with UQUE, UEDIT and other COM-PLETE tasks all at the same time, via a roll-dataset technique. Bob was not certain what the implications of this capability have for resource contention and for non-activity time-out parameter settings.

The ACCESS product allows any COMPASS user to talk to any other COMPASS user and to navigate through multiple physical machines. This moves us one step closer to the goal of transparent machine boundaries. This has implications for the data dictionary developments (see below). ACCESS also permits one or more users to be designated as "control status" users, which then authorizes that user to submit operator commands without being physically at the machine operator console.

• Data Dictionary, with enhanced Online DD aids. The Online DD is being upgraded to allow more updating with fewer screen boundaries. The DBID will now also be stored in the DDMs in the system file, which permits ACCESS and COMPASS to function correctly amongst multiple databases and multiple machines. With this DBID change, inter-DB joins are now a reasonable desire.

NATURAL V1.2 Beta Testing Results

Rodger Mattlage made an excellent presentation of his NATURAL V1.2 beta testing experiences. Rodger focused on how NATURAL V1.2 changes the nature of systems development and discussed this process in light of the new NATURAL features.

• PF Key support at three levels: Command level, Editor level, and Program level. A program must be specifically sensitized to a PF-key. Even still, one can expect source code simplifications as a result.

• Global Variables, indicated by a '+' prefix, can be defined and stored in the NATURAL region. It is perhaps important to note that when cataloging NATURAL programs with external global-variable references that the globals must pre-exist in the globals area.

• Error trapping within NATURAL programs can now be performed for most ADABAS commands. It does not check on the FETCH statement that the fetched module exists. New system variables *ERROR and *ERR-LN facilitate this error trapping.

• NATURAL V1.2 now permits the stacking of commands. Among other things, this would allow the development of more friendly user interfaces to NATURAL. Unfortunately, stacking %H is not supported.

• Full Online HELP facilities for all NATURAL commands and statements maximize a NATURAL programmer's interactive session productivity.

• An online internal sort for "test size" data will permit better online development of production batch jobs with obviously better turnaround time.

• External map definition and compilation permit the use of standardized maps now where previously multiple maps might have taken a different approach to the user interface.

• The passwords needed for access and update of ADABAS files can now be supplied through a variable reference or a global variable reference.

Pacific Southwest Region

Leo Webb
Star-Kist Foods, Inc.

The meeting was hosted by Star-Kist Foods, Inc., on May 28, 1982.

A preference for a meeting format was discussed. We will mail out a questionnaire on program format and request suggestions on what subjects and presentations should be considered for program topics through next year.

Software AG has tentatively offered to host the June 25, 1982 meeting and present NATURAL 1.2 along with a demonstration.

With the prospect of more User Group sponsored education, there was a motion and a second to set up and elect a Treasurer. The charter will be to set up a bank account and maintain moneys for education through receiving and dispersing of funds.

An open discussion was held on the Las Vegas Conference. The main topic was the product announcements and how they over-shadowed the concurrent tutorials and workshops scheduled.

David Berg of Hughes Aircraft presented the minutes of the Executive Committee meeting at the Las Vegas Conference.

Myron Pullen of Ticor Mortgage Insurance is coordinating efforts for a NATURAL Advanced Techniques class. It was decided to hold two classes. Software AG will pursue a NATURAL 1.2 Introduction Workshop around mid July and the NATURAL 1.2 Advanced Technique class will be held in the fall.

Jean Roberts-Mertan of Star-Kist Foods, Inc., presented the Yourdon "Information Modeling" class being offered July 19–23, 1982, in Long Beach. This is a special offering to the SAGGROUP by Yourdon. Yourdon has indicated willingness to offer this to other regions. This class may be postponed to a later date.

The meeting was adjourned at 1 p.m.

Southeast Region

Larry Goodman
American Family Life Assurance

The Southeastern Users met on March 17, 1982 at Peachtree Plaza Hotel in Atlanta, Georgia. Twenty-seven representatives from 14 organizations participated.

Larry Goodman opened the session with a summary of the days Agenda. Introductions of Software AG participants and Southeastern users followed.

Kevin Wilson from Duke Power presented a summary of his ADABAS SM04 testing.

Al Wolfson with Software AG gave a slide presentation on NATURAL Graphics. The Graphics interface requires graphics driven software such as IBM's GDDM as a prerequisite.

Bill McCrosky gave a presentation on Software AG's consulting services and education group. Some of the services offered are listed below:
• Contract programming;
• Conversion assistance;
• Performance and tuning assistance;
• Project management/system analysis.

A general discussion followed. Topics discussed were the upcoming Conference, nominations for 1982 Regional Representative, and proposed group projects.

Reginald Ellis of American Family Life presented the role of Data Administration and its structure within the organization. Emphasis was placed on data awareness within organizations and the evolving role of Data Administration.

Judy Pesses from Software AG gave a presentation on performance and tuning of ADABAS. Judy explained that each environment had uniqueness which must be considered when tuning. Some tuning considerations are mentioned below. SAG will be releasing tips on performance and tuning at a later date.
• Teleprocessing—run ADABAS above the TP driver in a TP EXCLUSIVE ENVIRONMENT. NOTE: Do not run batch jobs along with on-line in this configuration;
• ADABAS placement critical for good performance separate associator dates and work on separate packs and channels where possible. Placement in association to system page and spool data sets should also be considered;
• Avoid complex commands wherever possible;
• ADARUN parameters should

be tuned cautiously measuring the affect as parameters are changed.
- LBP—needs to be very large increase; check region size when increasing this parameter;
- LFP—default 4000, min 1,000, increase if RC 42;
- LI—increase if RC 71;
- LP—should zap as default; never change after unsuccessful ADABAS session;
- LQ—should start with default; then increase;
- LS—depends on installation; sometimes used to constrain find sorted;
- LWP—default should be at least (2 K LS). Regions size increase if this parameter changes.

Other ADARUN parameters vary on installations usage.

Southwest Region

Bob Glasscock
Dow Chemical

In the absence of Bob Glasscock, Bob Holub of Superior Oil opened the meeting with roundtable introductions and discussions. Bob Becker of Foremost Insurance gave an excellent talk on performance and tuning of ADABAS 4.1. During his talk he addressed the Foremost Insurance method of placing the data and associator of all the files across packs to gain performance considerations. He also discussed ways of reducing OPEN and CLOSE calls to reduce the number of buffer flushes and the adjustment of the Buffer Flush parameter.

Bryan Smith of Software AG gave a presentation showing the direct calls which various NATURAL commands generate and discussed which commands to use to cut down on CPU time and the number of I/O's. The attachment to these minutes shows the examples and conclusions discussed.

Sierra Pacific Region

Colette Farabaugh
Castle & Cooke, Inc.

The latest meeting of the Sierra Pacific Users' Group was held on June 29 at the County of Sacramento. There were 22 people present, representing 10 ADABAS sites.

Our first order of business was to elect Wayne Peterson of Teale Data Center as recording secretary. Then, after Bob Taylor of Software AG made announcements concerning the resignations of Keith Tipton and John Weil from the company, the remainder of the meeting centered on the Conference.

Alan Routhier, President of the International Users' Group, reported on several meetings the Executive Committee held during the Conference. Don Brown of the County of Sacramento talked on the ADABAS sessions he attended. Jim Reiner, also from Sacramento County, reported on the NATURAL presentations. Some of the new NATURAL products, such as NATURAL Graphics and NATURAL 1.2, were discussed. After lunch, since the County of Sacramento is a beta site, a demonstration of NATURAL 1.2 was given.

Our next meeting is scheduled for September 21, again in Sacramento. Software AG will be requested to provide a speaker on the new products and releases they are offering, most notably NATURAL 1.2, NATURAL AF, and the NATURAL Security package. The County of Sacramento will give a presentation of their law enforcement system which is currently in production using ADABAS.

Communication With Technical Users Data Administration/ Data Base Administration SIG Report

Carole Schermer
Chemical Abstracts

One of the concerns of a newly created Data Base Administration Unit is establishing good communication with data base users. This article will focus on communicating with technical users: systems analysts, designers, and programmers who must interface with the data base to implement their application systems. Communication has many facets: day-to-day interface on specific file and program design development, education in data base methodology and theory, problem resolution support, and announcement of new and changed products and services.

This article will address some of the tools available in day-to-day communication needs. One highly desirable goal is to employ some amount of standard communication between the DBA staff and the project development staff. While each application may have varied data and access requirements, the type of information needed to define a data base application differs little between projects. The DBA needs to know the physical and logical formats of the data elements, their relationships within the data base, the size of the data base files, growth projections, recovery requirements, etc. This carries along to the programming level as well: the DBA must represent

the programmer's access, update, and reporting requirements to the DBMS. For ADABAS, this could be in the form of a NATURAL userview, ADAMINT macros, direct call parameters, or some other interfacing technique.

One method useful in capturing data base related information is the creation of standard forms and procedures. While forms, cannot capture all the nuances and detail present in data base relationships, they do provide a uniform communication medium of the essential requirements. Information on the form represents the product of lots of discussion and decision making in creating the data base application. Use of standard forms and procedures can provide the following benefits:

1. Forms insure a level of uniformity in dealing with technical users. All essential information dealing with the data, its relationships, and access requirements can be captured.
2. Forms eliminate confusion and account for all information needed by the DBA. Without a form, the DBA may forget to ask a question; with a form, the question is asked all the time.
3. Paraprofessional, clerical, or less-experienced DP staff can be trained to create data base file definitions, userviews and other DBMS constructs from the information recorded on a form. These activities need not continue to involve senior DBA staff.

Forms and procedures do require some time to create and should be reviewed and changed if needed. The payoff is well worth the time and effort. Forms that Chemical Abstracts Service uses to record file definitions, userviews, ADAMINT requirements, and report ADABAS and NATURAL problems can be found in the 10th International Users' Group Conference Proceedings (The Paraprofessional's Role in Performing Selected Data Base Related Functions at Chemical Abstracts Service by Daniel Keller). The Government Print-

ing Office, Washington, D.C., has also developed forms to capture similar information (contact Robin Schwartz, 202-275-3389). If other users have developed or are in the process of thinking about creating forms, standards, and procedures to better control the relationship between the DBA and other development units, please let me know.

P.S. I would be interested in finding out about users' approaches to Data Administration and Data Base Administration within their organizations. One of the goals of this special interest group should be to form a centralized resource for users who are interested in learning more about DA and DBA functions and those who have that information and experience base to draw upon.

Large Data Base SIG Report

Eric Seifert
Citicorp Credit Services

I wish to thank all the users who attended the Large Data Base discussion at the 10th International Users' Conference in Las Vegas. I would like to thank Sue Birgeles who shared with us some of her experiences at Donnelley Marketing. I would also like to thank Peter Schnell, Software AG of Darmstadt, and Edward Forman, Software AG of North America, who gave us some ideas as to how and what Software AG is going to do for the Large Data Base User.

Many items of interest to the Large Data Base User were discussed. Specifically, we were glad to see that Software AG is aiding the Large Data Base User with new software enhancements like the "Reflective Data Base" feature with the

promise of better restartability in those long running utilities and a Repair Block facility.

There were several sessions on ADABAS performance and a lot of valuable information was shared. Some areas of performance that many users have found to be important are:
1. ADARUN parameters (specifically the LBP parameter);
2. Disk Placement;
3. File Placement;
and let us not forget,
4. Applications Design.

I would also like to ask again for any users who would like to participate in the Large Data Base Special Interest Group to contact me.

ADABAS/VM Special Interest Group Announcement

Tim McGovern
Massachusetts Institute of Technology

The VM/370 and VM/SP operating systems are important components of the IBM environment. Because of that, Software AG has provided some tailoring of the ADABAS product for the VM community. Many ADABAS installations are heavily committed to VM and at the same time are interested in using all aspects of the ADABAS software. In some cases, the VM architecture demands changes to or enhancements of the Software AG product line. In order to focus on these needs and to provide a clearinghouse for the latest news, etc., within the ADABAS/VM community, a Special Interest Group for ADABAS/VM sites is being formed. Tim McGovern of MIT has offered his services as Chairperson of the SIG.

At the present time, ADABAS/VM sites are scattered far and wide, and our numbers are still rather small. Consequently, for the next six months to a year, the agenda for the SIG will be to:

ADABAS Special Interest Group Chairpersons

Data Administration
Ms. Carole Schermer
Chemical Abstracts
P.O. Box 3012
Columbus, Ohio 43210
(614) 421-6940

Data Dictionary
Alan Florence
CCH Computax, Inc.
601 N. Nash St.
El Segundo, California 90245
(213) 640-3270

DBA Tools
Mr. Jeff Schutzer
INCO, Ltd.
1 New York Plaza
New York, New York 10018
(212) 742-4584

DOS
Bernie Conner
RAY-O-VAC
101 East Washington
Madison, Wisconsin 53703
(608) 252-7557

Education/Documentation
Mr. John Kaye
Foremost Insurance Company
5800 Foremost Drive, S.E.
Grand Rapids, Michigan 49501
(616) 942-3364

Large Data Bases
Mr. Eric Seifert
Citicorp Credit Services, Inc.
1 Huntington Quadrangle
Suite 2N06
Melville, New York 11750
(516) 752-3208

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

Restart/Recovery
Mr. Alex Manaila
Datacom Systems Corporation
85 Executive Boulevard
Elmsford, New York 10523
(914) 347-3690

Retrievals/Interfaces
Mr. John Colthar
R. J. Reynolds Industries
World Headquarters 4-A
Winston-Salem, North Carolina 27102
(919) 777-4285

ADABAS/VM
Mr. Tim McGovern
Massachusetts Institute of Technology
400 Main Street
Cambridge, Massachusetts 02139
(617) 253-3426

• Identify all ADABAS/VM sites, develop a profile of those sites and establish at least an informal ADABAS/VM communication network;
• Enlist individuals from ADABAS/VM sites to write articles about their experiences with the ADABAS/VM environment for the Newsletter to increase the visibility of the product;
• Encourage ADABAS/VM sites to actively discuss and present VM-related issues and requirements at regional and national users' groups;
• Develop a network of sites for the sharing of ADABAS/VM related tools, concepts, problems and solutions;
• Petition the Change/Enhancement Coordinator to allow

ADABAS/VM related problems to be listed separately in the C/E listings for easier identification by VM sites.

All known ADABAS/VM sites will receive a mailing with information related to the SIG and its agenda. If you have a VM site, are using ADABAS/VM and haven't received this mailing yet, it's possible you were overlooked. If so, you should contact the SIG Chairperson as listed below. Any other sites which are interested in receiving ADABAS/VM SIG news are also urged to contact:
Tim McGovern
Massachusetts Institute of Technology
77 Massachusetts Ave,
E19-332
Cambridge, MA 02139
(617) 253-3426

NATURAL Technical Notes

RSEQ—XEDIT Macro for NATURAL Renumber Function

Tom Dimock
Cornell University

This XEDIT Macro operates on NATURAL programs which are being edited with the VM/SP Editor, XEDIT. It presumes that either:
• CMPEXIT is being used to store and retrieve NATURAL program source and object code; or
• NATURAL programs are developed in the XEDIT environment and loaded into a system file for final checkout.

In either case, this macro has proved to be a valuable tool.

```
&TRACE OFF
  PRESERVE
  SET LINEN OFF
  SET ARB OFF
  SET SPAN OFF
  SET STREAM OFF
  SET VERIFY OFF
  VERIFY OFF
  SET WRAP OFF
  SET ZONE 1*
  TRANSFER LINE COL SIZE
  &READ VARS &RLINE &COLP
    &SIZ
  TOP
  &SEQ = 0
  &INCR = 10
  &IF &INDEX > 0 &INCR = &1
  & = &MULT OF &SIZ &INCR
  &IF & < 10000 & GOTO -LOOP
  &INCR = &DIV OF 10000 &SIZ
  EMSG LARGEST USABLE
    INCREMENT IS &INCR
  CMSG RSEQ &INCR
  &GOTO -POUTB
-LOOP
  NEXT
  &IF &RC NE 0 &GOTO
    -PASSTWO
```

```
  STACK 1 1 4
  &READ STRING &LI
  &SEQ = &SEQ + &INCR
  &SEQN = &CONCAT OF 0000
    &SEQ
  &SEQO = &RIGHT OF &SEQN
    4
  &IF .&X&LI NE . &Y&LI = A
  &X&LI = &SEQO
  &GOTO -LOOP
-PASSTWO
  TOP
  &SEQ = 0
-LOOP2
  NEXT
  &IF &RC NE 0 &GOTO -POUTB
  STACK
  &READ STRING &LI
  &SEQ = &SEQ + &INCR
  &SEQN = &CONCAT OF 0000
    &SEQ
  &SEQO = &RIGHT OF &SEQN
    4
  & = &SUBSTR OF &LI 5
  &LI = &CONCAT OF &SEQO &
  REPLACE &LI
  &LIT = &TRANS OF &LI
    0123456789 ?????????
  &OFF = 1
-LOOPY
  &REF = &LOCATION OF (????
    &LIT
  &IF &REF = 0 &GOTO -LOOP2
  &RED = &REF + &OFF
  &RE = &SUBSTR OF &LI &RED
    4
  &IF .&Y&RE = .A EMSG
    AMBIGUOUS REFERENCE
    . . . TO &RC IN LINE &SEQO
    SET TO &X&RE
  &IF .&X&RE NE . &GOTO
    -GOTIT
  EMSG REFERENCE TO
    MISSING LINE &RE IN . . .
    LINE & SEQO UNCHANGED
  &X&RE = &RE
-GOTIT
  &CMD = &CONCAT OF :&RED
  CL &CMD
  CR &X&RE
  CL :1
  &RED = &REF + 1
  &LIT = &SUBSTR OF &LIT
    &RED
  &OFF = &OFF + &REF
  &GOTO -LOOPY
-POUTB
  &COLP = &CONCAT OF
    :&COLP
  : &RLINE
  CL &COLP
  RESTORE
```

SETTIME AND *TIMD Commands

Steve Robinson
S. L. Robinson & Associates, Inc.

As evidenced by articles in the last several newsletters, the utility of the SETTIME and *TIMD commands is becoming more widely known and employed in the NATURAL user's community.

Below is a short program, using SETTIME and *TIMD, designed to demonstrate the "cost" of inappropriate use of the ADABAS ET command. (End of Transaction in Natural).

Many shops badly abuse this powerful command and its associated facilities (e.g. BT). The ET command should serve one of two functions:
1) Delineate a set of logically related updates, e.g.
Add an order record to the order file;
Update two fields in a customer record to reflect one more order for this customer and an increase in total dollar value of orders;
Update a variable number of product records (one for each line item of the order) to reduce quantity unallocated fields.
2) Establish a recovery time unit. This is especially appropriate in a batch run which will update a large percent of the records in a file, e.g. passing a 200,000 record file making a minor update to each record. Issuing an ET command every N transactions will permit recovery in considerably less time than would be required to rerun the entire program. Typical values of N might be in the range 50–200 depending on the extent of the updating going on and the size of the entire update run.

Unfortunately, many shops use the ET command as a

mechanism to simply release records. The sequence of programming mistakes goes something like this:

```
READ FILE X IN PHYSICAL
SEQUENCE
ACCEPT IF _____
UPDATE
END OF TRANSACTION
LOOP
```

The above usually produces a record hold queue overflow. Therefore the following code is erroneously employed:

```
READ FILE X IN PHYSICAL
SEQUENCE
IF _____THEN
DO
UPDATE
DOEND
END OF TRANSACTION
LOOP
```

This avoids the overflow problem but creates horrendously long execution times. Note: the ET command is simply being used to release records. (updated and non-updated) The correct program logic was demonstrated in the last newsletter, i.e., do not hold a record unless you intend to update it.

To comprehend the cost of inappropriate ET commands, try the following program on your system:

```
SETTIME
FIND 2 WITH MAKE = 'GENERAL
MOTORS'
END OF TRANSACTION
LOOP
WRITE 'ET LOOP TIME IS' *TIMD
(0010)
SETTIME
FIND 2 WITH MAKE = 'GENERAL
MOTORS'
LOOP
WRITE 'NON ET LOOP TIME IS'
*TIMD (0060)
END
```

We have seen ratios of NON ET/ ET times of 1.5 to 6 for the above example.
Note: If you write a similar example which selects more than the 284 records selected in the above example, you will have to "edit" *TIMD ala the examples in the last newsletter.

Natural Features SIG Report

Jim Reiner
Sacramento County

The past Conference was very exciting and informative for all users who were able to attend. I would like to thank all those who participated in the NATURAL workshops and those who presented papers. User participation and sharing of information is what the Conference is all about.

The following is a summary of the NATURAL topics covered although it will primarily deal with the NATURAL Features workshop and the Change/Enhancements workshop.

The NATURAL Features workshop covered three areas of interest—(1) the state of NATURAL one year ago and the Change/Enhancement requests at that time; (2) the current Change/Enhancements; and (3) further requests and questions by the Users' Group. First, NATURAL a year ago.

In the area of Change/Enhancements, a breakdown of the top vote receiver of 1981 looked like the following:

TOP VOTE RECEIVERS FOR 1981

NO.	REQUEST	SAG RESPONSE	VOTES
81039	Full screen editor	Planned for V2.	856
81106	Array processing	In V2.0	752
81212	PE group verbs	Will be considered	693
81225	Call to NATURAL	Planned	613
81215	Remove 32k source limit	In V1.2	600
81034	Security options	V1.2 security package	586
81338	Offline printing	In advanced facilities	545
81087	Syntax check batch programs online	Available in sm8	523
80069	User view for ddms	In V1.2 security package	462
81079	PF keys	In V1.2	457

It is interesting to see where the users wanted the general development emphasis for NATURAL one year ago. Some of the requests dealt really with cosmetic changes to what already exists; however, the large vote receivers were primarily in the area of language changes. These are also the ones that will take the longest to implement as we will see when we look at the top vote receivers for 1982. It may also interest you to see a breakdown of the responses to all change requests submitted last year. So here is a look at another set of stats:

RESPONSES TO 1981 CHANGE REQUESTS

SAG Response to Request	Number of Changes with This Response
Will be implemented in V1.2	44
Will be implemented in V2	27
Will be considered	14
Not planned/cannot be done	7
Implemented in the last year	6
In advanced facilities—V2	7
In security package V1.2	5

Those implemented in the last year (1981) included the following: syntax checking batch programs online, multi print report specification, password in batch (2), nested performs supported, and work area not cleared on execute.

So, the first two tables summarize where we have been. Now a look at where we are going.

TOP VOTE RECEIVERS FOR 1982

REQUEST	RESPONSE	VOTES
Array processing	V2.1	1497
PE group processing	V2.1	1483
Handle response codes	V1.2	944
Call of NATURAL program	V2.1	943
Program name available while in edit mode	V1.2	818
Group processing	V2.1	800
Scan/replace in edit	V1.2	717
Library mgmt. interface	Not planned	687
Use of .I selectively	V2.1	624
Integrity of SAVE & CAT	V1.2	597

Software AG is proud that over one-third of the change requests could be answered 'in V1.2'. Here we see that the requests with the most votes still deal with language changes and will be implemented in the future (1–2 years). The response to the library management request deserves an explanation. More and more of the enhancements to NATURAL will require that the source and object code be under the control of NATURAL. Therefore, in order to be a recipient of the latest and greatest features, you will need to leave the source and object right where NATURAL puts it.

The Features workshop concluded with an excellent discussion of features for which many users see a need. The topics discussed were ample evidence that there are some very sharp and astute people who use NATURAL. David Alexander of Bud Antle Inc., John Kay of Foremost Insurance Company, and Karl Gingrich of Marathon Oil are just a few of the users who were involved in

workshops and offered new ideas. As the Features workshop closed, some of the topics covered which deserve attention by SAG included the following:
• Dynamically load DDMS;
• Date/time stamp for source and object;
• Perhaps an autosave for NATURAL much like CMS;
• Put SAGTIPS in printed form;
• Dynamic storage acquisition online;
• Debug tools and features.

There were many other workshops and user presentations as well as 'adhoc' get togethers among the users. There were 12 NATURAL V1.2 beta test sites represented at the conference and we held a meeting to discuss its development, bugs, and release date. Not that dates are really that important any more, but word (rumor?) had it that NATURAL V1.2 would be generally available in August. The VI.2 documentation was also available for inspection. I must say that everyone will be very satisfied with the new format, completeness and correctness of the documentation.

The workshop chaired by Dave Parfrey dealing with teaching NATURAL to the user attracted some of the most vocal people and proved to be the most controversial topic of the workshops. There are just so many different users, environments, and needs that there is a full range of answers to "how do you teach NATURAL to your users?" Various sites use video tapes and notes for training the users. Some sites try to break the users into two or more groups and train them accordingly. There was controversy over whether users ever need to know about ADABAS. The answer seems to depend on the people using NATURAL, what they will use it for and what their data includes. So, the whole idea of answering the question "how do you teach NATURAL to your users?" with a very detailed answer and step-by-step procedure is not possible. Anything beyond an answer of "very carefully" is very dependent on the particular site.

Managing the NATURAL environment was the topic of another workshop. This workshop exploded with ideas when it got the subject of controlling the user from being inefficient. I found that there are a few users who have gone to great pains to control everything the user does by modifying many of the software products that they use. Here the "how to" of controlling the user was really dependent on how much the user was to be controlled. A very unique idea was really dependent on how much the user was to be controlled. A very unique idea in the area of controlling a NATURAL user from abusing the system was presented by John Kay. He suggested that DP cannot control the user from being inefficient if he is allowed to program. This is because the control must be at ADABAS, not in NATURAL. This perspective was different

than most of the discussion but may be the area where control really is possible. Discussion also included: setting up a test and production system file, CICS as a core hog, and the use of prototypers by Chairman Karl Gingrich.

John McAra of SAG wowwed us with NATURAL graphics. NATURAL Graphics will be available in V1.2 and will be the bridge between the DBMS and the graphics package, such as IBM's GDDM. Here is an outline of the presentation:
Why graphics?
1 word = 10^{-3} pictures; transform data into information; compress data into a compact presentation;
the human factor—we understand it easier.
Why now?
trends towards graphics— cheaper hardware and software user demands.
Roadblocks
ability to get good hardcopy; bridge between DBMS and graphics packages
(here's where NATURAL Graphics fits in).
Natgraph implementation
PLOT & DRAW statements; available two months after V1.2 is released.

Peter Pagé was involved in presentations involving NATURAL V1.2 features, NATURAL V1.2 Security, and NATURAL Advanced Functions. V1.2 contains many performance improvements. Here are a few:
• ADABAS commands—L1 will replace sequence of S1,S1,L1;
• Open/close processing is eliminated with OPRB=NOOPEN;
• Object code is blocked to 2K;
• Source code is blocked to 60 lines per record;
• A much-used object module can be converted to a load module and linked with NATURAL at gen time.

I will let SAG tell you all about the individual features of V1.2. They know a lot more about it than I do.

A general purpose inquiry facility was demonstrated by Len Jenkinson of the SAG British Development. This facility will be for the end user who has a knowledge of his data but has no DP skill. This may be available in a few months. The inquiry request will be stored as a series of parameters, not as a program. This sounds a lot like the "NATURAL—an adhoc query language" that we bought a few years ago. The demonstration looked very promising and I look forward to using this facility.

There were a few people at the last conference who had ideas for Special Interest Groups. Talk to the NATURAL Product Rep about your ideas and then the SIG will be recognized. There are so many of you out there who have discovered techniques for dealing with unique programming situations. The workshop for NATURAL techniques proved that there is an interest in sharing tips and techniques that users have developed. One very useful vehicle for sharing this information is the Newsletter—this very magazine you are reading. I encourage everyone to consider writing a short article for the Newsletter explaining your techniques, ideas, or questions if you have any.

NATURAL Special Interest Group Chairperson

Features
Mr. Jim Reiner
County of Sacramento Data Processing
700 H Street, Room 0740
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Software AG of North America, Inc. makes no warranty expressed or implied as to the documentation, function, or performance of these programs. Each user is expected to make the final evaluation as to the usefulness of the programs in his own environment.

Questions concerning the use of the programs should be directed to:
Mr. Roy Richardson
COM-PLETE Tools Chairman
Management Applied
Programming, Inc.
6420 Wilshire Blvd. Suite 200
Los Angeles, California 90048
(616) 942-3688

COM-PLETE Technical Notes

COM-PLETE User Routines Available

You may obtain a master tape of all the routines by sending a letter to:

Users' Group Liaison
Software AG of North America
11800 Sunrise Valley Drive
Reston, Virginia 22091

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***************************************************************************************************
**************************** Additional documentation is in members:      ****************************
**************************** $ETHYL    $FORMOST    $HOM    $MAINT    $NASA  ****************************
**************************** $NAVCO    &    $PRC                            ****************************
***************************************************************************************************
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Member	--------Type-------	-------------From -------------	Description
$DOC	Document		General documentation.
$ETHYL	Document	Ethyl Corp.	Documentation.
$FORMOST	Document	Foremost Insur.	Documentation.
$HOM	Document	Houston Oil	Documentation.
$MAINT	Document	Users' Group	Diary of changes to this library since May 14, 1982.
$NASA	Document	PRC	Documentation (see $PRC).
$NAVCO	Document	NAU	Documentation.
$PRC	Document	PRC	Documentation.
ABORT	Module	Foremost	To ABEND COBOL programs.
BLANK	Macro	Foremost	Used in contributed programs.
CAPTCOPY	Program	Foremost	Copy CAPTUR tape after system crash (Similar to ADARES-COPY).
CAPTMURG	Program	Foremost	Combine CAPTUR tapes (MVS only).
CCCOP	CopyCode	Unknown	OpCode Equates.
CCDEVT	CopyCode	Unknown	DASD Device Characteristics DSECT.
CCKENTRY	CopyCode	Unknown	DSECT for Keyword Table (CMKTABLE).
CCKPBA	CopyCode	Unknown	DSECT for UKYWD Utility Subroutine.
CCKTABLE	CopyCode	Unknown	DSECT for Keyword Table (in UPARM).
CCUID	CopyCode	Unknown	DSECT for USERID SD-FILE.
CDATERTN	Module	Foremost	Obtain today's date (gregorian).
CHKTID	Program	NAU	Display status of terminals.
CMKPBA	Macro	Unknown	Map UPARM Passback Area.
CMKTABLE	Macro	Unknown	Used to define tables used by UPARM.
CMPROB	Macro	Unknown	Parse Request Block used by UKYWD.
CMUID	Macro	Unknown	Map User record in USERID SD-FILE.
CMUIDD	Macro	Unknown	Map directory rec in USERID SD-FILE.
CMUIDF	Macro	Unknown	Map Free-space rec in USERID SD-FILE.
CMUID1	Macro	Unknown	Map First record in USERID-SD-FILE.
CUDSDSAT	Program	NAU	Display PGMLIB's DSAT.
CWD	Program	Unknown	Monitor & Print DASD Activity.

DATECONV	Module	Foremost	Convert date formats Load module format on third dataset of tape.
DBSTAT	Program	NAU	Online ADABAS Statistics.
DISABLE	Macro	Unknown	Disable interruptions.
ENABLE	Macro	Unknown	Enable interruptions.
EOUREGS	Macro	Foremost	Register Equates—originally from Penn State Univ.
EYSTRT	Program	Ethyl Corp.	Attach USTART to restart printers.
FINDDD	Module	Foremost	Determine if DD is present.
FIXDDNAM	Module	Foremost	Modify DDNAME in DCB (or COBOL FD).
GOBACK	Macro	Foremost	Exit from module (see KEEP).
HCLOGM	Program	Unknown	Print/spool Userid listing.
JBSTATUS	Program	NAU	Send Msg to TID at End-of-Job.
JCLGEN	IEBUPDTE	PRC	JCL Generator: see Proceedings of 1981 Users' Conference. Member is input to IEBUPDTE. Detailed documentation is within the first member to be added by IEBUPDTE and within $PRC.
KEEP	Macro	Foremost	Entry to module (see also GOBACK).
LOCTIB	Macro	Unknown	Find address of a TIB.
LOGOFB	Program	NAU	ATTACH *LOGOFF monitor.
LOGOFF	Program	NAU	LOGOFF inactive users.
LOGOFF2	Program	Foremost	Loq-off for inactivity. Derivative of TSALGO modified to execute without ISMON.
MESSAGE	Program	NAU	Operator send message to TID.
NATTRAP	Module	Foremost	Invoke 'ADABAS' via 'ADASPAN' from NATURAL programs. Last change is a "user-written" modification to allow ADABAS calls to be trapped by an in-house module (ADASPAN). Calls can be examined and "filtered" before passing the call through to ADABAS.
OVSUP	Module	Unknown	Overlay Branch Supervisor.
PAN	Program	Foremost	Read only access to PANVALET. WILL ALSO GIVE MEMBER LISTING OF PANVALET DIRECTORIES. See internal note about Ver-10. SC37PC, if needed, should be coded for your installation.
PASSFAIL	Module	Foremost	Sample ULGEX1: It limits the number of Logon attempts without a valid password. TIDOK reactivates terminals which have been disabled.
PERPDATE	Module	Foremost	Convert date formats. Copyrighted—Source not available.
O	Program	NAU	Display COM-PLETE terminal queues.
ROSCOE	Program	Foremost	Emulate ROSCOE so ROSCOE Monitors can be run.
SC11M001	Module	Foremost	SMF Report (see SC11PCMP & $FORMOST).
SC11M002	Module	Foremost	SMF Report (see SC11PCMP & $FORMOST).
SC11PCMP	Program	Foremost	Report COM-PLETE usage by USERID from reformatted SMF data. See $FORMOST for more details.
SC12M001	Module	Foremost	SMF Report (see SC12PCMP & $FORMOST).

SC12M002	Module	Foremost	SMF Report (see SC12PCMP & $FORMOST).
SC12PCMP	Program	Foremost	Report COM-PLETE usage by TID from reformatted SMF data. See $FORMOST for more details.
SC13M000	Module	Foremost	SMF Report (see SC13PCMP & $FORMOST).
SC13M001	Module	Foremost	SMF Report (see SC13PCMP & $FORMOST).
SC13M002	Module	Foremost	SMF Report (see SC13PCMP & $FORMOST).
SC13M003	Module	Foremost	SMF Report (see SC13PCMP & $FORMOST).
SC13M004	Module	Foremost	SMF Report (see SC13PCMP & $FORMOST).
SC13M005	Module	Foremost	SMF Report (see SC13PCMP & $FORMOST).
SC13PCMP	Program	Foremost	Report COM-PLETE usage by Program from reformatted SMF data. See $FORMOST for more details.
SDDUMP	Program	Unknown	Utility to dump SD-Files.
SEEK	Program	Foremost	DASD activity monitor (batch). Will show where on a pack activity occurs and how many cylinders of arm movement occur.
SEEKJCL	JCL	Foremost	Sample JCL to EXEC SEEK program.
T	Program	NAU	Display COM-PLETE TP tasks.
TCMCO	CopyCode	Unknown	Map Message Core Queue.
TCMDS	CopyCode	Unknown	Map Message disk segment.
TCQUCA	CopyCode	Unknown	Map DSECT for UQ.
TID	Program	NAU	TIB/TID status display.
TIDOK	Program	Foremost	Reactivate a terminal which was disabled by PASSFAIL because of excessive password failures.
TLAM32TR	Module	Unknown	Trace routine for TLAM3271.
TPANAL	Program	NAU	Read TPMON SD files in batch job.
TPMON	Program	NAU	Attached COM-PLETE monitor.
TPMONB	Program	NAU	Attach TPMON monitor.
TPSTAT	Program	NAU	COM-PLETE Statistical Display.
TPSTATFM	Program	Foremost	Foremost's version of TPSTAT.
TSALGO	Program	Houston Oil	Timed Log-off. (Attached by TSMON).
TSMESG	Module	Houston Oil	Message/WTO for TSMON.
TSMON	Program	Houston Oil	Main control program for other Programs & Modules from Houston Oil.
TSMSU1	Adamint	Houston Oil	ADAMINT for TSRSP.
TSPRIMER	Macro	Houston Oil	Internal Macro for Houston modules.
TSRSP	Program	Houston Oil	ADABAS Response Monitor. (Attached by TSMON).
TSSETKEY	Macro	Houston Oil	Internal Macro for Houston modules.
TUDSDSAT	Program	NAU	Batch display PGMLIB's DSAT.
TUMSASM	JCL	Unknown	JCL to Assemble & Link TUMSPRNT.
TUMSBLKC	Module	Darmstadt	Block character generator which is used by TUMSHDR module of TUMSPRNT program.
TUMSGPRT	Program	NAU	Batch Message dataset header print.
TUMSHDR	Module	Darmstadt	Used by TUMSPRNT to print msg header.
TUMSJCL	JCL	Darmstadt	JCL to invoke TUMSPRNT.
TUMSPRNT	Program	Darmstadt	Batch print COM-PLETE messages.
U	Program	NAU	Display all Users with Thread.
UBROD	Program	Unknown	Update logon broadcast message. (MAP MLOGxx is not provided).

UDEMO	Program	NAU	National Aviation Underwriters version of *DEMO.
UFORCE	Program	NAU	Remove User from System.
UJOB	Program	Unknown	Submit job to system. (MAP SUBM is not provided).
ULGEX1	Module	Unknown	Sample exit: It is a dummy module except when logon is successful, then it issues a broadcast message (the broadcast message can be updated with UBROD).
ULOW	Program	Unknown	Set terminal to lower case.
UMKILA	Module	Ethyl Corp.	Delete MSG/PO from a printer: this module is ATTACHed by UMKILL.
UMKILL	Program	Ethyl Corp.	Attach UMKILA to delete MSG/PO.
UNIT	Program	NAU	TID/CUU Display.
UONSIT	Program	Software AG	Instant Onsite Support by SAG. See Page 25 of Nov. 1980 Newsletter.
UPERF	Program	NAU	Performance Rate Display.
UPRTY	Program	NAU	Display/Change User's TIB Priority.
URESPM	Program	NAU	Response Monitor.
USER	Program	NAU	Display USERID, TID, Date & Time.
USHO	Program	Foremost	Give displays similar to "*UQ A" except it will also show CPU for a step. For some displays a "JESCKP" DD card must be added to your COM-PLETE PROC (it may be "BTCHed" anytime). The DD card should point to your primary JES2 Checkpoint dataset. "*USHO" should be catalogued as a privileged program.
USTART	Program	Ethyl Corp.	Restart printer (ATTACHed by EYSTRT).
USTAT	Program	NAU	Display COM-PLETE Status by Thread.
UTLACT	Program	Sacramento	Multiple Displays by Terminal Status, USERID, Thread, Program or Terminal Number. Foremost found this to be a very useful program to evaluate resource requirements by individual transaction types. Resource required by one transaction on one terminal can be determined with the 'MONITOR' function of this program.
UTLACT2	Program	Sacramento	Oldest version of UTLACT.
UTQ	Program	NAU	Display COM-PLETE tasks. (Similar to @ DTASK command).
UUEEX2	Module	Unknown	Sample exit. This sample has code which permits two additional commands. 'LOW' will put the terminal into lower case mode. 'UP' will put the terminal back into upper case mode.

UUP	Program	Unknown	Set terminal back to upper case.
UWTO	Program	NAU	Send message to system operator.
UWTOR	Program	NAU	Send message to system operator and wait for a reply.
UX	Program	NAU	Display related USERs.
WRTL	Module	Unknown	COM-PLETE Write-Lines Interface Data is written to the terminal when a full page (entire screen) of data has been accumulated or requested via alternate ENTRY points into the module.
WTO	Program	Foremost	Send message to console operator (prefixed by USERID) then ATTACH WTODEL to mark the message as satisfied after 30 seconds (this keeps the message from rolling off the console too soon) (Also "beeps" console to attract the operator's attention).
WTODEL	Program	Foremost	Mark message sent by WTO to console operator as satisfied after 30 seconds (this eliminates the need for the operator to manually remove the message from the console).

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ADABAS-M Product Rep's Report

Dick Gemoets
OMEX

Certainly for ADABAS-M users the 10th Annual User Conference could only be measured in terms of success. I am sure all who attended would agree. It was both informative and fun.

If you like to measure success in numbers, how about a 850% increase in attendance over last year. No, that's not a typo, but then again there were only two last year.

Also in terms of numbers, two attendees from Bosch, AG in Germany won the "travel distance award." That's quite a trek. Unfortunately, they had to cut their trip short because of illness. I hope their "Great Expectations" of America were realized nonetheless.

Maybe you measure success by unanimity. I am pleased to report that all the ADABAS-M users agreed there was a need to unite—to organize our efforts and to share information. We will use this forum (the Newsletter) to accomplish that goal. Many attendees agreed to write papers for the Newsletter and future Conferences. Furthermore, we saw a need to share ideas and techniques we've developed individually as well as to let other users become aware of our needs. Again, the forum for this exchange will be the Newsletter as well as other direct communication such as the ADABAS-M Special Interest Group forming in the Greater Washington, D.C. area. Cindy Dougherty's article in this issue gives more details on the SIG organizational efforts.

We agreed to (and in fact did) exchange addresses and phone numbers for this purpose. Anyone wishing to share such information (tell us what you *have* and/or what you *need*) can drop me a note and I will make sure you are on the distribution list. It is intended to be a fairly informal exchange, so don't worry about formality.

The best means of sharing ideas is through your regional groups. Most ADABAS-M users have found a dearth of similar interest at these meetings. The *only* way to correct that situation is to make the commitment—for yourself *and* your company—to attend and participate. Remember all of the other product groups were at one time in the same (empty) boat. Just because we are the "new kid on the block" doesn't mean we have to take a back seat. Participate in the meetings and exchange information—or be an island. The choice is yours.

Associated with our willingness to exchange, SAG agreed to "distribute" through the User Group a pseudo TTY driver used inhouse. This provides the capability to run the DBA terminal through command files. SAG does not support this product, but anyone wishing a copy can do so by writing to me.

Yet another measure of success: knowledge gained. Good, useful information abounded for anyone interested in picking it up. The highlights of the week vis-à-vis practical knowledge were:
• ADABAS-M Restart/Recovery;
• ADABAS-M Internals;
• ADABAS-M Tuning and Optimization;
• User Papers present;
• Guest Speakers.

I can't say enough about our guest speakers. Capt. Grace Hopper was magnificent and had some good, practical knowledge to share. Ask anyone who went for a look at their

microsecond. James Martin gave us a delicious look at the future of computer systems with fiber optics communication, laser optic storage, Josephson Junction computers, and AI techniques for software development.

The software AG folks gave us some very useful information concerning effective use of ADABAS-M. In fact, at OMEX we are currently revising the way we perform backup for recovery of our 2 + gigabyte database. This revision is a direct consequence of information gained at the Conference. We have also begun using AMTEST which is included in your most recent installation kit. We had a demo of its capabilities—essential for efficient application development.

In subsequent Newsletter articles, I will relate more tidbits on how to use ADABAS-M more effectively.

Another highlight, of course, was the results of the Change and Enhancement balloting. We had some lively discussion concerning SAG's responses. You should have received a copy of the results and responses. If you have not, please call or drop me a note. You should also have received the voting ballots for Executive Committee seats (President, Vice President, Secretary and ADABAS-M User Rep). Again, if you have not, feel free to contact me.

From an ergonometric point of view, the Conference was an unqualified success. On the subject of work, I would like to take this opportunity to thank all who participated in making the Conference very worth attending. From all the users, I extend a special thanks to the Software AG folks who worked so hard to give us a worthwhile program. Aaron Zornes, Rex Jaeschke, and Rich Goodloe (and of course, Jim Crawford, user group liaison) spent many hours preparing for the seminars and workshops. Without their efforts, we would not have had nearly so enriching a program.

So much for the informative—how about the fun side? Most of us helped out the Las Vegas School District via their unique "Slots for Tots" program. We had some terrific social events—some official and some not so official. Midnight pool parties are definitely in at the Dunes! I'm looking forward to New Orleans (did someone say Paris?).

ADABAS-M Technical Notes

VAX DBMS Users Gain Native Mode C Language Support with ADABAS-M SAGNA

Software AG of North America announced support for the native mode C language for ADABAS-M DBMS users on Digital Equipment Corporation VAX-11/730, 11/750 and 11/780 computers running under the VMS operating system.

Users may interact with the system in four ways: by CALLs from online or batch programs; from terminals using the ADASCRIPT-M query facility; via terminals or batched commands with the Report Writer; or through the interactive data base administrator utilities. User-written application programs may be in any of the 32-bit VAX-11 languages including BASIC, BLISS, C, VAX-11 COBOL, CORAL, VAX-11 FORTRAN, Macro-32, Pascal, and PL/1.

Eastern Region SIG for ADABAS-M to be Started

The eastern region of ADABAS-M is working on organizing the first local ADABAS-M Special Interest Group meeting. This Group will enable users to get together and discuss their experiences with ADABAS-M, talk about individual applications of the product, and receive talks from Software AG personnel.

Attendees of the first SIG meeting will elect a chairperson. This person will be the major contact for the SIG and will also attend the quarterly SAGGROUP Eastern Region meetings to report on the success and actions of the ADABAS-M SIG.

Agenda for the first meeting will also include a talk or two by Software AG personnel and a discussion of future meeting sites and future agenda. We hope to hold the SIG meetings quarterly in the eastern region for maximum benefit to the group.

For more information, or if you have questions or suggestions about this SIG, please feel free to contact Cindy Dougherty at:

IIT Research Institute
185 Admiral Cochrane Drive
ATTN: DSD/C. Dougherty
Annapolis, MD 21401

Software AG and Application Software

Ed Forman
SAGNA

Many of you who attended the Users' Conference had the opportunity to learn of the direction that Software AG has taken vis-à-vis ADABAS-friendly products.

While this subject has always been a concern to the user community, it has recently achieved a great importance for many of you. Since our corporate goals are consonant with these growing user requirements, we have been able to respond to many of our users' requests in this area. Our efforts in this regard are to continue this response and extend the types of application which are compatible with ADABAS.

For those of you who did not attend the Conference, we are presenting a summary of our activity with application software vendors. Applications that are ADABAS-friendly (in alphabetical order by vendor) are:

Bibliotechniques

Bibliotechniques markets the Washington Library Network online catalog system. This product, designed and developed around ADABAS and COM-PLETE, is currently being used by several ADABAS users. For further information, contact Clay Burrows at (206) 786-1111.

COMSERV

Many of you are familiar with AMAPS, the nine-module manufacturing package that COMSERV offers. Currently there are interfaces with ADABAS and each COMSERV module. The interfaces, which are in production at various ADABAS sites, are available with the purchase of the AMAPS components from COMSERV. John Carlson, of COMSERV, will answer any queries regarding their software and the ADABAS interfaces. He may be reached at their Corporate Headquarters, (612) 452-7770.

Information Science Incorporated

Information Science Incorporated and Software AG are currently working together to produce an ADABAS/NATURAL version of their data base oriented Human Resource System. This system will be available from Information Sciences Incorporated later this summer; product features may be demonstrated now using their current data base product. InSci will market and support this product. Please contact Scott Edelman or Bruce Loeffel of InSci at (201) 391-1600 for further details.

Integral Systems Inc.

Currently ISI markets an interface with ADABAS that allows for NATURAL access to the data files. This is currently operational at an ADABAS site. In addition to this, they will be offering ADABAS/NATURAL-based products. Software AG is working with ISI to develop these products, which they will market and support. Please contact Dan Callahan of ISI at (415) 939-3900 if you would like additional information on these capabilities.

MSA

Software AG, with the cooperation of MSA, is developing interfaces to the following MSA products: General Ledger, Personnel/Payroll, Accounts Receivable, and Accounts Payable. Interfaces with other MSA packages are being considered. These interfaces will work with the MSA batch and CICS online option. They will be developed, marketed, and supported by Software AG. The first systems available will be for General Ledger and Human Resources. We anticipate a mid-to-late summer availability for this capability. Contact your Software AG marketing representative for any questions regarding this interface.

Personnel Data Systems

Software AG and Personnel Data Systems have jointly developed an ADABAS/NATURAL version of PASS/ACCUPAY, the PDS Payroll/Personnel system. This integrated system is currently installed at an ADABAS user's site and can be demonstrated upon request. Personnel Data Systems will market and support this product. Frank Cancro of PDS should be contacted for further information; he can be reached at (215) 828-4294.

SAS

Software AG, with the SAS Institute's cooperation and support, is developing an interface to SAS. This will also allow easy access to the SAS/GRAPH capabilities. This interface is currently under development. Software AG will market and support this interface. Please contact your Software AG marketing representative for further information.

Sun Information Services Company

SIS is currently marketing SUNHEALTH, a product which addresses the data processing needs of Occupational Health and Safety professionals. The five-module system focuses on Medical Records, Industrial Hygiene, Occupational Illness and Injury, and Material Agents and Inventory Requirements. This system was designed around ADABAS and is written in NATURAL. For further details, SUNHEALTH Product Manager James Gavin may be contacted at (215) 293-8235.

Walker Interactive Products

Walker Interactive Products and Software AG have jointly developed an interface to their existing product line. This includes Purchase Payment, Material Management, Accounts Payable, and in the near future, General Ledger. This interface is currently running in production mode at ADABAS site. Barbara Edelman or Manuela Jimenez of Walker Interactive Products will provide you with further information regarding this interface capability. They may be reached at (415) 495-8811.

The above represents the current status of projects underway at Software AG for ADABAS-compatible application products. Other areas that we are actively pursuing include Oil and Gas Accounting Systems, Health Care Services, Airline Maintenance and Engineering Systems. We'll keep you advised on the progress of these projects.

The user community is the best guideline in helping us determine application areas which are of the greatest general appeal. As prospective users of application software, you can help us establish dialogue with vendors to provide ADABAS-friendly products. We welcome suggestions and assistance in this area. Please contact me at Software AG should you be interested in investigating ADABAS-friendly and other applications.

Brubaker, Smith Appointed Senior Vice Presidents

Lloyd Brubaker, formerly vice president and general manager of the Dry Grocery Division for Swift & Co., has been named Senior Vice President and Chief Financial Officer for SAGNA. Brubacker's corporate responsibilities include Administration, Finance, the Reston Data Center and the Planning and Legal Departments.

"I'm very impressed with the quality of people I've met at Software AG," Brubaker said, "particularly with their attitudes, but also with their skills

and intelligence." Commenting on the changes within SAGNA, Brubaker said, "Change is a function of corporate growth. As we become larger, we will have to do some things differently. It is critical, however, that a certain balance and a proper pace be part of the implementation of organizational changes or new functions which are initiated."

He began his career as a systems engineer for IBM. He then worked for the Whittaker Corporation and the Evans Products Company where he served as director of management information systems and corporate financial planning. He became familiar with Software AG products while at Evans.

Bruce Smith was appointed Senior Vice President of Technology. This appointment consolidates all of Software AG of North America's technical resources under one organization. Smith will be responsible for Research and Development, Field Technical Support, Product Technical Support, Quality Control and Course Development.

According to John Maquire, "Bruce Smith's extensive management experience in all areas of information systems planning and development will be a great asset in positioning Software AG for future growth, while at the same time enhancing customer and product support."

Smith comes to SAGNA with twenty-seven years of experience in various high technology fields. Prior to joining SAGNA, he was vice president of engineering for Eaton-Kenway Corporation. Previously, he held senior management and technical positions with the State of Utah, American National Finance Corporation, American National Insurance Company, American National

Computing Corporation, Management Systems Corporation, The Church of Jesus Christ Latter-Day Saints, and IBM.

Welcome aboard Lloyd and Bruce.

Robert A. Burgin Named to Board

Software AG of North America announced the appointment of Robert A. Burgin to the Company's Board of Directors. The appointment is a new position on Software AG's Board and brings the number of Board members to six.

Burgin is chairman and CEO of Leaseway Transportation Corporation, a position he has held since 1978. His career includes 22 years of executive management positions with TRW, Inc.

He serves on the Board of Directors of E. F. Johnson Company, Storage Technology Corporation, CFS Continental, and Provident Life and Accident Insurance Company.

Burgin has received numerous honors and awards in the transportation industry, including being named "Best Chief Executive in Trucking Industry" by *The Wall Street Transcript* and top CEO in the transportation services industry by *Financial World*.

SAGNA Opens Philadelphia Office

A new sales and support office was opened on July 1 in Philadelphia.

According to Don France, senior vice president, sales and marketing, the new office was opened to accommodate the company's expanding customer base and increased sales activity.

The new office is located at 3 Neshaminy Interplex, Suite 301, Trevose, PA 19047. Telephone (215) 245-0122.

Class Schedule

September–December 1982

Course	Date	Location
ADABAS Concepts & Facilities	September 7–8	Reston
	September 13–14	Seattle
	October 4–5	Chicago
	October 4–5	New Jersey
	November 1–2	Reston
	December 6–7	New Jersey
ADABAS Design Workshop	September 22	Seattle
	October 20	New Jersey
	October 20	Reston
	November 10	Houston
	November 17	Seattle
	December 8	Reston
ADABAS Direct Calls	September 13	New Jersey
	September 27	Houston
	September 27	Seattle
	October 25	Reston
	November 1	Chicago
	November 8	New Jersey
	November 29	Seattle
	December 6	Houston
	December 13	Reston
ADABAS Internals	September 14–15	New Jersey
	September 28–29	Houston
	September 28–29	Seattle
	October 26–27	Reston
	November 2–3	Chicago
	November 9–10	New Jersey
	November 30–1	Seattle
	December 7–8	Houston
	December 14–15	Reston
ADABAS Performance & Tuning	September 23–24	Seattle
	October 21–22	New Jersey
	October 21–22	Reston
	November 11–12	Houston
	November 18–19	Seattle
	December 9–10	Reston
	December 16–17	New Jersey
Data Base Administration	September 16–17	New Jersey
	September 30–1	Houston
	September 30–1	Seattle
	October 26–29	Reston
	November 4–5	Chicago
	November 11–12	New Jersey
	December 2–3	Seattle
	December 9–10	Houston
	December 16–17	Reston

Course	Date	Location
DBA Skills Workshop	September 13–17	Houston
	September 27–1	New Jersey
	October 4–8	Reston
	October 18–22	Chicago
	October 25–29	New Jersey
	November 8–12	Reston
	November 29–3	Reston
	December 6–10	Seattle
	December 13–17	Houston
ADABAS-M Concepts & Facilities	September 7–9	Reston
	October 5–7	Houston
	October 13–15	New Jersey
	November 16–18	Chicago
	December 14–16	Reston
COM-PLETE Applications Workshop	October 19–22	Houston
	November 15–18	Reston
COM-PLETE Systems Control	September 27–28	Reston
	October 18–19	Seattle
COM-PLETE INTERNALS	September 29–1	Reston
	October 20–22	Seattle
NATURAL Applications Workshop	September 15–17	Seattle
	October 6–8	Chicago
	November 3–5	Reston
	December 8–10	New Jersey
NATURAL Advanced Techniques Workshop	September 20–22	New Jersey
	October 13–15	Houston
	October 13–15	Reston
	November 3–5	Seattle
	November 15–17	New Jersey
	November 22–24	Chicago
Effective Use of JCL (OS)	September 13–17	Reston
	October 25–29	Seattle
	November 1–5	New Jersey
	November 29–3	Reston
	December 6–10	Chicago

Current Release Levels

The following is a list of current System Modifications that are available. Please contact Gordon Perrins, product support group manager, if you need current SMs.

ADABAS V4:

ADABAS Nucleus & Utilities—
—SM Level 5
ADAMINT Version 1.4
—SM Level 5
ADACOM Version 1.2
—OS Zap Level 8
—DOS Zap Level 8
ADASCRIPT + Version 1.1
—SM Level 5
Data Dictionary Version 1.1 OS and DOS
—SM Level 5

ADABOMP:

—OS Version 2.0.0
—DOS Version 2.0.0

ADABAS/VM: Version 1.1.6

COM-PLETE: Version 4.1

—All OS operating systems—
SM1

*NATURAL:

Version 1.1
—OS Zap Level 9
—DOS Zap Level 9

*Please note that the NATURAL/CICS pseudo conversational driver is generally available to all interested NATURAL users. Please contact the Product Support Group.

ADABAS-M V1.2

—SM2 for all operating systems

SAGUTILS

(Software AG Technical information Logs System)
The current distribution level of SAGUTILS is Release 3 Update series 8206.

ADABAS V4.1

Status: OS—Available
DOS—Available

NATURAL V1.2

Status: Beta testing

ADABAS-M V1.2

Status: RSX-11M—Available
RSX-11M + —Available
IAS—Available
VMS—Available

ADABAS/VM

Status: Available

Channel-to-Channel Software

Status: Available

COM-PLETE DOS

Status: Available

COM-PLETE VTAM SUPPORT

General Availability: Release 4.1

COM-PLETE V4.1

Status: Available

DATA BASE MACHINE

Status: Available with 60-day delivery

Online Data Dictionary

Status: Available for NATURAL Users

Early Warning

The Early Warning System was instituted to provide timely technical information (and, whenever possible, fixes) for items, problems with the software, and security.

The most current Early Warning distributed (as of 8/11/82) is EW122 - ADABAS V4.1.1.

Denver Support Numbers

(800) 525-7859
7:00 a.m.–6:00 p.m. Mountain Time

(303) 233-6500
Emergency "after hours" support

Notice: The product information presented here represents the official release dates/levels for all products currently committed to by Software AG of North America, Inc.

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Conference Information	David Schmidt
Consulting Services (Sales)	Gary Bowers
Documentation Orders	Geri Keydash, Kathleen Boushek
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Marketing Inquiries and Product Literature	Courtney Brooks
Product Security Features Documentation	Written requests to Gordon Perrins
SAGNA Software Distribution Requests	Pat Stroud, Pam Tompkins, Technical Services Coordinators, Product Support Group, Reston
Technical Questions Hotline Support	Field Support (800) 525-7859
User-Written Software Distribution Requests	Written requests to Users' Group Liaison

Software AG Users' Group Regions in the United States

This map represents changes made in the United States regional Users' Group boundaries at the International Conference.

Need Some Help?

Have you ever wanted to talk with someone from SAGNA and did not know who to call? The answer is simple. Contact your local sales representative. Listed below are the locations and telephone numbers for our North American sales offices.

If you are a user in the U.S., call the sales representative nearest you and he or she will put you in touch with your SAGNA representative. Users outside the U.S. should contact the local affiliate.

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December Newsletter copy due
November 1, 1982

Change/Enhancement
Requests for '83 Conference
due November 30, 1982

'83 Conference Abstracts due
December 10, 1982.

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