SOFTWARE AG

CONNECTIONS

VOL. 11 ■ NO. 4 ■ NOVEMBER, 1986 FALL ISSUE

Compact Discs and DB2

Bruce Mancinelli
Vice President, Market Development

It all started years ago. First we began with a receiver we felt was powerful and flexible enough to satisfy our then current needs and capable of anticipated growth and expansion consideration. As our listening needs changed, we would be able to add new devices, add power with an amplifier and the like. It was easy at first, since after all there was little to choose from. There was the economy and timeliness of 45s, the expanded listening pleasure and increased MIPS (Music Investment Per Song) of 33⅓s, and for those seeking high quality resolution and storage capacity, there was reel to reel. We started in monaural and soon stepped up to stereo. All in all, it was simple. Initial data processing systems and applications have followed much the same course. We bought computer systems thinking power and expansion capabilities would have them around much longer than they actually were and we used one or two of a number of relatively simple access methods or file management systems to implement basic applications.

Then the technology took over. First with the hardware in the audio world. The stereo components had more power, more features, with more integration and all of it available at better price performance ratios. Technology in the data world exploded with the 4300 family, 30XX models and even personal computers. In the audio world, after years of the same programmed music access methods we were hit with a barrage of new options that made what to buy or even what to play a mind boggling thing. With AM and FM and FM stereo and 8 tracks and quadraphonic sound, and cassettes, and video (and with it the standards war, Beta and VHS), and yes still records or LPs, and the newest technology, compact discs. Through it all new audio generation advertising promoted each newest media as the wave of the future . . . better than the last. Ads confused and challenged the consumer and made new decisions on what to do difficult. When to buy, what to buy, how much to buy or whether to buy at all or wait for the next generation made the decision process a challenge. Consumers were told to make new commitments to source music libraries and so we did, only until the next and newest generation. With it all we accumulated 8 track, record, cassette and video stock piles, each with the songs popular of that generation. Oh, some we converted, but by and large we held on to our precious investments and sought components and systems that supported it all. Will the compact disc change all of that? No! Although it

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PRESIDENT'S MESSAGE

Involvement: The Key To Progress

Carlo A. Scagnelli
Central Hudson Gas & Electric Corp.

Reviewing the last Newsletter with over ⅙ of its contents devoted to the President's Message, the Executive Committee Meeting summary and a description of the Secretary's function, the last thing you'll ever want to hear again is that '. . . I find myself at a loss for words . . .'. That such a large portion of any issue results from one individual can be construed in two ways. The most obvious will not be mentioned. The other forms the basis for this article.

To paraphrase an old axiom '. . . Repetition is the Mother of Invention . . .'. Each incoming president has noted the seeming apathy reflected by the lack of Newsletter contributions. Eliminating articles originating from the Executive Committee, regional representatives and Software AG personnel, only one article remained in the last issue to represent over 2,200 worldwide users. While the Newsletter, a major avenue of user communication between international conferences, is the most obvious, other opportunities for direct involvement are also ignored. During the months immediately preceeding the conference, ballots for Executive Committee elections and Constitutional amendments were

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mailed to all licensed sites and Technical Support Surveys were distributed across North America. Less than 200 returns were received in any one category.

The reasons? The litany goes on. "I don't know any of the candidates so I feel I shouldn't vote." If your representation is of any importance to you, a candidate is only a phone call and a few simple questions away. "It takes too much time and what difference does it make?" Responses to the 1984 Technical Survey resulted in the creation of a Documentation team in Software AG to rewrite all product documentation. Panels to permit user input and direction for future product development evolved from an idea of an *elected* member of the Executive Committee. Strong leadership influenced the rescinding of the charge for PREDICT ACM. On line access to Denver support is in the works. What difference does it make, indeed. All for a few moments of your time.

The last is the most ironic. "I don't know enough to (get involved, chair a SIG, write a Newsletter article)." If everyone felt this same way, from whom would any of us learn? Let me assure you that the knowledge and abilities you possess, regardless of how seemingly limited in your own eyes, will prove invaluable to other SAGGROUP members, especially new installations. That which you don't know, you can learn. None of us ever stops learning should we care to admit it. What better place to learn than in the midst of the action.

We represent a discipline dealing with information, its processing and exchange. The exchange of information is communication and communication needs more than 1 participant. We are an organization with members around the world yet most articles originate in the United States. With the conference an extra 6 months off, let's set some mutual goals. At least one article from a member of each region or international area over the course of the next year. An extra effort to complete and return the Technical Support Surveys you will receive this coming spring. A point to cast your vote in next year's election. A call to a product representative or SIG chairman offering your services.

SAGGROUP is a vast pool of knowledge and opportunity. You can only draw from the pool for so long before it needs to be refilled. Make a contribution and let's start refilling the pool NOW.

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SOFTWARE AG NEWS

Service Results In!

Michael E. Ater
Vice President, Customer Service Division

One way we have of measuring the quality of the service you receive from Software AG is to ask. So we sent you—and/or some other key employee(s) of your firm—a questionnaire in May 1985 and again in April 1986.

Since we can now compare the results of both surveys, it is clear you feel we have improved in virtually all areas covered by the survey! The following are some highlights of the survey results.

In 1985, when our Customer Service Division was just getting started, 83% of you thought we "fully met your expectations" when rating the support you received from Software AG in the 12 months prior to the survey. By 1986, that number had risen to 85%.

When contrasting the service levels provided by Software AG with those provided by other computer systems or software vendors with whom you personally do business, almost 90% of you believe Software AG is "comparable or better," as evidenced by the 1986 survey.

The number of you who feel we are proficient in providing appropriate solutions in an acceptable timeframe rose by 40% from 1985 to 1986. And, almost 99% of you feel we "consistently" or "regularly" serve you in a diplomatic and courteous manner, while almost 97% of you feel we "consistently" or "regularly" address your service requests in a professional manner.

When asked if you feel we are "empathetic and committed to providing a solution that is in the best interests of your organization," 88% of you believe we did so "regularly" in the 12 months prior to the 1986 survey, compared to 85% in 1985.

The mission of Software AG's Customer Service Division is to lead our industry in providing service, and these surveys enable us to see the areas we need to continue addressing. The steps we have taken in the past year—in product certification, training, documentation, and customer support—will enable us to reach that goal.

SOFTWARE AG EXTENDS NATURAL TO THE USER COMMUNITY

Chuck Riegel
Product Manager

Three recent announcements have proved that one company can offer integrated 4th Generation Technology for both application developers and end users. For many years NATURAL has been used to develop live production applications and in some cases to offer a limited syntax for end user inquiry development. Knowing that the need for user computing facilities would continue to grow, Software AG implemented development projects that would provide additional, and more effective NATURAL facilities for the end users.

***User Computing:* SUPER NATURAL Version 2**

The first step was SUPER NATURAL. SUPER NATURAL Version 1 was released in April of 1985 and has been received with a great enthusiasm. Version 1 was mainly used as a menu driven reporting system. Version 2, due to be released by the end of the year, will completely change the direction and purpose of SUPER NATURAL. With Version 2, users will be able to create and maintain their own user files; generated data maintenance transactions; generate NATURAL code; use a new report format editor for detailed reports, as well as summary information; upload and download data to and from the PC using the facilities of NATURAL CONNECTION and much more. With the release of SUPER NATURAL Version 2 all aspects of user computing can be delivered in a single menu driven system that offers extensive security and control.

***Tailored Workstations:* NATURAL PRODUCTIVITY CENTER**

User workstations have recently become a popular topic within the software trade journals. Software AG took the position that the NATURAL environment could benefit from workstation technology, especially since the

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For more information on SUPER NATURAL or NATURAL PRODUCTIVITY CENTER
call
1-800-843-9534

COMMUNICATIONS PRODUCT LINE EXPANDED

John Ebert
Product Manager

COM-PLETE, Software AG's key communications product, is being enhanced to further complement ADABAS, NATURAL and PREDICT. Enhancements for COM-PLETE include DOS/SP2 SUPPORT, MVS/XA (31 bit) support, and a new NATURAL driver to even further improve NATURAL performance under COM-PLETE. These enhancements, along with others, will be available at the VERSION 4.4 level of COM-PLETE scheduled for general release this spring.

Since its announcement at the International Users Conference in San Diego last May, COM-POSE, a member of the COM-PLETE product family, has generated much excitement among users of CICS, TSO, CMS, and IMS/DC. COM-POSE, based on COM-PLETE's transaction processing nucleus, allows users of other communication systems to transparently provide a full set of NATURAL functionality and increased performance as well as a host of other utilities to their users. The next release of COM-POSE, version 1.3.1, is scheduled to be released in December.

ACCESS, also a member of the COM-PLETE product family, is an option available to users of COM-PLETE that would like instant access to the COM-PLETE environment from either CICS, TSO, CMS, IMS/DC, or another COM-PLETE. ACCESS version 1.1.0 is currently available.

The newest member to the COM-PLETE product family, COM-PLETE SECURITY, will be an option available to users of either COM-PLETE or COM-POSE. COM-PLETE SECURITY provides functional security to the COM-PLETE or COM-POSE environment much in the same way as NATURAL SECURITY. Objects such as data sets, application programs, sd-files, batch jobs, and COM-PLETE or COM-POSE utility programs can be secured by user profiles, tib groups, prefixes, or time windows. Details about the COM-PLETE SECURITY system will be available with the release of COM-PLETE versioin 4.4 and COM-POSE version 1.4.

NET-PASS–VTAM Session Manager to be Released

John Ebert
Product Manager

NET-PASS, Software AG'S VTAM session manager of multiple communications systems, is scheduled for release in December 1986. NET-PASS allows users to switch back and forth between communication systems or between multiple copies of a communication system. This would allow users to instantly switch from a TSO session to a COM-PLETE or CICS session without the tedious logoff/logon process usually associated with multiple communication systems. Besides significant performance enhancements to remote VTAM terminals, NET-PASS provdes a unique windowing capability in which multiple sessions can be concurrently displayed as different sized windows on any 3270 terminal.

For more information on NET-PASS
(VTAM SESSION MANAGER)
call 1-800-843-9534

DB2

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offers many new capabilities and new quality, it lacks in some other areas that we have grown to enjoy with previous technology. Does this sound familiar? It should, as data processing professionals, we have wrestled with new computer technologies, new access methods, and a variety of data base management systems as we sought to maximize our information management strategies. We all have had to deal with an even larger number of choices in new application development languages or productivity tools. As these new software products or access methods emerged, we seized on their potential for improving information management and our ability to better satisfy application development demand. Each time we weighed the prospects of conversion, however, conversion plans were often abandoned and the "shop" was resigned to develop in the new environment while supporting the production systems in a co-existing fashion. Recently, with the accelerated choice of software tools available, and increased demand
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Review V2 October Release

Mark Milne
Product Manager

REVIEW Version 2, Software AG's enhanced performance monitor is scheduled for release at the end of October 1986. REVIEW Version 2 is now capable of monitoring applications in realtime, in addition to monitoring individual ADABAS or COM-PLETE/COM-POSE nuclei. These new REVIEW enhancements are a result of adding two interactive realtime monitors to the batch oriented capabilities already present in Version 1 of REVIEW.
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software AG

NETPASS VTAM SESSION MANAGER

☐ Yes, please send me additional information on NET-PASS, Software AG's VTAM Session Manager.

☐ Also send me additional information on Software AG's other data communications products

NAME _____

TITLE _____

COMPANY NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

TELEPHONE _____

software AG

SOFTWARE AG'S ADVANCED END USER COMPUTING

Yes, please send me additional information on the following end user products from Software AG:

☐ SUPER NATURAL V2

☐ NATURAL PRODUCTVITY CENTER

☐ NATURAL ELITE

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TITLE _____

COMPANY NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

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Extending NATURAL to Users

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user population of NATURAL has been expanding to all levels of the organization.

The approach that was taken, after consultation with many users, was to provide a tailored workstation approach. Existing 4th Generation workstations are static and cannot be tailored to meet the individuals needs. Since there is extensive functionality available to NATURAL users and the knowledge of the transmission and access of that functionality is needed, we felt that a tailored approach was the most effective approach.

This tailored workstation approach has been developed in a product called the NATURAL PRODUCTIVITY CENTER which will also be available by the end of the year. The NATURAL PRODUCTIVITY CENTER offers the NATURAL user the ability to build tasks and menus that front-end the NATURAL environment. These menus can incorporate functions within Software AG NATURAL based products as well as user developed products and applications. The task/menu creation is menu driven and extremely simple to use. In addition to the task/menu facilities NATURAL PRODUCTIVITY CENTER also provides resource tracking by user and task and a roadmap to determine what facilities are available to the user. It is true: the NEXT prompt is no longer needed either for application developers or end users.

***Computer Assisted Instruction:* NATURAL ELITE**

The third major effort in this area is the development of NATURAL ELITE, Software AG's CAI training product. Without effective training, users and application developers are left at an enormous disadvantage. NATURAL ELITE offers not only a presentation system with courseware but also an authoring system that can be used to create individual courses.

The most unique feature of this system is the ability to provide interactive workshop sessions within the NATURAL ELITE courseware thus providing the best training environment possible; learning by trying. Currently a number of courses are available and a number will be available soon. These courses include NATURAL for the Business Professional, Introduction to NATURAL, SUPER NATURAL Fundamentals, Advanced SUPER NATURAL, SUPER NATURAL Administration and soon a full line of NATURAL Version 2 courses.

As you can see, Software AG has taken great steps to provide end users an improved information processing environment. Software AG plans on concentrating a great deal of effort in the area of user computing and the Information Center in the near and long term future. Significant interest has been created by the user community in user computing and I urge anyone interested in starting a special interest group to please contact the President of the User group, Carlo Scagnelli. I would be very interested in helping this SIG get off to a flying start.

New courseware for NATURAL V2 and SUPER NATURAL V2

Maggie Geiser and Susan Kaplar
Customer Service Division

Since Software AG released NATURAL/ELITE in April, ELITE courseware development has been in full production, with the first results soon to be available.

Our primary development has been an ELITE training series for SUPER NATURAL users. Other ELITE courseware soon to follow includes a NATURAL Version 2 enhancement course and upgrades of the existing NATURAL Version 1.2 courses to NATURAL Version 2.

The SUPER NATURAL series for NATURAL/ELITE consists of three courses, and is being authored in conjunction with SUPER NATURAL Version 2 product development. The three courses are targeted toward separate audiences and cover different usage needs of SUPER NATURAL.

The first course is intended for end-users and primarily covers the fixed format capabilities. The second course concentrates on the free format of SUPER NATURAL and is targeted toward advanced users. We also expect programmers to find this second course extremely useful, as the new features of SUPER NATURAL Version 2 make it an excellent prototyping tool. The third course is for SUPER NATURAL administrators. It covers many aspects of controlling the SUPER NATURAL environment, including user-generated files.

For those of you unfamiliar with NATURAL/ELITE, it is Software AG's computer-based training system. It allows anyone on your mainframe network to take self-paced individualized instruction on any topic. We plan a full curriculum of ELITE courses on Software AG products, while the optional authoring system of ELITE allows you to create custom courses on topics of your choice.

The ELITE system is especially useful for training users on how to use your NATURAL-based applications. Since ELITE is written in NATURAL, it is extremely easy for a user to stop a course at any point, try what he or she has learned with your application, then restart the training course.

For more information about NATURAL/ELITE call Ken Anderson or Dyan Morgan at 1-800-843-9534.

For more information
on
NATURAL ELITE
call

1-800-843-9534

Software AG Adds and Expands Training Centers

Stan Maring
Customer Service Division

The big news in Software AG's Education Department these days is the addition of a classroom facility in the Los Angeles area and the move of our New Jersey regional training center to a larger, more convenient, and better equipped facility.

We expect the Los Angeles training center, located in Irvine, California, to open on November 10. This beautiful facility has been designed to provide a top quality learning environment capable of hosting the entire Software AG training curriculum.

Ease of access was a prime consideration when planning the Los Angeles facility. It is conveniently located a short walk from the Marriott Hotel Irvine or can be reached by car from the many other hotels in the Orange County area. Students will especially enjoy the ease of air travel, as the training center is adjacent to the John Wayne (Orange County) Airport.

On September 26, our Hasbrouck Heights, New Jersey, office and training center was replaced by a much larger office and training center in Fort Lee, New Jersey. Everyone, especially our New York City customers, will find this new facility to be much more convenient. Located near the George Washington Bridge, students will have a superb training environment (not to mention a beautiful view of the Manhattan skyline). Many hotels are in the area, with the Holiday Inn-Fort Lee the closest. In addition, the Fort Lee office and training center are within easy access of all three major New York area airports.

Software AG now has regional training centers in Denver, Los Angeles, and New York. Each of these facilities has been specially designed to meet the high quality standards set by our national training center in Reston, Virginia, which, of course, serves the Washington, D.C. area. Each facility features a large number of classroom terminals. This allows students to maximize their hands-on experiences, while under the close tutelage of one of our instructors.

Our new winter Software AG Public Education Schedule has been mailed to all of our customers. If you have not received yours, please call one of our registrars at (703) 648-2482.

Software AG's policy on NATURAL CMPEXIT

Michael E. Ater
Vice President, Customer Service Division

There appears to be some concern regarding Software AG's commitment to CMPEXIT. The following is intended to provide a clear and concise statement of Software AG's policy regarding this feature of NATURAL.

CMPEXIT was originally designed to allow customers the option of storing NATURAL source and object programs in a destination other than the NATURAL system file (normally an ADABAS file). It is implemented as a user exit of NATURAL and, as such, requires that the user both write and support the additional code required to implement this function. Code has been developed by users to support certain operating environments, but not all of the environments supported by NATURAL have been addressed. Software AG does not intend to develop or support any user exit code for CMPEXIT and will require that users continue to supply this code if this feature is desired.

Software AG's policy, as has been stated previously, will be to maintain the functionality of CMPEXIT at existing levels. This means that there are no commitments or guarantees that future enhancements to NATURAL will support CMPEXIT. Users have the option of requesting this support as part of the normal Change/Enhancement procedure and such requests will be considered on their merits based upon the priority assigned by the user community.

I trust that this restatement of our policy will allow you to understand Software AG's position on this feature and remove any existing confusion and uncertainty.

Software Terminology

Larry Cook
Customer Service Division

In order to clarify the meanings of some of the terminology we frequently use in reference to products here at Software AG, the following definitions are offered:

A *new product* is any software product developed by Software AG which has not yet been released or distributed to our user community.

A *version* is an upgraded copy of an existing Software AG product which contains major enhancements and new features. All outstanding maintenance fixes should be integrated into the source code for each new version of a product.

A *System Maintenance* (SM) release is an upgraded copy of an existing Software AG product which contains maintenance fixes, but does not contain major enhancements or new features.

An *Early Warning* is a hardcopy description of an identified problem with a Software AG product that may have significant impact on a customer's operations. Normally, a fix for such problems will be provided or, if a fix is not yet available, then a bypass solution is suggested. By implication, these problems are of such a serious nature that it would be inadvisable for customers to wait for the next SM release.

A *Product Fix Tape* is a tape containing a machine-readable form of all fixes for a particular Software AG product that have been developed since the last SM release. Customers can apply these fixes to their systems to correct the reported problems without the danger of errors often introduced during transcription of hardcopy fixes.

The time between release of versions is to be no less than one year and no more than two years. The time between SMs will normally be no less than six months and no more than one year. The exception to this might be the very first SM, which is sometimes released within the first six months following a product's release.

PROFESSIONAL SERVICES

Achieving Dramatic Improvements In System Performance

Professional Services, from Software AG, is uniquely designed to assist you in achieving maximum success with Software AG products in your environment, and in so doing, enhance the spirit of self-reliance throughout your company.

Software AG's experienced technical specialists are available to share their expertise whenever—and wherever—you need it.

Software AG's Professional Services capabilities include:

- DBA Assistance
- On-sight Training
- System & File Design
- NATURAL Coding Analysis
- NATURAL Performance
- Performance Analysis and Tuning
- Large Scale System Design
- Application Load Analysis
- Third Normal Form Procedures
- Disaster Recovery Procedures
- Long and Short Term Consulting

For more information on Software AG's Professional Services call:

1-800-843-9534

DB2

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from the corporate user community for more timely, accurate and directly available information systems, we have found ourselves in new evaluations. Now, IBM (silent on DBMS' for a decade) has the marketplace reevaluating current information strategies. But we all know this has been done before. Look around the shop. We have ISAM, VSAM, DL/I-IMS, DBMS' from independent software firms and even batch sequential applications working hard to help support daily data processing systems. Each set of applications marks when we ceased development in one area and focused on a new alternative. Various access methods and DBMS' have for years provided us choice as to which to use that best fit the corporation's needs at the time. Each provided many new capabilities but each also introduced new limitations and problems as we found out. A DB2 or SQL/DS is nothing more than a new alternative. It is not a binary choice, but one of many to choose from, some from IBM, and many others from the well established independent software firms. That choice will exist for years to come. We will weigh the merits of one DBMS against another as we reevaluate our ongoing information strategies and measure the capabilities and proven track record of one DBMS against another. With all the choices available and what should we acquire that will in fact provide a foundation for information management for the next few years . . . until the next generation and the next reevaluation.

We have dealt with two major problems in recent years: data management and application development. First, we have lived a data dependent life, with complex data structures tied to application programs. This has been further complicated with the use of different access methods and different DBMS' as we have migrated from one IBM operating system and environment to another, or one on-line monitor to another, or from non-IBM operating environments. Each time specific data files unique to our old environment and tied to the production systems made conversion only a passing consideration. New operating environments were implemented and through the ingenuity of the MIS department or software trickery the old systems would continue in the new environment. Data independent applications, free of navigation and internal data pointers has been clearly defined as the direction to take. Whether implemented as a quasi, somewhat, nearly, partially or fully relational, relational processing frees us of a decade long struggle with pointers, or chains. But we can't stop there. We must find a system suitable for high performance as well as ad hoc information processing. We must find a system that is flexible, dynamic and truly capable of growth and support for new "information" types: text, image, graphics, document, etc. . . . not just data. We must select a system capable of spanning ever changing IBM operating environments and on line systems and non-IBM systems. We must select a system that will aid in the data conversion and provide application program migration of older systems. We must select a system that provides non-stop operation and facilities that minimize ongoing maintenance. We must select a system capable of support for large, mid range departmental and personal computer systems. We no longer debate the merits of an integrated data dictionary but seek a DBMS that provides one

"Someday we might have the perfect media that addresses all needs. Then again, we may not. For now "Bridge over Troubled Waters" never sounded better."

with active cross reference facilities and provdes a base for full corporate modeling capabilities and one that will control data security and business rule processing integrity. We seek a system that will support distributed and remote processing needs. Finally and most important, we seek a system that incorporates a transparent and portable fourth generation system. This must provide not only application portability, but also access to the variety of access methods and DBMS' we know will have to deal with for years to come. If we can bridge old application libraries, then some conversion can be done, but various access methods such as VSAM, or DL/I and IMS and some of the widely used independent DBMS' and even DB2 offer each unique capabilities and choice. A common fourth generation methodology with native access to all of these access types and DEC/VAX systems will provide productivity gains in all environments, while eliminating application dependencies. It is like the universal stereo component capable of playing records, or tapes or CDs. We don't have to, or want to decide on a single DBMS or access method at the sacrifice of everything we have, or at the price of the problems or deficiencies that one choice would create. For now we will pick the best data management strategy major application at a time. But we will implement each application with the same high level, productivity oriented fourth generation facility whether we select VSAM, or DL/I, or IMS, or DB2 or one of the independent DBMS or something in the DEC/VAX world. With native access to these environments and migration software, we can pick what to convert or move to a new environment, what to leave as is, what to extend with fourth generation facilities and at what pace. Integrated stereo components are available that provide access to a variety of music sources. So are some fourth generation application development systems and they represent the key to information management strategies for years to come. The CD is an emerging technology. Someday soon we might even be able to record our own from old music sources. DB2 is an emerging technology and young software product. It will mature as all software does, but it will take time and years of application in practical use. For now it is an alternative among many to choose from and as we know, freedom of choice is good.

I recently bought a new fourth generation stereo audio visual system for my home. It can do it all, and do it through remote control. It has a CD digital player to boot. I don't yet own a compact disc, but I'll probably buy a few. For now I play my old records and tapes. I may convert some of them, but many will go unconverted. I like being able to choose and feel better that I made a decision that addresses all my listening desires. With a simple wire connection or bridge, I was even able to hook up my old 8 track unit. Someday we might have the perfect media that addresses all needs. Then again, we may not. For now "Bridge over Troubled Waters" never sounded better.

Software AG

REVIEW VERSION 2

Performance Monitor

☐ Yes, Please send me additional information on REVIEW V2, Software AG's enhanced performance monitor.

NAME _____

TITLE _____

COMPANY NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

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Attn: Ken Anderson

New ADABAS Rep Appointed

Carlo Scagnelli
Central Hudson Gas & Electric

Mr. A. C. Roda of Planning Research Corporation has resigned as ADABAS Product Representative. A. C. had served since he was elected to the position in May 1985 and contributed substantially to the overall effectiveness of the Executive Committee. Good luck A. C. in whatever the future holds.

Mr. William Wagner of the University of Texas at Austin has accepted appointment to fill the remaining term of the ADABAS Product Representative until the next International conference in October 1987. Bill's address and telephone number can be found at the back of the Newsletter.

Review V2

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The ADABAS interactive component of REVIEW measures all ADABAS requests issued from any application in the online environment. This allows REVIEW to monitor applications that access ADABAS regardless of application language, target database (local or remote) or usage of multiple databases. In contrast, other packages would require multiple reports to be combined for an accurate representation of an application. Available information includes: NATURAL userid, NATURAL program, other program, ADABAS control block data and ADABAS's CPU duration. Because of REVIEW's integration with NATURAL, it is possible to monitor down to the NATURAL statement number level. This data is collected in realtime and does not require ADABAS Command logging to be active, nor does it make use of any ADABAS User Exits.

The second interactive component measures resource usage and performance for COM-PLETE or COM-POSE. This component will be available with COM-PLETE/COM-POSE Version 4.4, which is scheduled for release in March 1987. REVIEW will monitor the internal usage of key resources within COM-PLETE/COM-POSE, such as: roll buffers, big buffers, small buffers, program library buffers, SD file utilization, response time, COM-PLETE/COM-POSE commands (map, open, close, etc. . . .) issued, and many more. This will allow the COMPLETE or COM-POSE environments to be monitored very accurately and thus tuned for optimal performance. Again logging need not be very active and no exits are used.

In addition to the interactive components, REVIEW still has the batch capabilities present in Version 1. Through the command logs of ADABAS and/or COM-PLETE/COM-POSE each individual nuclei can be monitored at a detail command level or at a summarized level. The detail level presents a view of all the activity that occurred within that nucleus. The data can then be summarized and concatenated with other summarized data to form an historical perspective. This historical aspect allows Data Administrators or DBAs to spot emerging trends and head off potential problems before they become critical. This historical data may also be the basis for forecasting tomorrow's requirements.

By now, you can see the many benefits that REVIEW Version 2 brings to your organization. The application monitoring capabilities of REVIEW enable you to debug and fine tune applications in the online environment, thus making them more accurate and effective. The application can be measured no matter what languages are involved or what ADABAS nuclei (local or remote) are involved. Yet each individual nucleus can still be monitored by REVIEW.

Application or nucleus level, have your cake and eat it too, with REVIEW Version 2.

For more information on REVIEW V2 (performance monitor) call

1-800-843-9534

Two ADABAS User Committees Are Being Formed

Bill Wagner
The University of Texas at Austin

As the above byline indicates, A.C. Roda is no longer the ADABAS Product Representative. His obligations at work forced him to resign, and I was recruited by Ralph Jenks and Carlo Scagnelli to fill the rest of his term. So with three days experience under my belt, I now find myself writing my first newsletter article in the "ad hoc" mode. Next time, I'll be more organized. I promise.

For anybody out there interested in committee work, have I got a deal for you! I'm in the process of forming not one, but *two ADABAS user committees:* one to suggest future directions for Software AG to take in the database area, and another to review ADABAS version 5.1 documentation. Space is limited. Apply early.

No ADABAS Product Rep report would be complete without the obligatory solicitation of articles. Here it is. Any aspect of ADABAS is fair game. Possible topics include "New User Experiences", "Performance and Tuning", "Silly Mistakes We've All Made", and "User-Written Utilities". How about "10 Changes I'd Make If I Could Rewrite ADABAS"? Speculative articles are just as good as nitty-gritty bits and bytes—if you have a vision of where ADABAS should be going, or Software AG, or the industry as a whole, write it down and send it in.

Since I find myself serving in an elective office to which I was never elected (now I know how Gerald Ford felt), I can only hope that you will give me the help and support that A.C. Roda had earned. The next year should be exciting, with the arrival of such products as ADABAS version 5.1 and HPE, and I look forward to serving as ADABAS Product Rep during that time. Feel free to call or write me with questions, comments, suggestions, or articles. Especially articles. . . .

ADABAS SM10

Sue Karlin
Customer Service Division

The ADABAS SM10 effort is well underway within Software AG's ADABAS Product Support Group and the various releases are currently in different phases of quality assurance testing.

We are targeting a January 1987 release for all supported operating environments, which are: OS, MVS/XA, DOS, VSE SP2.1, CMS, CPO (Continuous Processing Option), CPO/XA, and ADABAS/VM.

As SM10 will be the last SM for ADABAS V4.1, we have set the following four goals for SM10 development:

- Solutions to all known V4.1 software bugs
- Simplification of the installation procedures
- Synchronization of the software and the documentation
- Significant enhancements for VM/CMS users

All ADABAS fixes included on the Post-SM09 Fix Tape, as well as all ADABAS fixes developed subsequent to that tape, will be included on the SM10 replacement load modules. Also, several fixes and performance gaps will be incorporated into the ADAMINT libraries. We urge you to make plans now to upgrade your systems to SM10 as soon after its release as possible to take advantage of all software fixes.

The installation procedures have been streamlined by eliminating the ADASCRIPT+ and ADACOM installation and verification steps, as well as those pertaining to the old data dictionary system. For DOS users, the JCL generator has been enhanced to support the latest VSE SP2.1 environment and the use of MSHP. Best of all, changes to the installation JCL and procedures will be documented in new installation manuals for OS, DOS, and CMS.

With SM10, we are committed to minimizing the amount of SM-related documentation that is distributed in "loose-leaf" fashion, whether in hardcopy or on the release tape itself. Rather, we will set a precedent with SM10 of incorporating all updates up to and including SM10 into the reference manuals. In addition, the following documentation is now included in the appropriate sections of the reference manuals:

- The PREFETCH option
- The DOS ADAIOR module
- The diagnostic utilities: ADAICK, ADAACK, ADAVAL
- Several Frequently-Asked Questions, write-ups from the Software AG Customer Support Center
- Changed/new response codes and error messages
- Pertinent SAGTIPs
- Expansion of RSP009 and ERR010 documentation

These ADABAS manuals will be reprinted with all revisions up to and including SM10 and will be distributed with the release tape. They are as follows:

ADABAS Internals	Command Reference
Utilities	DBA Reference
DOS Operations	OS Operations
DOS Installation	OS Installations
DOS JCL Generator	Messages and Codes

The decision was made to reprint the manuals, rather than simply provide updates, because of the extent of the changes. In addition, the pages will all be re-numbered and each index will be correspondingly updated. Note, however, that the documentation was not rewritten; therefore, the same basic organization and style has been maintained.

Beyond SM10, our plan with ADABAS V5.1 is to have a more timely mechanism in place to feed user input, documentation errors, and new SM-related information into a manual update process which is synchronized with each SM release. By putting extra effort into SM10 documentation, we hope to demonstrate our commitment to continual improvements in our documentation for ADABAS.

Furthermore, with the documentation synchronized to the software, I believe there will be incentive for users to upgrade to the SM10 level. With stable software, up-to-date documentation, and a user base synchronized at SM10, I am hoping the support requirements for V4.1 will diminish as we shift our emphasis and staff resources to the support of ADABAS V5.1.

Finally, we have significantly enhanced the ADABAS release for VM/CMS environments, as follows:

- Performance enhancements
  a. The new CMS ADAIOR is now standard with SM10
  b. PREFETCH has been provided for CMS users
  c. A re-entrant link module is provided to allow NATURAL to run in shared segments under CMS
- Installation/Documentation
  a. New installation procedures and documentation
  b. New CMS Operations Manual
  c. New EXECs have been provided

In conclusion, the ADABAS SM10 project is the largest and most comprehensive maintenance release effort ever undertaken by the ADABAS Product Support Group. As Manager of the ADABAS PSG, I am confident that SM10 will even surpass the success we had with the SM09 release of ADABAS.

The Truth About ADABAS Waits in a CICS Address Space

Tom Melesky
Santa Fe Energy

Ever since I moved from Data Base Administration to become the CICS Systems Programmer here at Santa Fe Energy I had been frustrated by the lack of concrete tuning information available to me, even though we were running OMEGAMON/CICS from Candle Corporation and Performance Analyzer II (PAII) from IBM. OMEGAMON/CICS showed me that tasks running in the CICS address space were spending 70%-90% of their elapsed time on a 'Wait—Single Event'. To do any effective tuning on CICS or ADABAS I needed to break down this large block of time into smaller, more meaningful pieces.

A little investigation showed that ADALNC, the module called by appli-

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Third Normal Form in a Third World Country

Fin Park
Ministry of Planning
Riyadh, Saudia Arabia

Serving as database administrator for an installation that is relatively new to database and has only recently become appreciative of good database file design techniques can be a challenging situation. And when that installation's data processing staff is made up of many individuals who have limited overall data processing experience, let alone in depth knowledge of anything like normalization principles, the situation becomes doubly challenging. The following account will describe the experiences that the Ministry of Planning in Riyadh, Saudi Arabia has had in its attempt to achieve reasonably normalized data structures and file designs.

The major function of the Ministry of Planning (M.O.P.) is to produce a Development Plan every four years which specifies the goals, objectives, projects, programs, and projected expenditures for the entire Kingdom. This Plan is then used in conjunction with the annual budget to guide the various private and governmental sectors for the next four years. The past two plans and especially the most recently published Fourth Development Plan have utilized computerization to assist in the plan's creation which has been a real asset since the overall project generally spans at least two years. In addition to the production of the Plan, scientific applications such as energy and economic models, simulations, and SAS procedures are run by end-users, as well as the conventional payroll, personnel, inventory, etc., applications. M.O.P. has been an ADABAS customer for 4+ years, a NATURAL user for over 3 years, and we have used PREDICT for 7 months. The computer department staff consists of a mixture of multinational expatriates (classified as 'experts' by the Saudis) who are fairly familiar with application system design and development but only occasionally have extensive ADABAS/NATURAL experience, plus Saudi nationals, most of whom have computer science degrees but as yet have not acquired the experience base built up over long years of 'suffering' in data processing. It is

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The Truth

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cations programs that in turn calls the ADABAS SVC, issues a 'wait single event' for that task if ADABAS doesn't respond immediately to the request. Aha, now I knew that at least some part of the 'Wait—Single Event' time could be attributed to ADABAS, but how much? Were there other places and programs in CICS also issuing waits for single event? How could I find out just what was going on here?

Thanks to the help of Clovis Lofton of the Candle Corporation I was able to develop a modification of ADALNC that enables OMEGAMON/CICS Degradation Analysis (DEXAN) to report the percentage of time a task, a group of tasks, or all tasks, spend waiting for each ADABAS file being accessed. Instead of seeing

Wait—Single Event	86%

on the OMEGAMON/CICS Degradation Analysis screen I now see something like this:

Wait I/O Event	86%
Ada-F015	(14)
Ada-F082	(36)
Ada-F060	(4)
Ada-F165	(21)
Ada-F215	(11)

This gives me a much better idea of what is going on in a CICS address space, and what must be tuned to improve response time for a transaction. An added benefit is that OMEGAMON/ESRA will also identify ADABAS files in its reporting of transactions exceeding response time thresholds. The code needed to make this change can be seen in figure 1.

Figure 1—Code to report waits by ADABAS file.

Replace the code at LNKUC3 with the following code which:

- Formats the file number from the call into a literal which is placed in TCAFCDI to be found by OMEGAMON.
- Saves the incoming SVMID (Service Module ID) in an unused file control area in the TCA.
- Puts the DFHFCP SVMID, X '3100', into TCASVMID, so that OMEGAMON will believe that the wait was issued by DFHFCP.
- Change wait from 'single event' to 'ioevent'.
- Restores the original SVMID after waking up from the wait.

```
LNKUC3   DS     OH                          ENTERED WITH R1 -> ECB TO WAIT ON
         L      R5,0(,R3)                     addr of command buffer
         USING  ACB,R5                        ADDRESSABILITY TO CB
         SR     R8,R8                         CLEAR R8
         IC     R8,ACBFNR+1                   GET THE FILE NUMBER
         DROP   R5
         CVD    R8,WORKD                      CONVERT FNR TO DECIMAL
         UNPK   RESULT+5(3),WORKD             UNPACK INTO FILE-NAME LITERAL
         OI     RESULT+7,X'FO'                MAKE IT RIGHT
         MVC    TCAFCDI,RESULT                PUT IT IN THE TCA
         MVC    TCAFCURL,TCASVMID             SAVE THE INCOMING SVMID
         MVI    TCASVMID,X'31'                1ST BYTE OF OUR SVMID
         MVI    TCASVMID+1,X'00'              2ND BYTE OF OUR SVMID
         ST     R1,TCATCEA                    STORE ECB ADDRESS IN THE TCA
         DFHKC  TYPE=WAIT,DCI=IOEVENT         ISSUE THE WAIT
         MVC    TCASVMID,TCAFCURL             RESTORE ORIGINAL SVMID
         B      ADARET                        RETURN TO ADALNKR
***      literal and workfield needed for this mod
WORKD    DS     D
RESULT   DS     OCL8
         DC     CL5'ADA-F'
         DC     CL3'
```

Figure 2—Code to Report number of ADABAS calls per task.

This code should be inserted somewhere between labels LNKUC2 and LNKUC3. Exactly where is not important, but it must be after R1 is saved in R3.

```
LNKUC2   DS     Oh
         LR     R3,R1                         in case rl -> user param addr list
         .
         .
***      beginning of call count code
         L      R1,TCASYAA                    addr of TCA system area
         USING  DFHSYTCA,R1                   addressability
         L      R5,TCADCAA                    load addr of DCA for this task
         L      R8,X'30'(R5)                  x'30' is my disp to PAII amct bucket
         LA     R8,1(R8)                      bump it by one
         ST     R8,X'30'(R5)                  put it back
         DROP   R1
***      end of call count code
```

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The next question I needed to answer was 'How many ADABAS commands does transaction XYZ issue?' Of course, all other things being equal, the more ADABAS commands a task issues the longer the response time; but you have to be able to measure something before you can try and improve it or explain it. PAII does report the number of DFHFCP (File Control Program) calls to an access method, but what I needed to see was the number of times ADALNC was called per task. After I found that the 'access method call' bucket was in the PAII control area appended to the Dispatch Control Area (DCA) for the task, it was a simple matter to have ADALNC increment it by one each time he is called by an applications program. The length of the PAII control area and the location of the full-word counter varies depending on the options specified at PAII installation; see your PAII installation manual for details concerning the layout of the PAII control area. The code to make this change is seen in figure 2. Perhaps someone reading this will figure out, or has already figured out, how to get CICS/PARS to report ADABAS commands per task and will let us all know sometime soon.

These two changes have given me some basic information needed to tune CICS and ADABAS to work together. I can now not only spot problem transactions, but can explain exactly why it is a problem transaction and what should be done to improve it. Best of all, with one glance at OMEGAMON/CICS DEXAN I can now assess the general health of both the Data Communication and the Data Base systems at Santa Fe Energy.

Third World Country

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rare when someone from either of these groups has ever had more than a textbook exposure to normalization and database file design techniques.

The early M.O.P. ADABAS/NATURAL systems were very much application database oriented, which is understandable since the computer department staff was just becoming familiar with the capabilities of the two products. The basic file design procedure followed the steps of: data element identification, basic file design and review, entry of the file data to the file and field entities of the old Software AG Data Dictionary, and then generation of empty ADABAS files and NATURAL DDM's to commence the programming phase of the system development. In reviewing these early attempts, it is apparent that some normalization techniques were applied but generally the outcome still resulted in large, non-flat data records with multi-key/data-item dependencies in a single master file, plus a few assorted table files. These files were identified identically both logically and physically to ADABAS and the use of userviews which could have at least given a 'token' normalization appearance to the files was seldom employed. Additionally, because many of the master files were application database oriented, the tendency was to lump every possible data item on them resulting in numerous PE and MU repeating groups as well as frequent MU within PE situations.

Despite all this, ADABAS, with the added flexibility of NATURAL, performed and has continued to perform with a minimal amount of major file redesign dilemmas when adding new and integrating existing systems. However, two problems arose in the existing systems which made normalization and better design techniques of increasing importance to M.O.P. First, because most of the systems were designed as application databases with only limited attempts to advance to the subject database level, a good deal of data redundancy occurred. Each application database system had its own set of tables and master files with data items frequently repeated in other similar but independent application database systems, especially in the area of table files. The storage/maintenance/data discrepancy problems that resulted should be obvious. The problem was even further exaggerated when one considers that bilingual systems are often common for Saudi Arabia so that each alphanumeric field was being stored twice, in English and Arabic (and this also applied for Arabic numerals unless you converted the IBM Arabic hex numeral representation to F0-F9!).

The second problem was even more insidious and involved the difficulties that arose with non-normalized files full of PE, MU and PE/MU groups. The most important file for the Fourth Development Plan system which had an absolute completion date for publishing and fiscal year reasons had many of these repeating group definitions. These groups contained long text descriptions of the programs and projects within the Plan. When the text was duplicated in Arabic after initial data entry in English, it was not long before we were getting a NAT3049 error for a 3000 byte compressed record buffer overflow. We even got into a situation where somehow a few records more than 3000 bytes actually got stored on the file which then proceeded to give us all sorts of utility problems during the file's unload, decompress, and reload—we only overcame this problem by temporarily zapping our utility buffers while processing the file. Fortunately, the Development Plan project was at a point where the English was no longer critical since the Plan was to be published in Arabic so we were able to condense the English text descriptions and sidestep the NAT3049 problem.

However, as more systems were developed without real normalization reviews, the NAT3049 in particular became more of an immediate problem while the proliferation of redundant data in application databases represented a potential future problem, if for no other reason than data storage limitations. The obvious solution was staff training in normalization techniques and strict enforcement of database fill definitions. Training is an ongoing function at M.O.P. as the Ministry tries to realize the Plan's goal of Saudiization—meaning eventual replacement of all expatriate experts with Saudi nationals. Fortunately, in the database area at least, the Saudis at M.O.P. were very receptive to training in database administration principles and seemed to assimilate the ADABAS/NATURAL/PREDICT material presented quite well (it only took a one day NATURAL class before the entire Automobile file contained Mercedes' and BMW's!). Based on my experience training Saudis, it seems that the Software AG product line is sophisticated but straightforward enough for new and relatively inexperienced users to easily and quickly comprehend. And the simple database access offered via NATURAL results in enthusiastic users as well.

Presentation of the normalization techniques was also relatively well-received by the Saudis and expatriate staff so the groundwork had been laid and what really remained was the enforcement of the normalization and data-

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SOFTWARE AG

M E M O R A N D U M

TO: All readers, Software AG Connections

FROM: Larry Jayne, User Group Liaison
Software AG

This issue marks the debut of the new Software AG Connections, designed to communicate a wider range of news to a growing user base.

Apart from the new look of Connections, you'll notice new feature contributions from Bruce Mancinelli and other key members of our product development teams. These features will address a wide range of topics of concern to anyone engaged in applying 4th Generation technology to the tasks of information management.

You'll see articles on the availability and future direction of new products, as well as detailed discussions on the use of existing products. You'll see special offers which will provide you with significant savings.

But most importantly, you'll see continuing input from our most significant contributors: you, our users.

Connections will continue to grow as a true, two-way communications link between us and you. We count on your continued support to feed this growth.

REGIONAL REPORTS

NEW ENGLAND REGION

Dave Miller Discusses The Information Center

Mary C. Albano
Massachusetts Institute of Technology

The first meeting of the 1986–1987 season of the New England SAG Users Group took place on June 19, 1986 at SAG and the Sheraton Tara, Braintree, Ma. Jim Wisdom opened the meeting by thanking Buck Shaw for all his help over the previous year. He then introduced the new officers; Art Rondeau, Terri-Lynn Thayer and Mary Albano. The following announcements were made:

- We are in the process of updating the mailing list. If you have not already returned your address and survey form please do so or your name will be removed from the list (Please include a description of your operating environment and a managerial application contact.)
- Call for standards. Jim Wisdom would like to create a regional standards notebook. All those interested should forward a copy of their institutions standards to him.
- The Quips process has been re-evaluated. QUIPS (Questions, Issues and Problems) is an information sharing system that allows Software AG or the user community to clarify questions and/or problems. It is not a gripe session, all true software problems and bugs should be reported to Denver.

Joyce Maroney discussed the following highlights of the San Diego User Conference:

- Software AG has announced a high level consulting service called On Site Services.
- There are two new technical reps in Braintree, Bob Pritchard and Bill Shaheen.
- New prospects (N.E. Region): DRI, Lexington Ma. and the University of Connecticut.
- New IBM sites (N.E. Region): Chase Access Services, PVA/EPVA, Buzzottos Inc., City of Hartford and West Vaco/U.S. Envelope Division.
- New VAX sites (N.E. Region): Central Connecticut State University, Southern Connecticut State University, Eastern Connecticut State University and Connecticut Regional Community College Board.
- The 16th International Software AG Conference will be held in Strasbourg, France October 26-30, 1986.
- The 17th International Software AG Conference will be held in Miami, Florida November 1-5, 1987.
- Software AG is sponsoring a Customer Service Award. This award is to recognize Software AG employees for exemplary service to customers. If you would like to nominate an employee notify Patra Frame, Human Resources Department, Software AG, Reston, Virginia.
- Just a reminder—If you are not already involved in a BIG (Business and Industry Group) consider joining.
- Software AG appointed two new executive vice presidents: Carlton Crenshaw—Vice President of Finance and Administration and Chief Financial Officer; E.L. Pearce—Executive Vice President Sales and Marketing.

NOTE: *NATURAL Version 2 Planning Guides* are available, if you have not received one contact Joyce.

Dave Miller, Software AG Product Manager for End User Computing, discussed *The Information Center and End User Computing.* Dave's presentation reviewed the needs for an information center, gave some direction on how to extend products, training and resources to make an information center effective, and information center implementation using Software AG products.

The video from the San Diego User's Conference entitled *Integrated Software AG Processing Environments* by Roel Pieper was shown. The video explained Software AG's plans for the integration of ADABAS with other SAG products (ADABAS HPE, NET-PASS, COM-PASS, WINDOWS 3270 and the NATURAL PROCESS.)

The afternoon demo session was held at Software AG, Braintree, MA. The following demo's were available: ELITE, SUPER NATURAL, NATURAL/CONNECTION, CON-NECT, COM-POSE, and ACCESS.

EASTERN GREAT LAKES REGION

Carlo Scagnelli Highlights San Diego User's Conference

Bill Hirons
R.T. French Company

The first official meeting of the Eastern Great Lakes Region was held on June 25th at National Fuel Gas in Buffalo, New York. Joan Obrien hosted the meeting which opened with Dick Godown, co-chairperson of the group, introducing Carlo Scagnelli, Central Hudson Gas & Electric, the newly elected president of SAGGROUP.

Carlo reviewed the proceedings from the Executive Committee meeting held at the San Diego User's Conference. Highlights include the following:

- A technical support group consisting of approximately 6 people, has been established within Software AG for the purpose of writing documentation for all new products.
- Creation of a User panel on Documentation was suggested. Mike Miller, Rochester Gas & Electric, has agreed to chair the panel and encourages anyone to call him if they would like to serve on this panel.

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- Production of an on-line service connection to download zaps, Sagutils, User profiles etc. has been initiated.
- Carlo Scagnelli noted that Software AG pays particular attention to the SAGGROUP User Survey for improving its level of service.
- New Software AG classes include:
  —NATURAL Internals
  —Version 5 (2 week duration)
- A final note, the 1987 User Conference will be held in Miami in November.

Other presentations included Bonnie Sale, Rochester Schools, group co-chairperson, reviewing the boundaries, responsibilities and by-laws of Eastern Great Lakes Region with the attendees. Ed Smith, SSR Manager, Software AG, White Plains, NY, was introduced to the group. He stated that the Software AG presence in the Rochester Buffalo area will be enhanced in the near future.

Iggy Licata stated that his installation at Rochester Institute of Technology has been Beta testing ELITE and initial reaction to the product has been favorable. However he did say that an author dedicated to designing a course is required to achieve satisfactory results. He is also willing to demo the product to anyone who is interested.

The following User presentations were given: Iggy Licata spoke on Application Development at R.I.T. and Bonnie Sale presented a School Census and Attendance System at Rochester City Schools.

Eastern Great Lakes Elects New Officers

The September 16th meeting was held at Rochester Gas and Electric with Bonnie Sale, Rochester Schools and co-chairperson of the Group, opening the session. There were 21 attendees present, representing 10 organizations. The first order of business was the election of officers for the new year.

The results were:

Program Chairperson—Joan Obrien, DBA, National Fuel Gas, Buffalo, NY

Regional Representative—Laura Jacobs, Sr. Software Specialist, Rochester Institute of Technology

Secretary—Bill Hirons, DBA, R.T. French Company, Rochester, NY

Education Chairperson—open, volunteers needed

Bonnie then read the July 15th letter from Collette Farabaugh on the subject of SERVICE CONNECTION USER PANEL. A discussion followed resulting in the submission of the names of 2 persons to serve on this panel. They are as follows: Ken Freidman, Technical Support, Cornell University and Andy Ludwick, Data Base Technician, Rochester Institute of Technology.

Laura Jacobs, speaking for Iggy Licata, Education Chairperson, stated that a positive response was received from the attendees of the Advanced NATURAL Class and On-line Design Class held in Rochester in July.

In discussing future topics, the subject of a local User Profile was brought up and Mike Miller, Rochester Gas and Electric, said he would follow up with a form he has in his possession that could be modified to meet local needs. Mike also gave the GROUP an update on new courses that will be available under Software AG's Education package "ELITE".

ROCKY MOUNTAIN EAST REGION

Jon Kluger Shares Custom Solutions Efforts

Joe Leighty
State of Colorado

The August 22, 1986 Regional meeting was held at the Holiday Inn in Golden, Colorado. About half of the business meeting was devoted to a discussion of a proposed conflict resolution procedure. The purpose of the procedure is to promote speedy handling of issues that involve differences in interest between Software AG and its Rocky Mountain customers. Bill Speaks (NATURAL Product Rep) led a discussion on proposed changes to the Executive Committee structure. The only consensus reached was centered on concerns that the Executive Committee could lose its effectiveness if it became too large.

John Kluger gave a presentation on the Software AG Custom Solutions effort. He shared a success story about a rapid development project in a VAX/VMS environment. Jill Clark highlighted the features, enhancements and implementation considerations of NATURAL Version 2. Bill Chapman ended the afternoon with a colorful and informative presentation on extending PREDICT.

ROCKY MOUNTAIN WEST REGION

Report Cards Indicate High Success Rates for Customer Satisfaction

Gordon L. Wood
Utah Retirement Systems

The Rocky Mountain West Regional User's Group meeting was held on July 18, 1986 in Salt Lake City, Utah.

The meeting opened with the introduction of speakers and Software AG personnel in attendance. Paul Maxwell followed with the treasurer's report. He reported that the users' group funds were getting very low and that we could no longer provide the lunch at the meetings. He also stated that charging a registration fee would be too cumbersome to administer at the present time. However, the group will look into sponsoring some type of education, possibly NATURAL V2.0, or implementing a registration fee or annual membership before the funds become too critically low. Incidentally, at the previous meeting the group unanimously voted to implement some kind of membership fee for the group.

After a short break, Art Burkett, Manager of Customer Service, spoke on customer service and support, quality assurance, and education. He said that report cards on customer satisfaction have indicated a high rate of success in the past year. Mr. Burkett gave some tentative release dates for NATURAL V2.1, COM-PLETE 4.4, etc.

There was some concern from the group as to why NATURAL SM07 and NATURAL V2.1 were to be released at approximately the same time. The question posed was, "Why install and

test SM07 then install and test V2.1 the following week, especially when SM06 is very stable?". Art said that it was necessary to have everyone at the same stable level of NATURAL V1.2 during the conversion process so that they could concentrate their support efforts on NATURAL V2.1 problems.

Jim Beavers, Account Representative, Software AG of Denver, gave a comprehensive review of all new Software AG products. Jill Clark (Kline), SSR, also from Software AG of Denver, followed with a presentation of NATURAL V2.1 highlights and planning tips. She indicated that the conversion should not be too painful.

The last presentation was given by Leo Schutter from the Idaho State Auditor's Office. Leo discussed the development effort they went through when developing an employee information system for the state of Idaho.

He stated that this would be a major system and therefore it was very important that they took great care during the design phase of the project. Leo stated that because of a lack of in-house experience and the importance of the project, that they should seek some outside assistance. They decided to contract with LBMS to evaluate and design this new system along with their own staff.

Leo confessed that it was a hard thing to do, to admit to his management the lack of expertise in this area and request outside help. But, he also expressed that it was the best long range decision he could have made because it not only allowed several members of his staff to gain the expertise necessary for future projects but also got the employee information system off on the right foot.

PACIFIC SOUTHWEST REGION

Predict Version 2 Experiences

Wally Maltz

The meeting was hosted by City National Bank, in Los Angeles on August 29th. There were approximately 35 attendees. Ted Dumetz chaired the meeting.

Roy Richardson has volunteered for Software AG's Service Connection Service panel. One more volunteer is needed to participate in this new project. Anyone interested should contact Ted Dumetz.

Cathy Chiavetti from Software AG Denver replied to two questions: the UTIL1 tape was distributed on August 1 and the length of field BZ (A32) is overridden (A45) on the system file in PREDICT Version 2.

Charles Fields of LRF and Associates gave a presentation of several successful NATURAL front-end schemes. He recommended that rather than make internal modifications to NATURAL which may not be supported in future releases, it is better and safer to build shells within which NATURAL can operate. Examples of front-ends which interface NATURAL with CICS and COM-PLETE were given. These front-ends allow signing off of CICS from within NATURAL without leaving orphan user queues, and the disallowing of letting users have access to the NATURAL next prompt. A handout with source listings was distributed.

Tom Marconi of Software AG covered the following topics of interest:

- Software AG's revenue for the last fiscal year was up over 25% to over $62 million.
- At the next User's Group meeting John Church, SAG Technical Product Manager, will have the latest news regarding Natural Version 2.
- The Education schedule for the Newport facility will be available in November.

The meeting concluded with a discussion on PREDICT Version 2 experiences. User tips are as follows:

- Most users reported good success in convertion to PREDICT Version 2.
- Migration is recommended over the 'in situ' method
- Don't use 'REFERENCE' by in Batch Mode.
- Converting from batch dictionary to PREDICT was discussed as well as XREF use.

SIERRA PACIFIC REGION

Cathy Lonsdale Talks About New Products

Ronna Slobe
State of Nevada

The June 2nd meeting of the Sierra Pacific User's Group was held in northeastern California and was hosted by the State of Nevada. There were 39 attendees with 21 companies represented.

The new Regional Representative, Ron Johnston, ATAC, opened the meeting with a discussion of the San Diego Conference. Larry Jayne, Software AG Reston gave an overview and his evaluation of the conference. Other conference attendees gave their views and highlights of the conference. Everyone who attended was impressed with the organization of the overall conference and the quality of the presentations. The highlights mentioned most were the enhancements to the new versions of ADABAS and NATURAL and the number of new products to be available within the year.

Throughout the day other presentations were also made. Cathy Lonsdale of Software AG, Mountain View, CA then reviewed the new products and enhancements and talked about the future directions of Software AG products. Lou Absher, Software AG, Denver Support Center, gave an overview of COMPOSE and ACCESS. SPL (Systems Programming Limited, San Francisco) gave a presentation on ADAPrep, their ADABAS preprocessor. Lastly, Betty Iura of Software AG, Denver Support Center, gave us an overview of some helpful hints which the support center may request if you put in a problem call.

The meeting was concluded with a round-table discussion centering on "On-line ADABAS Usage." These discussions have proved to be very informative in conjunction with the "What's Happening?" papers from users.

Jon Church Gives NATURAL Version 2 Presentation

On September 8th the Sierra Pacific User's Group was held in San Jose, California hosted by Dole Foods. There were 34 people in attendance representing 18 companies. There was an extremely full schedule with user presentations of the San Diego conference being postponed until the next meeting.

We were pleased to welcome Jon Church of Software AG Reston. Jon

gave us a condensed version of the presentation he gave in San Diego on NATURAL Version 2 enhancements. It was nice to be able to ask questions, voice our concerns and give out input.

FAR EAST REGION

New Far East Region President Elected

Shiro Suemasu
Software AG of Far East, Inc.

The General Meeting for the Far East Region User's Group was held on June 30, 1986 in Tokyo. There were 85 attendees from 60 companies.

Mr. Amino, committee member of the User group, gave a presentation to the participants with an outline of the activities and events in the previous fiscal year, 1985.

Mr. Goichi Yoshizawa of Nissan Motor Co., Ltd. was elected as a new president of the User Group. New committee members nominated by the executive committee members met with other User's approval. The activities and the balance of the previous fiscal year were reported. The budget and the activity plans for this year were accepted with unanimous approval.

In the latter half of the general meeting, Mr. Shozo Ogiya who was invited by Software AG Far East as a guest speaker, gave a speech titled as "Where does a artical mind come from?"

21st COM-PLETE Users' Meeting—Quarterly Meetings to be Held

Yuzo Fukumoto
Isetan Data Center

The 21st COM-PLETE Special Interest Group (SIG) meeting was held at the Toranomon Pastoral hall on June 30, 1986.

Meetings will be held quarterly in August, November, January, and April. The meetings include users' presentations from Nippon Suisan Kaisha Ltd., The Nippon Trust & Banking Co., Ltd. and Dentsu Inc.

Theme of studies and schedule for the meetings are as follows:

1. Communications between different companies—Schedule: July 25, Group leader: Mr. Omi from Eisai Co., Ltd.
2. Communication between Mainframe and Personal Computer Users—Schedule: July 17, Group leader: Mr. Tsujii from Showa Computer System Ltd.
3. COM-PLETE Lecture—Schedule: July 18, Group leader: Mr. Morimoto from Tokyo Sangyo Credit Association

In addition, we plan to have a special guest lecture and visit COM-PLETE user companies like last fiscal year. Details will be decided by group members.

Software AG briefed the attendees on the 15th International Users' Conference in San Diego. On June 9th and 10th, Software AG announced its new products and altogether about 500 people attended.

FAR EAST REGION ASSIGN

User Conference Attendees Reported on User's Examples

Tadaharu Yanai
Taisei Corporation

The 46th Far East Region ASSIGN (ADABAS Special Interest Group of Nippon) Meeting was held in Tokyo on June 30, 1986, with 61 attendees from 40 organizations.

Activities in '85, and plans of activities in '86 were agreed upon with members in the General Meeting. This year, Kanto District has 7 research groups. The president of ASSIGN in Kansai District, Mr. K. Matsumiya, from Takenaka Komuten Co., Ltd., was introduced and 3 research groups from Kansai District.

Second, attendees from the 15th International Software AG Users' Conference made a report centering around the User's Examples.

User's Examples are as follows:

- "Integrated Host Language Interface for ADABAS and NATURAL Source Program Analyzer," by Yasuo Sasaki (Hitachi Works of Hitachi, Ltd.,)
- "Data-Oriented System Design In Software Development," by Akio Watanabe (Takenaka Komuten Co., Ltd.)

Then, Software AG of Far East presented a summary of the 15th International Software AG Users' Conference.

At last, the vote of Change/Enhancement request procedure was explained. This year the vote will take place in August.

Correction

The August 1986 issue of Connections stated incorrectly the dates for the 16th International Software AG Users Conference. The correct date for the conference is November 1-5, 1987. (Miami, Florida)

Third World

continued from page 12

base file definition rules, i.e., practice what you preach. PREDICT was both a boon and a curse for us in this endeavor since it provided such an easy file definition mechanism for the analyst. When we began using PREDICT, we were getting even greater proliferation of non-normalized files and redundant data than before—to the extent that a single DBA (me) could not keep up with enforcing any design rules but also could not stand in the way of development. Unfortunately, with the advent of so many new Software AG products one can easily become a DBA with 'virtual' knowledge until you can actually learn the product and advise others on its use so it took some time to familiarize myself with all the capabilities of PREDICT to bring the situation under control. PREDICT put us in the file definition 'fast-lane' for awhile since it was so easy to use and offered so much more than the old Data Dictionary but things eventually did settle down. Although ADABAS and NATURAL still performed well despite file design problems, the storage buffer overflows and data redundancy issues virtually forced us to revise our file design methodology.

The M.O.P. plan of attack to enforce good normalized file definitions was as follows: after data element identification with the user, the analyst or project lead entered the logical files at the conceptual level to PREDICT. The analyst and DBA reviewed the logical files at the conceptual level to PREDICT. The analyst and DBA reviewed the logical files online while still at the conceptual level, working through the normalization steps. We were not of the opinion that pure third normal form was an absolute necessity so some PE and MU repeating groups were allowed but only after stringent analysis for potential data dependency problems. As the conceptual files were built and subsequently normalized into other conceptual files, the existing M.O.P. PREDICT file definitions were also carefully reviewed to identify redundant data and try to also bring that problem under control. Following completion of the conceptual normalized files, the physical ADABAS files were created and loaded, corresponding as closely as possible to the normalized files (while still employing some ADABAS-oriented physical file definition techniques). The file definition process was concluded with logical userview definitions and DDM creation which provided a further normalized appearance to the data if desired.

There is no guarantee that this process will always work but we have been moderately successful in our new procedure so far. The critical user request with the impossible deadline will still come through where an application database master file is the only way to get the system up and running quickly. And in Saudi Arabia where such a request can come from an end-user accustomed to being addressed as 'Your Excellency', you diplomatically sacrifice your normalization principles. (Some of the users I used to work with in the U.S. had aspirations to be addressed in a similar fashion but fortunately couldn't back up their desires!). But in general, the time spent up front normalizing always returns a dividend somewhere later on so I view the M.O.P. procedure with guarded optimism—it will continue to be successful if the required time is devoted to normalizing but it will also be very easy to fall back on the catch-all file design approach if one is not willing to put in the normalization effort. In conclusion, however, I am hopeful that the process described here will continue to be followed and provide success in the future. As mentioned, the Saudis are receptive and understand the importance of normalization and good file design techniques. ADABAS and NATURAL have been tolerant of problem file designs as we have gone through our 'learning' phase. The tools provided by ADABAS, NATURAL and PREDICT are there and are conducive to use when normalizing files. So, as Saudiization does occur I feel that there is a good chance for the normalization process to become an 'unqualified' Customer Success at M.O.P.

Software AG Product Status Report

This Product Status Report, updated quarterly, is offered as a regular feature of Connections as a means of advising which products Software AG has released recently and which are scheduled for release in the near future.

Software AG's goal is to provide products that perform as our customers expect them to perform, and that can sometimes mean a delay in release while last-minute bugs are fixed or changes are incorporated. It is, therefore, important to note that all target release dates are as accurate as possible at press time, but are subject to change without notice.

Released: January 1 to August 31, 1986

PRODUCTS	
NATURAL AF	February 1986
NATURAL ELITE	April 1986
ACCESS	May 1986
COM-POSE	May 1986
VERSIONS	
NATURAL CONNECTION V2.2	October 1986
PREDICT V2 (OS/DOS)	January 1986
ADABAS VSAM Bridge V2	March 1986
SYSTEM MAINTENANCE RELEASES	
ADABAS Fix Tapes	May 1986

Scheduled for Release: September 1, 1986 to February 1986

PRODUCTS

TOTAL Bridge
In beta test
Target release date: December 1986

NATURAL DL1
In alpha test
Target release date: February 1987

ADASQL
In alpha test
Target release date: December 1986

NATURAL Productivity Center
In beta test
Target release date: November 1986

VERSIONS

SUPER NATURAL V2
In alpha test
Target release date: December 1986

REVIEW V2
In beta test
Target release date: November 1986

NATURAL V2
In alpha test
Target release date: First Quarter

Software AG Users' Group Tools Request Form

REQUEST

Any licensed user of Software AG products may request a copy of the DBA (for ADABAS & NATURAL) Tools or the COM-PLETE Tools.

Complete the information below and send to: Users' Group Liaison, Software AG of North America, Inc.
11800 Sunrise Valley Drive, Reston, VA 22091 USA

Send: ☐ DBA Tools Tape (for non-DOS users) ☐ DOS DBA Tools Tape (for DOS users) ☐ COM-PLETE Tools Tape

Note—Both of the above DBA and DOS DBA Tools tape contain the same set of tools. The only difference is the DOS DBA Tools tape is DOS readable.

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Street 2 ☐☐

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SOFTWARE AG

ANNUAL MEETING AUDIOCASSETTES

15th Annual Software AG Users' Conference
San Diego • May 11-15, '86

- ☐ **#848R-1** Opening General Session—"We Had A Vision; Software AG Worldwide Progress; SAGGROUP Business Session
- ☐ **#848R-2AB** Industry Trends and Software AG
- ☐ **#848R-3** VMS Product Line Update
- ☐ **#848R-4** Managing A Research Database; Using ADABAS/NATURAL To Organize Computer Model Results
- ☐ **#848R-5** NATURAL/ELITE, Improving Training Effectiveness
- ☐ **#848R-6** COM-PLETE User Exits
- ☐ **#848R-7** DBA Tools
- ☐ **#848R-8** COM-PLETE/COM-POSE And Online Environments
- ☐ **#848R-9AB** Distributed Databases In The Water Monitoring System of Bavaria; MINGEL: A Distributed Engineering Data Base
- ☐ **#848R-11** DOS
- ☐ **#848R-12** Large Data Bases
- ☐ **#848R-13AB** ADABAS V5 Features and Performance, Distributed Data Bases As A Future Strategy
- ☐ **#848R-14** COM-PLETE Performance and Tuning and Tools
- ☐ **#848R-15** Integrated Software AG Processing Environments
- ☐ **#848R-16** Problem Tracking in an ADABAS/NATURAL Environment; On-Line Printing From NATURAL In CICS; Null Pattern Recognition System
- ☐ **#848R-17AB** Data-Oriented System Design In Software Development; The Design and Implementation of a Table Processing System for a Large Federal Agency
- ☐ **#848R-18** NATURAL Advanced Facilities
- ☐ **#848R-19** CON-NECT and Its Uses
- ☐ **#848R-20** NATURAL Micro-Mainframe Link
- ☐ **#848R-21** Inter-System Technology
- ☐ **#848R-22** Is Information Center a Micro-Based Backwater
- ☐ **#848R-23** A Performance Presentation on ADABAS V5 in Relation To ADABAS V4; A Database Development Technology
- ☐ **#848R-24** Integrated Solutions; Computer Integrated Manufacturing; Product Integration; Success and Importance
- ☐ **#848R-26** ADABAS Change/Enhancements
- ☐ **#848R-27AB** A Chronicle: Migration To NATURAL Security; Administering NATURAL Security; Behind (COM-PLETEly) Closed Doors
- ☐ **#848R-28** REVIEW V2
- ☐ **#848R-29AB** Introduction to NATURAL/CONNECTION
- ☐ **#848R-30AB** Education/Documentation
- ☐ **#848R-31** The NATURAL Environment and Application Development Cycle
- ☐ **#848-32** NATURAL V2 Performance Enhancements
- ☐ **#848-33** Integrated Host Language Interface for ADABAS and NATURAL Source Program Analyzer; Securing the ADABAS Environment
- ☐ **#848R-34AB** ADABAS V4 Debugging and Problem Reducing
- ☐ **#848R-35** Introduction to ADASQL
- ☐ **#848R-36** CON-STRUCT: The NATURAL Programmer's Workbench
- ☐ **#848R-37** VMS Products
- ☐ **#848R-38AB** Application Development With NATURAL V2
- ☐ **#848R-39** AUTOREGEN: Automated Database Regeneration at Rochester Gas & Electric Corp.; 3880 CACHE Controllers in an ADABAS 4.1.9 Environment; Experience in Performance and Tuning
- ☐ **#848R-40AB** COM-PLETE Technical Support
- ☐ **#848R-41** Scientific/Engineering
- ☐ **#848R-42** NATURAL Change/Enhancements
- ☐ **#848R-43** COM-PLETE Change/Enhancements
- ☐ **#848R-44AB** PDMS—The Project Design Management System; Fundamental Data Administration Issues Using Software AG Tools
- ☐ **#848R-45** Automation of the Computer Center; Training Without Trainers; DOS ADABAS Users—The Poor Relatives
- ☐ **#848R-47** The Information Center, End-User Solutions
- ☐ **#848R-48** Flight on the Edge of the PREDICT Envelope; Naming Conventions; Beefing Up PREDICT V1.3
- ☐ **#848R-49** System Prototyping Using NATURAL and PREDICT
- ☐ **#848R-50** NATURAL Security
- ☐ **#848R-51** ADABAS Performance
- ☐ **#848R-52** Customer Service and Support
- ☐ **#848R-53** Structuring Programming in the NATURAL Environment: The Application of Structured Tenets
- ☐ **#848R-54** The Battle for NATURAL Performance: Strategy, Tactics, A View from the Trenches
- ☐ **#848R-55AB** System Prototyping Using NATURAL and PREDICT—Part II
- ☐ **#848R-56** Customizing the COM-PLETE/COM-POSE Environment
- ☐ **#848R-57** PREDICT/Data Dictionary
- ☐ **#848R-58** PREDICT and Data Dictionary Directions
- ☐ **#848R-59** Real-Time Visits to ADABAS Nucleus; An ADABAS Payroll System; Database Capacity Planning and Management
- ☐ **#848R-60** NATURAL Administration
- ☐ **#848R-61AB** ADABAS/VM
- ☐ **#848R-62** NATURAL V2 Implementation
- ☐ **#848R-63** PREDICT Change/Enhancements
- ☐ **#848R-64** Systems in Transition; Modeller—A Data Model Database; Resolving ADABAS/NATURAL Problems at the Asian Development Bank
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_____ VM
_____ ADABAS (VMS)
_____ OTHER

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_____ DOCUMENTATION
_____ FILE I/O
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_____ NUCLEUS
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NATURAL

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_____ GRAPHICS
_____ I/O
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_____ LANG. INTERFACE
_____ CON-NECT
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_____ NATURAL/CONNECTION
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_____ OTHER

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2. Enter a Request Title which is a one line description for your Change/Enhancement that is less than 40 characters.
3. Enter a description for your Change/Enhancement. Please be specific when describing your Change/Enhancement.
4. Enter an explanation of the benefits of the Change/Enhancement.
5. Enter information about yourself so someone can contact you if there is some question about your Change/Enhancement (you must include your telephone number).
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   3700 Park East Drive
   Beachwood, OH 44122
   USA

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