

Basic-2C Connection

News and Information from the Basic-2C Community

Volume I, Issue 1

July 1990

Niakwa Discusses Long Term Business Plan

Mundelein, IL - To date, Niakwa has successfully completed two "Priorities in the 90's" workshops. A third workshop is going to be held in Europe this September.

Each workshop further refined Niakwa's development strategy for the 1990's. Informative presentations were given by Niakwa's General Manager, Dick Drew, Research & Development Manager, Harry Cohn, and Sales Manager, Kevin Brownell. These presentations managed to clarify Niakwa's future development plans.

"Basic-2C is one of the world's most portable languages," explained Drew.

To guarantee our long term portability, we are rewriting Basic-2C from Assembler into the 'C' programming language, which will make platforms such as IBM's AS/400 and the new generation of RISC processors realistic possibilities," Drew continued. He went on to describe Niakwa's strategy to grow its reseller base by recruiting non-Wang resellers. This would be accomplished by providing conversion tools that will allow other third generation language users the ability to convert their programs to Basic-2C with minimal program conversion.

Harry Cohn discussed the external call facility in Basic-2C, Release III, which provides developers access to third party products such as access methods, screen generators, report generators, windowing systems, and data bases. Cohn went on to discuss Niakwa's detailed short-term strategy of creating a new class of products called Niakwa Gateways. Using Basic-2C's external call technology, Niakwa Gateways will be

prepackaged interfaces to many third party products.

The workshop focused not only on the short-term but Niakwa's long-term goals. Realizing the increasing demands for more productivity from programmers, and more functionality from programming languages, Niakwa announced its plans to incorporate fourth generation capabilities into the Basic-2C development environment.

A second long term goal discussed at the workshop was support for

language; Pat Montgomery represented Northwest Source Group at the second "Priorities" workshop; Bill Knopf of KDS who discussed how external calls can be used to increase the performance of Basic-2C applications; Mike Louviere of Mica Systems who discussed the use of Niakwa's print screen and input screen to implement pop-up windows; and Steve Ward of Niakwa '88 who presented the use of external call routines through BTrieve and MS-DOS access methods. The impressive demonstrations revealed Basic-2C's state-of-the-art look and feel.

The first workshop was held February 27, 1990, at the La Jolla Marriott in La Jolla, California. The second workshop was held April 19, 1990, at Allgauer Hotel and Fireside Restaurant in Northbrook, Illinois.

September 24, 1990, is the date of our third workshop.

The European workshop will be held in Luxembourg. It is intended to be as beneficial for our international customers as the first two were for our domestic customers.

(continued on page 15 - see Priorities)

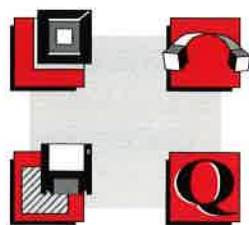
**PRIORITIES
IN THE
90'S**

structured programming in Basic-2C. This will make modularized development of Basic-2C applications a reality.

The best showing of Basic-2C and its Release III features was by Niakwa's distributors. Success stories were given by Alan Green of FlexSystems, who demonstrated the new FlexWindows system in the Flex Spreadsheet; Alan Johnston of Hydratec who illustrated how Basic-2C's demo facility can be used for training; John Harris and Charlie Knox of Northwest Source Group who showed the FourD fourth generation

Inside...

Niakwa announces support of the Bull DPX/2 product family



Basic-2C Connection

News and Information from the Basic-2C Community

Publisher: Dick Drew
Editor: Lesslee Dort
Staff Writers:
 Kevin Brownell Cyndee Philyaw
 Barbara Chiprin Kurt Skaronea
Technical Advisor: Harry Cohn
Photographers:
 Barbara Chiprin Dick Drew
 Lesslee Dort
Contributors:
 Carl Barnes J.R. Samples
 Bill Haase Drew VanVooren
 John Harris Tim VeArd
 Mike Liston

Acknowledgements: Kathy Bradley
Basic-2C Connection (ISSN 1050-8872) is published on a periodic basis by Niakwa Management Services of America, Inc., 23600 North Milwaukee Avenue, Mundelein, IL 60060. Telephone (708) 634-8700, Facsimile (708) 634-8718.

Basic-2C Connection invites Basic-2C users to submit articles for publication regarding commercial successes, technical successes, technical tips, new product releases, and/or other subjects of interest to the Basic-2C community. Niakwa reserves the right to edit or not print articles submitted.

Comments, questions, and suggestions can be directed to the Editor, *Basic-2C Connection*, Niakwa.

Copyright © 1990 by Niakwa Management Services of America, Inc. Printed in the USA. All rights reserved. Basic-2C is a registered trademark of Bluebird Systems. Niakwa is a registered trademark of Niakwa Management Services 1975 Ltd., and is licensed to Bluebird Systems.

Other product names, company names, and/or logos are or may be trademarks of their respective companies.



In This Issue

Volume I, Issue 1

July 1990

News

Niakwa Discusses Long Term Business Plan	1
The Basic-2 Report Charts New Course	3
Niakwa '88 Wins Important Endorsement	3
Bullets	4
System Maintenance Problems – Solved	4
Data 3500 Document Conversion Product	5
NSG Replaces UNIX Machines With Network	6
2236 DE/DW Key Caps Available For Wyse Keyboard	6

Platforms

Basic-2C Available For Bull DPX/2	7
Approved Compatibles: New Testing Policy	8
Platform Update – Multi-User	8
Platform Update – Single User MS-DOS	9
Bluebird's PC Connect	10
New Product Release Of Basic-2C For SCO System V/386 (UNIX)	10
New Basic-2C Software For INTERACTIVE UNIX	10

Announcements

Niakwa Enhances Communication Techniques	11
Welcome ...	11
Marketing Bulletin	11
Meet The Team	12
The Basic-2C Community Helping Each Other	12

Tech Corner

Ask Andy	13
Technical Notes – Summary	13
PC Connect And SuperLAN	13
Technical Notes	13
Basic-2C RunTime Revisions Made Easy	14
Don't Forget	14

The Back Page

Priorities	15
Letters To The Editor	15

Profile

Group 2000	16
------------	----

News

The Basic-2 Report Charts New Course

Austin, TX - Tim VeArd recently acquired *The Basic-2 Report* from Data Base Publications. In addition to writing the regular Basic-2 TIPS column for Access to Wang, Tim was also the Technical Advisor for *The Basic-2 Report*.

Most people who know Tim claim that advancing Basic-2 had become a "labor or love" for him. He founded AIMS+PLUS and created their Advanced Information Management System.

Since leaving AIMS a few years ago, he has become a highly recognized international consultant, speaker, and author. Through his new companies, VCR and the I.D.E.A. Group, Tim is researching Artificial Intelligence and

Expert Systems - when not traveling to teach, consult, or speak for organizations in the Soviet Union, Europe, and South America.

When asked why he bought *The*



Basic-2 Report, Tim chuckled and said, "Hey, remember that TV commercial where Victor Kiam was shaving and said ... I liked the razor so much I bought the

Niakwa '88 Wins Important Endorsement

Mundelein, IL - Niakwa '88, a publisher and leading provider of CPA specific business solutions, recently announced that Clifton, Gunderson & Company has endorsed Niakwa's Client Accounting Software as the solution for their 47 United States offices.

According to John Bittner, Director of Data Processing, "Niakwa was chosen as Clifton, Gunderson's solution because of the product's Financial Statement Report Writer, its integration with a variety of other products, and the firm's commitment in working with us in developing a plan of installing, enhancing and supporting our specific needs."

Niakwa '88 President, J.R. Samples, remarks: "The Clifton endorsement presents an enormous opportunity for our marketing efforts. We look forward to working very closely with Clifton, Gunderson and its people. Our commitment is to provide them with the

very best in high-performance, cost effective software and business systems. Systems designed specifically for public accounting firms."

Jo Eyberg, Clifton, Gunderson's Director of Accounting Services says, "This product provides us with the capability to provide value-added services to our clients which will set us apart from our competition."

Niakwa '88, formerly a division of Niakwa Management Services, and now independently owned, has marketed MS-DOS, Novell, and SuperDOS based solutions for over four years to CPA's in the United States. They provide public accounting software solutions for client write-up, practice management and statistical word processing.

Based in Mundelein, Illinois, Niakwa '88 currently services over 1,000 firms in the United States and Canada. BC

company? I simply love Basic-2. But, I've been accused of being too evangelical about Basic-2, so let me spare you my infamous 'save Basic-2 and the whales' sermon - I'm just getting too old to learn 'C'. Seriously though, it's because Basic-2 has the potential to become the world's most portable language. The UNIX world is about to wake up and discover the enormous power built into Basic-2. I want to be there when they do!"

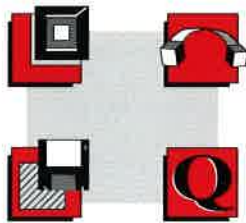
Tim went on to say, "We're not experienced publishers - yet - and can't guarantee a glossy 'look' right away. So, for awhile we'll offer much lower advertising and subscription rates. But, we can promise to have the most useful information available in the Basic-2 community. We'll strive to improve with each issue and to attract new readers to promote Basic-2."

Tim wants *The Basic-2 Report* to be a user's journal, with news for users, about users and written by users. He's encouraging everyone to not only subscribe, but to also submit articles, hints, tips, share programs, product announcements, stories about their company, news items, press releases, and use *The Basic-2 Report* to announce user meeting schedules.

You can now subscribe to *The Basic-2 Report* for just \$24 (\$38 outside the USA) per year. For more information, please contact:

The Basic-2 Report
 P.O. Box 90967
 Austin, TX 78709-0967
 (512) 892-6115 (Voice & Facsimile)

Editor's Note: We wish Tim and *The Basic-2 Report* a long and prosperous life. BC



Bullets

- **Herk-de-Stad, Belgium** - SCIA nv, a Niakwa Master Distributor with offices in France, Holland and Germany, has signed an agreement with Bluebird Systems to introduce SuperDOS to their Basic-2C Reseller network.
- **Eagle, CO** - Eagle Computer Systems upgraded 35 of their installations in the Wyoming Court system to Release III. They expect to install their application in 40 more Wyoming sites over the next year.
- **Paris, France** - Sipa Press, Europe's premiere news agency, has installed the first 70 terminals of a projected 120 terminal Altos 5000 system. AMIS, Inc. installed their software of the same name (Archive Management Information Systems) to perform extensive publishing functions.
- **New York, NY** - Time Warner, Inc. has been running AMIS software for two years on a 32-user Altos 2000 system.
- **Wiesbaden, Germany** - GTS has installed the initial test sites for their contract with the German federal government. The software has been installed on Bull DPX/2 systems to provide sophisticated technical integration of building utilities.
- **Omaha, NE** - Orion Systems reports the successful installation of two 90 terminal NEC Astra Systems. One is at RPM Rent-A-Car in California and the other at Budget Rent-A-Car in Georgia, utilizing their Auto Rental Software.

System Maintenance Problems – Solved

Middleburg Heights, OH - Associated Software Consultants, Inc. (A.S.C.), developer of the UNI-FORM Loan Processing System for banks, savings and loans, and mortgage companies, is pleased to announce the System Support Toolkit for Basic-2C. Anyone who has maintained Basic-2C systems over any period of time has had

categories: Basic-2C disk management, disaster recovery, and programmer productivity. The toolkit lets non-programmers accomplish system support tasks safely. It also helps programmers perform many tasks more quickly and conveniently without using cryptic commands. Following is the menu containing all functions of the toolkit:

System Support Toolkit 12/04/89		TOOLKIT OPERATION MENU
1. Change Device Equivalence Table	15. Copy Files to Another Disk	
2. Format Raw Disk/Remove Diskimage	16. Copy Sectors from Disk to Disk	
3. Create Disk File Index/Extent	17. List Disk Sector Contents	
4. Enlarge Disk File Index	18. Change Disk Sector Contents	
5. Change Disk Catalog End/Extent	19. Compare Disk Files by Sector	
	20. Compare File Names on Disks	
6. List Sorted Disk Files		
7. List Disk Usage Statistics	21. Search for Text in Programs	
8. Clean Up/Rehash Disk File Index	22. Search and Replace Program Text	
9. Remove Free Sectors from Files	23. List Program Source Code	
10. Recover Available Sectors on Disk	24. Compare Program Files	
11. Verify Disk/Index Integrity	25. Execute Native System Command	
12. Recover Sectors to Another Disk	26. Compute System Performance Factor	
13. Recover Damaged Disk Index	27. Change Native ASCII Text File	
14. Change Disk File Index Entry	28. Print Native ASCII Text File	

PROGRAM NUMBER: ##4

Main Menu of the Systems Support Toolkit

to deal with several fundamental system maintenance issues.

First, Basic-2C inherited from Wang Basic-2 a fixed-size disk file index along with fixed-length program and data files. These can change over time, leaving the disk index and parts of the disk catalog over- or under-utilized.

On rare occasions hardware or software failure may cause damage to disk surfaces, or the disk index, and require recovery. Few programs exist to help develop and maintain program code in Basic-2C.

An outgrowth of an earlier product developed by A.S.C. for the 2200, the toolkit consists of 28 programs in three

The System Support Toolkit has been used with Basic-2C releases 2.00, 2.01, 3.00, and 3.01 under MS-DOS, Novell, SuperDOS, VMS, XENIX, and UNIX operating systems. The toolkit requires at least 40K of memory and supports Basic-2C "extended diskimage" files exceeding the former 65535 sector (16.8 megabyte) file size limitations. In operation, each of the toolkit programs displays information about the diskimage or physical disk being operated on to make sure the proper address has been selected. The toolkit is also password-protected to prevent use by unsophisticated users.

(continued on page 5 – see Toolkit)

Notable Programs

While all the programs in the toolkit are useful and many are not available anywhere else, the most noteworthy ones are:

Recover Available Sectors on Disk, a "disk crunch" program which removes scratched files and dead index entries, then closes gaps on a diskimage to make more space available. Run in place, this program eliminates the need to create a new diskimage and copy files.

Recover Damaged Disk Index, a disaster recovery program which may be used when disk index sectors have been damaged or accidentally overwritten. Since the program and data files in the disk catalog are usually intact but inaccessible, this program scans the disk and recreates the file names in the disk index.

Compare File Names on Disks, which compares the contents of two diskimages to show which programs or data files have been added or deleted over time, and can also use the Basic-2C date/time stamp to show which is the newer revision of like-named files.

Search for Text in Programs, a word processing-style facility which locates selected text strings (including Basic-2C variables) within one or many programs on a diskimage.

Search and Replace Program Text, can be used to quickly replace the selected text, eliminating many time-wasting "production programming" chores.

Compare Program Files, a utility which examines two programs, usually an earlier and later version, and prints the differences between them in easy-to-read 'program listing' format. Changes within remark statements may be selectively ignored.

Toolkit

(continued from page 4)

Documentation for the toolkit consists of an extensive on-line context-sensitive HELP facility (using Basic-2C \$HELP), explaining each menu selection, data entry field and error message.

Alan Green of FlexSystems, Ltd., developer of the Flex Spreadsheet Modeling System, commented, "When I moved Flex development to the PC environment, your software was the only thing about the 2200 I missed ... Your new toolkit fills a much-needed gap in the Basic-2C arena. I don't see how anyone who does development in the language can function effectively without it."

In the January 20, 1989, issue of the Niakwa Newsletter, Harry Cohn, Manager of Research and Development, reported, "In our review we found the System Support Toolkit to be a well-designed and well-written package ... The utilities are easy to install and operate ... (They) are designed in a very conservative fashion, which is essential for utilities of this nature."

Pricing of the System Support Toolkit has been reduced to: quantity 1-9 \$395 each, quantity 10-49 \$165 each, and quantity 50 and up, \$95 each, making it among the lowest cost software available in Basic-2C.

A.S.C. provides a free, limited-use demonstration diskette for evaluation by prospective users.

For further information, please contact:

Associated Software Consultants, Inc.
7530 Lucerne Drive
Suite 115
Middleburg Heights, OH 44130-6557
216-826-1010
FAX: 216-826-1140

(Michael P. Liston is the founder and CEO of A.S.C. and author of the System Support Toolkit. A.S.C. is currently active in 35 states.) BC

Data 3500 Document Conversion Product

Portland, OR - Archway Systems, Inc., announced the release of ADDU, version 3. ADDU is an acronym for Archway Data 3500 to DCA Utility.

This computer program converts word processing documents created using the Data 3500 word processing package, from TOM Software, into a standard IBM DCA/RFT document exchange format.

Most popular word processing packages can read these DCA/RFT documents allowing users of Data 3500 to exchange documents with users of these other packages.

Data 3500 users, working on Wang 2200 computer systems, need an IBM PC compatible computer and the PC 2200 file transfer software to run ADDU, version 3. This provides batched error checked transfers of whole volumes of documents to the PC in one session.

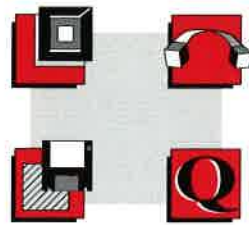
Data 3500 users, working on IBM PC compatible computers, need the Niakwa Basic-2C RunTime Package to use ADDU, version 3. This provides batched transfer of volumes of documents from Data 3500 to MS-DOS files.

ADDU, version 3, uses multiple languages to increase its performance capabilities. It also has larger batch capacity, enabling it to convert most large Data 3500 volumes. ADDU, version 3, costs \$395 and is supplied on 5 1/4" and 3 1/2" diskettes with manual.

For more information, or sales, contact:

Archway Systems, Inc.
2916 SE Caruthers
Portland, Oregon 97214
(503) 236-2080

BC



NSG Replaces UNIX Machine With Network

Seattle, WA - Northwest Source Group (NSG), a software developer and hardware integrator, reports the successful installation of a 45 workstation NSG network. They are also reporting four times performance improvements over the previously installed UNIX machine.

NSG replaced a 32 user, CCI 632, UNIX/Motorola based computer with a 45 terminal NSG network. The NSG network is configured with a 386/33 file server, two 650 MB disk drives, 8 MB CPU memory, Netware 386 and Basic-2C. Workstations are 386/20 sx's with 2 MB of memory.

The end-user originally achieved a three times performance improvement by converting their A&M D3 TOM system from a Wang 2200 to the CCI 632 operating with Basic K.

An additional four times performance improvement was anticipated and achieved at the workstation level by installing the network operating with Basic-2C. Additionally, NSG was pleasantly surprised by the performance improvements with the new system during posting – the standard eight hour end-of-day process has been reduced to two hours.

The standard eight hour end-of-day process has been reduced to two hours.

NSG has installed Desqview on all of the 386 machines allowing each user to open up to three windows. The windows are used for doing inquiries or file maintenance while taking orders or doing other tasks.

Another interesting feature of the installation is the electronic ordering capability. The end-user's large customers can upload orders (often several hundred line items) directly to the network.

Within minutes stock verification and order confirmation is downloaded to the customer's computer, significantly reducing the time spent by order takers and order givers alike. NSG is currently developing an on-line ordering capability that will further improve the process.

The performance improvements of the new computer system, and the

2236 DE/DW Key Caps Available For Wyse Keyboard

Aurora, IL - Gilmore Research, Inc., announced a new product for Basic-2C SuperDOS and UNIX Systems: Wang 2236 DE/DW style key caps for the Wyse WY-60 and WY-370 keyboards.

This product consists of 35 custom made key caps with Wang nomenclature that matches the Wang DE/DW style keyboards. The keys have been manufactured to exactly match the color, plastic, shape, and type styles on the Wyse key caps they replace.

The idea behind this product came from working on over a dozen Basic-2C installations, primarily conversions from Wang 2200's to SuperDOS. Some features and benefits of making the Wyse ASCII keyboard look like a Wang 2236DE or DW are as follows:

The software supplier need only keep one set of user documentation, whether his end-user is still on Wang terminals exclusively, mixed Wang and Wyse, or Wyse terminals exclusively.

Telephone support is made easier because the software supplier doesn't have to stop the end-user and ask what kind of terminal he is using before explaining to the end-user what to key next.

In installations where there are multiple keyboard types, users can move between Wang and Wyse

electronic ordering capability, will help the end-user achieve their goal of shipping all orders taken in the morning by that afternoon – even with 50,000 open line items in the order entry file.

Thanks to Northwest Source Group, and Basic-2C, it's a real computer success story. BC

terminals easily. The Wyse terminal users don't have to do the mental gymnastics to convert, say, SFK's to F6, SFK'27 to shifted F12, etcetera.

Control keys such as Edit, Erase, Insert and Delete don't have obscure names like Del, CLR, INS, DEL. Less operator confusion means more accuracy and productivity.

Gilmore uses this consistency theme to sell end-users on the ease of converting from their Wang system to Basic-2C. In short, these key caps are a simple, elegant solution for every Basic-2C user with Wyse terminals. The key caps also fit the Wyse WY-50 terminal and Wyse AT keyboards.

Another aspect Gilmore looked for, but was unable to find, was a high quality Mylar special function key strip. They had these made, as well.

The combination of the new key caps and the new SFK key strips really dresses up the Wyse terminal for Basic-2C applications.

The key cap/function strip combo retails for \$37.00 each. Dealer discounts and quantity discounts are available.

For more information, contact:

Gilmore Research, Inc.
1281 N. Farnsworth Ave.
Aurora, IL 60505
(708) 898-4667

BC

Platforms

Basic-2C Available For Bull DPX/2

Mundelein, IL - Niakwa is pleased to announce Basic-2C for the Bull DPX/2 family of Intel and Motorola based computer systems.

The Bull (formerly Honeywell Bull Incorporated) DPX/2 family is a new line of open systems designed and developed by Bull to target both commercial and technical developers and end-users.

Utilizing the UNIX operating systems the DPX/2 product line will further solidify Bull as one of the leading distributors of UNIX affiliated systems worldwide.

Within the Bull DPX/2 line are the DPX/2 100 (Micral 600/ix), DPX/2 200, and DPX/2 300 systems.

The DPX/2 100 family is built around 32-bit, Intel 80386 microprocessor and utilizes the BOS 386 operating system. BOS 386 is an OEM version of INTERACTIVE's 386/ix. The Bull DPX/2 100 supports up to eight active users.

The Bull DPX/2 200 and 300 systems are built around a 32-bit industry standard Motorola 68030 microprocessor, and an advanced peripheral bus (Multibus II). The DPX/2 200 supports up to 32 active users. The DPX/2 300 supports up to 256 users.

Basic-2C for Bull DPX/2 product line supports all Basic-2C, Release III, features plus release 3.01 enhancements such as color serial terminal support, and an enhancement to the \$OPEN statement.

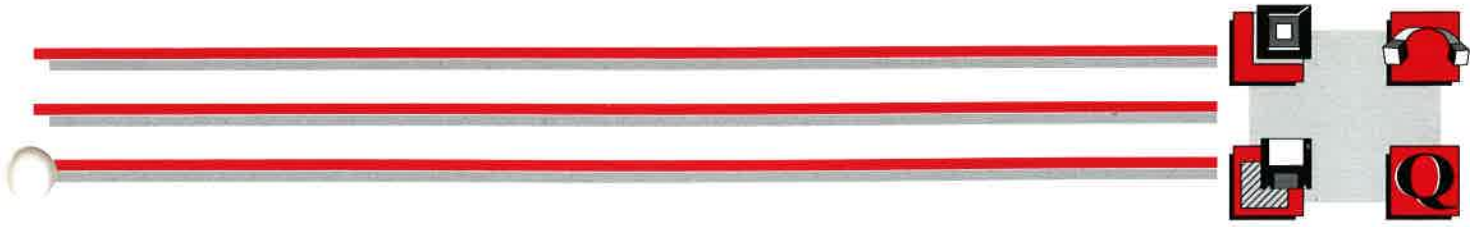
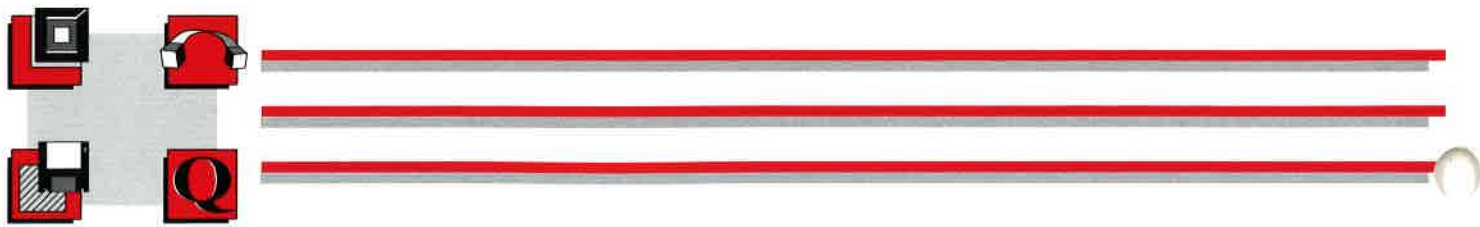
Bull is one the world's top computer companies with more than 50,000 international customers in over 90 countries. Niakwa is proud to be associated with Bull and looks forward to a continued fine relationship.

For more detailed information about Basic-2C for the DPX/2 product line please contact Niakwa.

For more information about the DPX/2 product line contact your local Bull sales office. BC



	DPX/2 100	DPX/2 200	DPX/2 320	DPX/2 340
CPU	80386	MC68030/68882	MC 68030/68882	MC68030/68882
Clock Speed	25 MHz	25 MHz	25 MHz	33 MHz
CPU Memory				
Min	4 MB	4 MB	8 MB	8 MB
Max/CPU	24 MB	16 MB	72 MB	72 MB
Max/System	24 MB	16 MB	144 MB	288 MB
Disk				
Type	100/140/300 MB	155/338/675 MB	155/338/675 MB	155/338/675 MB
Max Capacity	600 MB	2 Gb	7.4 Gb	15.5 Gb
No. Active Users	1 to 8	8 to 32	Up to 96	Up to 256



**Approved
Compatibles:
New Testing Policy**

In the February 1, 1990, issue of the Niakwa Newsletter, Niakwa published an article on its new policy toward testing IBM PC compatible systems. The new policy states that Niakwa will no longer perform testing for PC compatible systems.

In the past, Niakwa has consistently tested and published listings of approved compatibles for use with Basic-2C. In many cases, Basic-2C users have found that Basic-2C operates quite well on most compatibles even though they are not listed as an Approved Compatible.

Niakwa will continue to publish the Platform Update Status chart containing all compatible PCs previously tested by Niakwa (listed on this and the next page). We have added a new section to the chart which lists machines Basic-2C has been installed on but not tested by Niakwa.

Niakwa is asking Basic-2C users to supply information about known compatible and noncompatible PCs running with Basic-2C that are not on the Platform Update Status chart by completing the enclosed mailable insert. The information provided on the inserts will be continuously published and updated in future issues of the *Basic-2C Connection*.

Even though the mailable insert asks for a company and contact name, address and phone number, Niakwa has no intention of publishing this information. Only the PC model will be published. BC

Platform Update - Multi-User

Shared Logic Systems

Computer	Operating System
ALTOS 686, 886, 1086, 2086, 3086	XENIX 3
ALTOS SERIES 2000	XENIX V
ALTOS 500, 600, 1000, 2000, 5000	SYSTEM V
BLUEBIRD SL/DH/TW SERIES	SUPERDOS
BULL XPS 100	UNIX V
BULL DPX/2 200	BOS
BULL DPX/2 300	BOS
BULL MICRAL 600/ix	BOS 386
DEC MICROVAX II	VMS
DEC VAX SERIES	VMS
IBM AT & IND. STANDARD 286	SCO XENIX V 286
IBM, PC, XT, AT	SUPERDOS
IBM PS/2 SERIES	SUPERDOS
IBM PS/2 SERIES	SCO XENIX V
INDUSTRY STANDARD 386, 486	SCO UNIX V/386, 486
INDUSTRY STANDARD 386, 486	INTERACTIVE 386/ix UNIX
NEC ASTRA-XL SERIES	ASTR-IX
WANG 280	SCO XENIX V 286
WANG 380	SCO XENIX V 386 AT
WANG APC	XENIX 3.0
WANG APC	XENIX V
WYSE PC 286 SERIES	SUPERDOS
WYSE PC 386 SERIES	SUPERDOS

Distributed Logic Systems (Networking)

IBM & ALL APPROVED COMPATIBLES	NOVELL ELS I NOVELL ELS II NOVELL ADVANCED NETWORKARE NOVELL E/TI NETWORKING SPERRY USERNET
(SEE SINGLE-USER MS-DOS)	

Platform Update - Single User MS-DOS

Basic-2C has been tested on the following computers

- | | | |
|--------------------------|-----------------------------------|-------------------------------|
| AMSTRAD PC1512 | HONEYWELL PC AP | NEC APC IV |
| • ARCHE/RIVAL 286 | HP VECTRA | SPERRY PC/IT |
| •+ AST PREMIUM 286 | HYUNDAI SUPER 286C | TANDY 3000 |
| AT&T 6300, 6300 PLUS | •+ IBM PC, XT, AT | TELEVIDEO TELE-PC |
| BLUEBIRD SL/DH/TW SERIES | • IBM PC, XT, 286 | TELEVIDEO TELE-XT |
| COMMODORE PC-10, PC-20 | •+ IBM PS/2 MODELS 30,50,60,70,80 | TI BUSINESS PRO |
| COMPAQ DESKPRO | 30/286, 50S, 70Z/386 | • TOSHIBA T3100, T3200 |
| COMPAQ PLUS | ITT XTRA XP | TULIP COMPACT |
| COMPAQ PORTABLE | • KAYPRO 1610 | UNISYS PW2/500-12 |
| • COMPAQ PORTABLE III | • KAYPRO 16/E | • UNISYS PW2-500 |
| • COMPAQ 286 DESKPRO | NEC APC IV | UNISYS PW2-800 |
| • COMPAQ 386 PORTABLE | • KAYPRO PC, PC10, PC30 | •+ WANG PC, APC |
| • COMPAQ 386 DESKPRO | • KAYPRO 286i | •+ WANG PC280 |
| • COMPAQ 386/S DESKPRO | • KAYPRO 386+ | •+ WANG PC380, 382 |
| • COMPAQ 386/20E DESKPRO | • KAYPRO 2000+ | •+ WYSE PC, PC286, 2108, 2200 |
| COMPAQ 386/25 DESKPRO | LEADING EDGE PC (D) | 3216, 3225 |
| • COMPAQ LAPTOP SLT/286 | MAI/BASIC 4 PC | XEROX 6060PC |
| COMPUTERLAND PC | • MULTITECH LAN 500 (ACER) | XEROX 6065 |
| DEC VAXMATE | •+ MULTITECH 700, 710 (ACER) | ZENITH 150 SERIES |
| DELL SYSTEM 220/286 | •+ MULTITECH 900, 910 (ACER) | ZENITH 248 SERIES |
| EPSON EQUITY I, II, III | • MULTITECH 1100 (ACER) | • ZENITH SUPER SPORT/286 |
| | NCR PC6 | |

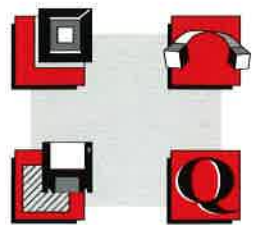
• Tested and passed for 2.01. To date no previously approved compatible has failed the 2.01 compatibility testing.

+ Tested and passed for Release 3.00. To date no previously approved compatible has failed the 3.00 compatibility testing.

Basic-2C is currently operating on the following computers*

- | | | |
|------------------|---------------------|-----------------------|
| PACKARD BELL 286 | NEC POWER MATE 286+ | NOVELL 386 NETWORKARE |
|------------------|---------------------|-----------------------|

* It has been reported to Niakwa that Basic-2C operates properly on the following computers. Be advised that Niakwa has not tested Basic-2C on these machines and therefore cannot be responsible for incompatibilities or other problems that may arise when using Basic-2C on these computers.



New Basic-2C Software For INTERACTIVE UNIX

Mundelein, IL - Niakwa proudly announced a new Basic-2C 386 RunTime Package for INTERACTIVE UNIX 386/ix, on April 27, 1990.

INTERACTIVE Systems Corporation, founded in 1977, was one of the first companies to offer a fully supported, commercial version of the UNIX Operating System. INTERACTIVE is currently in the process of developing what they hope to be a new UNIX standard that incorporates XENIX binary compatibility.

The 386/ix products build on INTERACTIVE's experience with porting, enhancing, and developing products for UNIX systems.

Most recently, INTERACTIVE has enhanced its 386/ix products to include support of a removable XENIX file system, XENIX binary and source code compatibility, STREAMS object-level networking interfaces, internationalization support, improved security features, and an expanded, easy to use *sysadm* system administration facility.

Basic-2C for INTERACTIVE UNIX supports all Basic-2C, Release III, features plus release 3.01 enhancements. Please refer to Marketing Bulletin No. 04 for a complete description of 3.01 enhancements. Newsletters 19, 20, and 21 have further documentation on Release III features. BC

Bluebird's PC Connect

Carlsbad, CA - Bluebird Systems, a leading provider of microcomputer based multiuser computer systems, announced the availability of PC Connect in December of 1989. This software product allows SuperDOS based applications to run in a multi-tasking Windows environment concurrently with DOS based applications.

PC Connect can run on any microcomputer supporting Microsoft Windows and is connected to a SuperDOS

microcomputer host via a standard RS-232 serial port. SuperDOS, Bluebird's multiuser operating system, is capable of supporting up to 66 PC and/or CRT workstations on a single IBM or compatible microcomputer.

Currently PC Connect supports Wyse 50 emulation. Bluebird is working with Wyse Technologies so Wyse 60 emulation can also be supported.

Bluebird's President, Hal Tilbury, reports that PC Connect has been extremely popular with SuperDOS users.

He commented, "In essence, PC Connect will let any SuperDOS user have up to 6 virtual terminals on a single PC workstation, and enable them to access both SuperDOS and DOS applications simultaneously."

PC Connect has been tested by Niakwa and found to work well with

Basic-2C. Multiple Basic-2C/ SuperDOS sessions may be run concurrently on the PC Connect workstation. Each session generates

unique terminal identification.

Founded in 1982, Bluebird has over 300 Value Added Resellers who market their vertical application packages with Bluebird's SuperDOS multiuser operating system and language products. SuperDOS is designed specifically for business transaction processing.

Bluebird markets SuperDOS based systems both through resellers and directly to end-users in several transportation related vertical markets. BC

PC Connect...found to work well with Basic-2C

New Product Release Of Basic-2C For SCO System V/386 (UNIX)

Mundelein, IL - Niakwa proudly announced the immediate availability of the new Basic-2C SCO System V/386 (UNIX) RunTime Package, release 3.01, on April 4, 1990.

This true 386 implementation of Basic-2C is designed to operate with the Santa Cruz Operation's (SCO) new version of SCO System V/386 (UNIX) 3.2, which was first delivered in January of 1990. This 386 implementation of Basic-2C was designed to fully utilize the 386 processor. Niakwa predicts good performance improvements over the

previous versions of Basic-2C for the SCO XENIX operating system.

The availability of Basic-2C on Intel based UNIX platforms should improve the marketability of many Basic-2C applications by providing better coverage at the low end of the UNIX marketplace.

Basic-2C for SCO System V/386 (UNIX) supports all Basic-2C, Release III features plus release 3.01 enhancements. Please refer to Marketing Bulletin No. 04 for a complete description of these enhancements. BC

Announcements

Niakwa Enhances Communication Techniques

In an effort to improve communications, and keep Basic-2C Resellers up-to-date, Niakwa announced additional communication tools and the revision of others on March 23, 1990.

Niakwa Newsletter

As you can see, the scope of Niakwa's Newsletter has been expanded beyond new product announcements to include news from the Basic-2C community at large. The Newsletter has been renamed *Basic-2C Connection* to more accurately reflect its mission - "News and information from the Basic-2C community."

We invite all Basic-2C users to submit articles for publication regarding commercial successes, technical successes, technical tips, new releases of product and/or other subjects of interest to the Basic-2C community. Niakwa reserves the right to edit or not print articles submitted.

This style of newsletter will give everyone a better idea of who is doing what, what is working, and what is not.

Welcome...

As of April 16th, **Elisa Gottlieb** joined Niakwa in the capacity of Office Manager. Her management experience in operations spans five years.



Before accepting the position at Niakwa, she was employed by Enercom, Inc. (a utility consulting firm) as the Illinois Branch Manager. She had direct administrative responsibility for P & L, Budgetary writing and reporting, and a staff of more than fifty.

Elisa's husband, Art, is a District Manager for Convergent Dealership Systems, a division of UNISYS. BC

We encourage you to participate by sending your articles and press releases to *Basic-2C Connection* c/o The Editor.

Some of the information currently contained in the newsletter will be covered in more detail through Marketing Bulletins and Technical Notes.

The *Basic-2C Connection* will be mailed to all Basic-2C developers, as usual.

Marketing Bulletins

The Marketing Bulletin brings news of product updates, special offers, business news, and new developments within Niakwa. Marketing Bulletins will be published on an "as needed" basis.

We recommend you keep all bulletins in your files to refer to as often as necessary. This format will be a consistent method in which to relay

pertinent information in a timely manner.

Each issue of the *Basic-2C Connection* will contain a review of Marketing Bulletins sent out within the present quarter.

Marketing Bulletins are mailed to Resellers of Basic-2C. If you are not a Reseller of Basic-2C, but would like to receive a specific Marketing Bulletin, please contact any authorized Niakwa Reseller of Basic-2C, or Niakwa directly.

Technical Notes

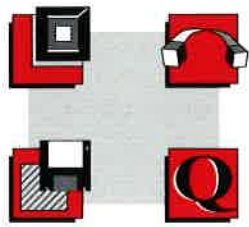
Technical Notes will be published by the technical department. Technical Notes will keep you up-to-date on the most recent developments, patch files, and relevant hardware/software issues.

The format and mailing guidelines of the Technical Notes will duplicate those of the Marketing Bulletin. BC

Marketing Bulletin

North America	International
01 March 23, 1990 Communications	01 March 23, 1990 Communications
02 March 23, 1990 Basic-2C Brochure	02 March 23, 1990 Basic-2C Brochure
03 March 23, 1990 Niakwa's Sales Team	03 March 23, 1990 Niakwa's Sales Team
04 April 4, 1990 New Release 3.01 of Basic-2C	04 April 4, 1990 New Release 3.01 of Basic-2C
05 April 4, 1990 New Product Release of Basic-2C for SCO System V/386 (UNIX)	05 April 4, 1990 New Product Release of Basic-2C for SCO System V/386 (UNIX)
06 April 27, 1990 Basic-2C Release 2.00.04 Products	06 April 27, 1990 Basic-2C Release 2.00.04 Products
07 April 27, 1990 New Basic-2C RunTime Package for INTERACTIVE UNIX	07 April 27, 1990 New Basic-2C RunTime Package for INTERACTIVE UNIX
08 May 25, 1990 Upgrade of Basic-2C for Bull XPS 100	08 May 25, 1990 Upgrade of Basic-2C for Bull XPS 100
09 May 25, 1990 New Basic-2C Software for Bull DPX/2 Systems	09 May 25, 1990 New Basic-2C Software for Bull DPX/2 Systems

Marketing Bulletins are mailed to Resellers of Basic-2C. If you are not a Reseller of Basic-2C, but would like to receive a specific Marketing Bulletin, please contact an authorized Niakwa Reseller, or Niakwa directly.



Meet The Team

Niakwa proudly announced the reorganization of its sales department in Marketing Bulletin No. 03 on March 23, 1990.

Kevin J. Brownell has accepted a new position with Niakwa as Sales Manager. Kevin has been with Niakwa for three years. During this time he held the positions of Product Analyst, Senior Product Analyst, and most recently the position of Product Manager. Niakwa plans to use Kevin's extensive technical support background to provide an improved level of sales support for our existing resellers as well as grow the Basic-2C licensee base by recruiting new developers. Kevin is directly involved in the strategic planning of Niakwa's development, business, and marketing plans. In addition, Kevin is also directly responsible for Basic-2C North American sales.

Lesslee Dort has also accepted a newly created position with Niakwa as Sales & Marketing Associate. Lesslee had previously worked as a Sales Associate within the administrative department. In her new role, Lesslee's responsibilities



From left to right:
Lesslee Dort,
Kevin Brownell,
and
Cyndee Philyaw

include press releases, marketing bulletins, newsletters, organization of workshops/conferences, license renewals, and orders. She will communicate Niakwa's news to current Basic-2C Resellers and to the general market.

Cyndee Philyaw, former Account Representative, has taken on the role of Account Manager, International Sales. Cyndee is a Niakwa veteran of five years.

She has been involved in each phase of Niakwa's development. Her responsibilities are now directed exclusively to the International Basic-2C marketplace. International Resellers represent an important portion of Niakwa's sales as well as tremendous growth possibilities in the future. BC

The Basic-2C Community Helping Each Other

Niakwa would like to extend its appreciation to all who responded to our request for Wang 2200 equipment during the April 19, 1990, "Priorities in the 90's" workshop.

Randi Scott, handicapped due to a horse riding accident, is an independent Wang 2200 programmer. Randi had a system crash in April of 1990.

The outlook was not good. The most obvious solution, convert Randi to a PC

with Basic-2C, was not appropriate because she can only depress one key at a time.

Her livelihood, developing newsletters on her Wang 2200, was indefinitely interrupted.

During our "Priorities in the 90's" workshop, we appealed to the kindness of our Basic-2C Resellers.

After explaining the situation, and the need for donated Wang 2200

equipment, Randi now has a fully operable 2200 system. As a matter of fact, she also has a back-up or two.

Niakwa would like to thank Inn-Line Systems, MICA Systems, and Niakwa '88 for their generous offers and contributions. BC

Tech Corner

? Ask Andy

? I'm getting the error message "Interpreter not Enabled." What does it mean?

A. When running the interpretive RunTime (RTI), the ENABLED file is needed to start the interpreter. Copy the ENABLED file from the Development Package's Compiler Diskette to the Basic-2C directory.

? I have a Novell network that has two hard drives in the file server. How and where do I install the security?

A. Install the security fingerprint on the drive containing Basic-2C. If the hard drive is the F drive, install the security as the manual instructs. If installing the security on the second drive, the path must be selected to the hard drive containing Basic-2C. Remember, no matter which drive Basic-2C is installed on, the Basic-2C subdirectory must be off the root directory.

For example, the second drive is drive J.

1. Copy Basic-2C to the J:/BASIC2C directory.
2. Install the security by typing: NIAKINST A: J:
3. Set the path to J:/BASIC2C.
4. Run the RunTime.

The most important thing to remember is that when the RunTime is executed the "current" drive must be the one when security is installed. The "current" drive can be a logical drive which is mapped to a sub-directory of the physical drive.

Technical Notes - Summary PC Connect and SuperLAN

On April 1, 1990, Niakwa's Technical Support staff published its first Technical Note. This is one of Niakwa's new methods of communication which announces technical notices, such as new products running with Basic-2C, patch files, recent technical developments, and pertinent hardware/software developments relating to Basic-2C.

The first Technical Note dealt with Basic-2C under PC-Connect. PC-Connect is a Wyse 50 terminal emulation product, distributed by Bluebird Systems, running under Microsoft Windows 286 and 386. PC-Connect allows a user to establish up to six concurrent SuperDOS sessions from a standalone PC while maintaining the ability to access other MS-DOS applications running under Microsoft Windows. Running single or multiple SuperDOS Basic-2C sessions is supported in this environment.

The second Technical Note explained how Basic-2C operates under SuperLAN. SuperLAN, which was developed by Bluebird Systems, allows two or more CPUs to interact with each other. Basic-2C applications are able to:

- read and write files that physically reside on other nodes
- output information to ports that are physically connected to other nodes
- generate a unique terminal identification number based on the node number.

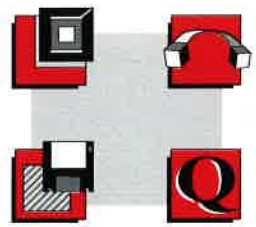
Both PC-Connect and SuperLAN are supported with Release 5.1 or greater of SuperDOS. For more information on PC-Connect and SuperLAN, contact your local SuperDOS distributor. If you are interested in running Basic-2C under one of these environments and need to know more specific information on how to set up your Basic-2C environment, please consult the Technical Notes No. 01 and No. 02.

If you have not received the Technical Notes and would like to, contact any authorized Niakwa Reseller or Niakwa directly. BC

Technical Notes

- | | |
|----|--|
| 01 | April 1, 1990
Basic-2C Under PC-Connect |
| 02 | April 1, 1990
Basic-2C Under SuperLAN |

Technical Notes are mailed to Resellers of Basic-2C. If you are not a Reseller of Basic-2C, but would like to receive a specific Technical Notes, please contact an authorized Niakwa Reseller, or Niakwa directly.



Basic-2C RunTime Revisions Made Easy

Having trouble keeping up with Niakwa's new Basic-2C products and enhanced revisions of other Basic-2C products?

To help Basic-2C Resellers and End-Users, Niakwa has compiled product information. Shown on the right is the most current listing of Basic-2C RunTime packages and the latest revision available. Please refer to this list as necessary.

On the Basic-2C horizon are possible platforms such as the NCR Tower and Motorola's 68000 processors. Both are currently under consideration and/or testing by Niakwa's Research and Development staff.

If there are any other platforms you have a vested interest in, please let Niakwa know.

As always, Niakwa strives to be your answer to portability, compatibility, capability, quality, and service. BC

Basic-2C Product #	Description	Revision
1A-RTP-XX	Wang PC & Approved Compatibles 5 1/4"	3.00
2A-RTP-XX	IBM PC & Approved Compatibles 5 1/4"	3.00
2B-RTP-XX	IBM PC & Approved Compatibles 3 1/2"	3.00
4A-RTP-XX	Novell Networking Netware, 5 1/4"	3.00
4B-RTP-XX	Novell Networking Netware, 3 1/2"	3.00
5A-RTP-XX	Altos XENIX 3 based systems 5 1/4" (686, 886, 1086, 2086, 3086)	3.01
6C-RTP-XX	DEC Micro VAX II/VAX RX50 diskette	2.01
6D-RTP-XX	DEC Micro VAX II/VAX, TK50 tape	2.01
6E-RTP-XX	DEC Micro VAX II/VAX, 9 track tape	
7A-RTP-XX	SuperDOS based systems, 5 1/4"	3.01
7B-RTP-XX	SuperDOS based systems, 3 1/2"	3.01
8A-RTP-XX	Bull XPS 100, 5 1/4"	3.01
9A-RTP-XX	Altos 2000, 5 1/4"	3.01
10A-RTP-XX	SCO XENIX V for IBM, 5 1/4"	3.01
10B-RTP-XX	SCO XENIX V for IBM, 3 1/2"	3.01
14A-RTP-XX	NEC Information systems, 5 1/4"	2.01
15A-RTP-XX	Altos 600, 1000 & 2000 (386 RTP), 5 1/4"	3.01
16A-RTP-XX	Altos 500 System V (386 RTP), 5 1/4"	3.01
18A-RTP-XX	SCO System V/386 (UNIX) for IBM PS/2 and approved 386 compatibles, 5 1/4"	3.01
19A-RTP-XX	Bull DPX/2 68000, 5 1/4"	3.01
20A-RTP-XX	INTERACTIVE UNIX, 5 1/4"	3.01
20B-RTP-XX	INTERACTIVE UNIX, 3 1/2"	3.01
22A-RTP-XX	Altos 5000, 5 1/4"	3.01

Don't Forget!

Basic-2C Revision 2.00.04 and 2.00.05 are quickly coming to an end. July 15, 1990, is the absolute last date a replacement or upgrade order will be accepted by Niakwa. Anyone needing a 2.00.04 replacement after July 15, 1990, will need to purchase a new Basic-2C RunTime of the most current release.

Please refer to the summary chart for specific systems affected. For further information refer to Marketing Bulletin No. 06, or call an authorized Niakwa Reseller of Basic-2C.

Product Type	Anniversary Date	Last Date Available
Wang (MS-DOS)-1.00.04	July 15, 1988	July 15, 1990
IBM (MS-DOS)-2.00.04	July 15, 1988	July 15, 1990
Novell (Netware)-2.00.04	July 15, 1988	July 15, 1990
Wang APC (XENIX 3)-2.00.04	June 28, 1988	June 28, 1990
Altos (XENIX 3)-2.00.05	June 28, 1988	June 28, 1990

The Back Page



Priorities

(continued from page 1)

As shown in the pictures, the workshop allowed Basic-2C Resellers to meet and discuss common interests.

Starting in the upper left hand corner, clockwise: Alan Green of FlexSystems and George Zeltner of Zeltner Associates discussing FlexWindows, Mike Louviere of Mica Systems enjoying the camaraderie of the workshop, Charles Hutchins and Frank Feeny of Inn-Line Systems sharing their views of the conference, and King Mike Liston of Associated Software and Queen Carrie Zimmerman of Gilmore Research presiding over our Allgauerian Feast at the end of the day. BC



Letters To The Editor:

One of the goals of the *Basic-2C Connection* is to give Basic-2C users a forum to exchange ideas, share insights, make comments or simply to speak their mind. We encourage you to send us short, to the point letters that would be of interest to the Basic-2C community. Please address them to *Basic-2C Connection*, Letters to the Editor.

Profile

Group 2000

Introducing Group 2000

Group 2000, located in Belgium, is one of Niakwa's original Basic-2C Distributors. In fact, Maurice van Cauwenbergh, General Manager and Partner of Group 2000, attended the unveiling of Basic-2C at our seminar in Chicago back in 1984. From that moment on, Group 2000 was sold on the merits of Basic-2C and became one of Niakwa's first International Distributors.

Andre Camps, in partnership with Maurice van Cauwenbergh, formed Group 2000 in 1981 for the purpose of providing "Turn-key solutions" for commercial environments. Andre's primary responsibility is in Product Development, while Maurice is in charge of Sales and Management.

When Andre and Maurice decided to form a company together, they put a lot of thought into the name they gave it. They determined "Group" would give them the larger image they wanted to portray. Back in 1981, reference to the year "2000" seemed like a good way to indicate keeping stride with the future. And, finally, they knew their market was to be an international market, so they tested out the name in four different languages. Although the spelling is vastly different in each language, the words "Group 2000" actually sound very similar in all four. (That's some careful planning!)

A Unique Location

Group 2000 is located in Heverlee, just outside of Leuven, Belgium, and 15 miles east of Brussels. The history of Leuven includes the "Begijnen," who were religious women who lived in a community of their own. (The last "Begijnen" woman in Leuven passed away at the age of 85 in 1988!) The center picture was taken at the former site of the "Begijnen" women. The buildings now serve as hospitality for Belgium visitors and foreign students.

Back to Business

The 21 employees who make up Group 2000 are in the business of providing complete solutions to companies in a large range of countries: Belgium, France, Germany, Luxembourg, the Netherlands, South Africa, and the United Kingdom.



Maurice van Cauwenbergh, General Manager and Partner of Group 2000

Their primary hardware sales are Wang systems (PC, CS, and VS). The Wang PC sales number approximately 150 annually. Basic-2C is sold on machines running MS-DOS, SCO UNIX, and SuperDOS. The most popular Basic-2C platform is SuperDOS. According to Maurice, "Niakwa's strength is the overall portability on the approved platforms without any new manipulations!"

The Software Story

Group 2000 has programs for wholesale invoicing, stock control, accounting, salary-banking, production-control, cost-control for construction building, salary, kitchen-designing programs and more.

All of these programs were written by Group 2000 in Wang's Basic-2. They are then sold on Basic-2 machines or converted to Basic-2C for use on

alternative operating systems. Group 2000 still continues to program in Basic-2 due to their high number of Wang CS-system users. However, they are taking a serious look at migrating to Basic-2C as their programming language of choice due to the expanded features which are now available in Release III.

A Master Distributor Link

In the international marketplace, Niakwa has 11 Master Distributors in place who help to market, sell and support Basic-2C worldwide. Group 2000 has used one of these Master Distributors, SCIA in Belgium, as their Basic-2C connection. According to Maurice van Cauwenbergh, he works with SCIA on a mutually beneficial support arrangement and has the benefit of a nearby stock of Basic-2C from SCIA.

Words of Experience

Maurice has developed a personal philosophy which has helped to make Group 2000 the success it continues to be. "There are three parts to every business day, the morning, the afternoon, and the evening." Regarding support, "Support is the best after-sales publicity!" Regarding dealings with customers, "We always give our customers the feeling that they are right! Only after a brief discussion they may find out that it was the opposite."

This may explain why Group 2000 still has its first customers from 1981.

Group 2000 Successes

A Wang PC 382 with 28 Wang terminals was set up at a production plant, all operating off only one PC running Basic-2C under SuperDOS.

At another wholesale distribution site, Group 2000 installed a Wang PC 382, with 29 Wang terminals, 9 printers and Basic-2C under SuperDOS. BC