

SUPPORT UPDATE

Quarterly Newsletter from Ultimate Customer Service

Volume 1 Number 1

CUSTOMER SERVICE DIVISION

First Quarter Winter 1991

THE ULTIMATE CORP. INTRODUCES CUSTOMER SUPPORT NEWSLETTER

The Ultimate Corp. proudly introduces "Support Update" — its new quarterly newsletter from the Customer Service Division. The newsletter is a key component in a refocused communications program providing Ultimate Dealers and End User Customers information regarding customer support, activities, services, and products.

The quarterly publication is a primary source of written information and valuable experience gained by Ultimate's Customer Service Division in supporting thousands of users of Ultimate systems. Each quarter the "Support Update" will focus on a variety of customer support themes. This first issue discusses the importance of keeping your Ultimate system updated on a current operating system release level, and includes an interesting view of the Technical Support structure within the company.

Ultimate is now marking the beginning of a new era — its second decade of commitment to excellence. A commitment to excellence in the people who are a part of Ultimate; excellence in the products that we sell; and excellence in our approach to customer service. The design of the company's new corporate logo reinforces these commitments. The colors and shape that Ultimate has chosen denotes both passion and tradition, growth and stability. The past and future intersect today at The Ultimate Corp.

Inside Support Update

Customer Support1
Release 210 1
System Features2
Customer Service3
Highlights of Release 2104
Release 2004
System Numbering5
System Distribution5
Release Documentation5
Technical Assistance Center6
Hands-On-Learning6&7
New Partners7
Hands-On-Learning Course Desc 8

Ultimate Announces New Release 210 Of Operating System

The Ultimate Corp. (NYSE: ULT), the leading supplier of total-solution information systems, software and services to the Pick® and Pick/UNIX® markets, announced the availability of Release 210 of the Ultimate Operating Environment on October 9, 1990.

According to the announcement by Ultimate Systems Division Vice President Engineering Steve Sorensen, Release 210 applies to a large portion of the Company's installed base of over 8,000 systems, and provides dealers and end users with significantly increased file system performance and integrity; improved performance monitoring and system tuning facilities; new text editing functionality; competitive operating system compatibility; enhanced data communications facilities; as well as other important features and benefits.

An extension of Release 200, announced last year, Release 210 is available for Ultimate users of Honeywell, BULL HN, IBM S/370 and Ultimate DEC/ LSI-based systems.

Release 210 has been shaped by customer requirements and is the latest in an eleven-year series of on going enhancements to the Ultimate Operating Environment; a high performance relational data base system designed for multi-user, transaction-oriented business computing environments. An enhanced version of Pick, the Ultimate Operating Environment includes an extensive set of features and options for compatibility with Pick R-83 and other implementations of Pick. It is supported across a broad range of Ultimatesupplied hardware platforms, and each new release is designed to be upward compatible from earlier releases, protecting the Company's and its dealer's and end user's investments in applications software and training.

Ultimate has implemented several new features in Release 210, while enhancing the capability and extending the application of existing features. The new release has been through an extensive testing and quality-assurance program on all targeted hardware platforms and is available on request.

"The communications power of our product offering has been bolstered through enhancements to the UltiNetTM communications and networking system, and the already extensive R-83 compatibility feature set of the operating system has been expanded. In addition, to improve file system reliability and integrity, we have implemented Phase Two of our three-phase Group Format Error (GFE) elimination program. Phase Two addresses transient GFEs by extending the "READ/LOCK" function to ten additional verbs, and Phase Three, to be implemented in the next release, will deal with the elimination of GFEs created by a system crash. As a result of these and the other new features included in Release 210, we are receiving high praise for the quality, capability and performance of each of the new versions," Sorensen said.

"IBM S/370 users are particularly enthusiastic about the improved performance and enhanced system-tuning facilities provided by the new 2k/4k variable page size feature and the new performance monitor. Users of BULLbased 6000 and 7000 systems, as well as Ultimate LSI-based 3040 and 3050 systems are seeing reductions of up to 50% in file save and file restore times, and we have increased the number of users on BULLbased 1400 systems from 64 to 96 users. In addition, the expansion of Disk Shadowing support (automatic creation of mirror-image disk files) to all BULL 6000 and larger systems is being hailed as essential for users

New Release

(continued from page 1)

requiring the added security of redundant copies of files for critical applications," Sorensen added.

As well as hardware platform-specific enhancements, Release 210 provides one of the first Pick-based full-screen editors, providing end users and programmers with expanded functionality and easy to use facilities for item creation and editing. Other features include: a full-function single-user evaluation copy of UltiWriterTM, (Ultimate's state-of-the-art word processing system); UltiWriter command compatibility with the new full-screen editor; Several important new TCL commands including CHARGE-UNITS for monitoring CPU utilization, TCL-PROMPT for the easy display, modification and execution of system prompt commands; and extensions to Ultimate RECALLTM permitting up to 465 characters per print line to take advantage of the compression modes available on a wide variety of printers.

Upcoming additions to Release 210 will include several other important enhancements including the support of transaction logging during a file-save operation, a significant increase in the number of serial printers supported, and Level Pushing — the unlimited ability for terminal users to easily switch back and forth between programs and applications in real time without exiting the primary application.

Ultimate provides business solutions to companies of all sizes by integrating system-level software and applications software in hardware platforms from premier computer vendors such as Bull HN, Hewlett-Packard, IBM and Sequoia. The firm also provides education, training, consulting, and field-maintenance services to customers across a wide range of vertical markets. In addition to its domestic operations, Ultimate has subsidiaries in the United Kingdom, Canada, France, and Australia.

Ultimate Operating System Features

Olumate Operating	Joysie	III FEALU	1162	
	R180	R190*	R200*	R210*
 Multiple Hashing Methods 	Χ	Χ	Χ	Χ
 Extended Math 	Χ	Χ	X	Χ
UltiKit	Χ	Χ	Χ	Χ
UltiMation	Χ	Χ	Χ	Χ
 Greater than 32k Item Size 		Χ	Χ	Χ
 TCL Stacker 		Χ	Χ	Χ
Basic Subroutines within Recall		Χ	Χ	Χ
Soundex in Recall		Χ	Χ	X
Inputcontrol in Basic		Χ	Χ	Χ
Verify File Save		Χ	Χ	Χ
 New TCL Prompt Character 		Χ	Χ	Χ
 Selective Transaction Logging 		X	X	Χ
TCL Keywords		Χ	Χ	Χ
File Indexing (B-Trees)			Χ	Χ
Term-View			Χ	Χ
Extended Basic			Χ	Χ
Named Common			Χ	Χ
 Basic Compiler Enhancements 			Χ	X,
 MultiLingual Capabilities 			Χ	Χ
 Character Translation 			Χ	Χ
 New Basic Debugger 			Χ	Χ
Disk Shadowing			Χ	Χ
Full Screen Editor				Χ
 UltiWriter Evaluation Copy 				Χ
 Faster File Save and Restores 				Χ
 CHARGE-UNITS Command 				Χ
 Recall Reports>145 Characters 				Χ
Level Pushing				Χ
MOVE-FILE				Χ
•BUILD-PROC				Χ
 Increased Number of Printers 				Χ
◆TCL-PROMPT Command				Χ
●GFE Reduction				Χ

^{*}For more information, please refer to the Release 190, 200 and 210 Guide to New Features

Ultimate Customer Service — Where Best Keeps Getting Better

Dan Jordan stands in the entrance hallway of the Ultimate TAC Center and takes in the whiteboard conspicuously hung on the wall before him. The numbers on it trumpet the department's service results of the previous day: an effectiveness rate of 99.7% compared to a goal of 99.5% (this compared to a rate of 89.9% a year ago when the measurement was first established). Making his way to his office, he is satisfied but resolute.

"When we're getting as close as 99.7%, I need to find answers to the question, why aren't we at 100%," says Jordan, Ultimate's Assistant Director of Technical Support.

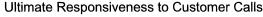
This attitude is one that has its roots at the top.

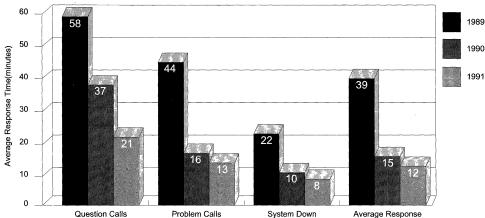
At the helm of this ship is Jack Smith, Senior Vice President of Ultimate's Customer Service Division. Smith came aboard two years ago and since then, has led the improvement of Ultimate's service offering to a level that is even better than previous "bests."

In a recent survey, 97% of Ultimate customers rated Ultimate service as good to excellent. Close to 90% of Ultimate customers rated Ultimate service as very good to excellent! Although this rating is high, Smith says, "We will not be satisfied until we achieve a 100% excellent response."

Those that work for Smith report him to be "unyielding but fair" — he doesn't expect any more effort from his staff than he is willing to put forth himself. A tough act to follow when you consider that one staffer reports: "I don't think he sleeps."

"Our goal, quite simply, is a 100% referenceable customer base," says Smith. His commitment to attaining that goal is evident in measures that include, among others, the tracking of Ultimate's responsiveness to customer calls. TAC's actual performance in responding to three categories of customer calls, as well as an average for calls from all categories is reflected in the graph above. In each scenario, Ultimate has significantly improved its responsiveness when providing technical telephone support to its customers.





Another example of our commitment to gain a completely referenceable customer base is the development of a support system based upon Expert System Technology.

Expert System Technology involves "picking the brains" of the most informed and competent people on the subject and shaping a system based on this wealth of knowledge. Combined with this knowledge base is information gathered from hundreds of thousands of service activities that have been recorded on Ultimate's support system. The end result is a source of information that everyone in the group can access. This ensures consistency and effectiveness of support and allows for the further reduction of response times.

Another measure Smith is currently laying the groundwork for is the networking of all Ultimate Support Centers throughout the world. The Goal? Cost-



Jack Smith, Senior Vice President Customer
Service

effectively delivering service worldwide, 24 hours a day, 365 days a year.

"The network will be running on a fault-tolerant system with expert system technology capabilities. The result will be around-the-clock, consistent levels of support," says Smith

In the meantime, Smith has set up an organization to support the growing business and its customers' changing needs. It's up and running; and constantly being monitored and tuned.

The customer's first contact for contract and administration issues is Finance & Administration, which is headed up by Gary Dedoussis, Vice President. The customer call comes through — and it's always answered by "a live person." At this point, a customer service representative logs the call to ensure that it is routed to the appropriate person, and that follow-up is made in a timely manner. In those cases where the customer writes a letter, the correspondence must be closed out within 72 hours.

Service Operations is chartered with the responsibility of ensuring that the quality of service delivered to the customer is satisfactory. A frontline group of Customer Service Representatives (CSR's) direct the call to the appropriate resource depending on the nature of the problem. This group is aided by a call-management system which is designed to assure continuity during the problem resolution activity.

Additionally, the Service Operations Group provides a Situation Management function. This group monitors and provides critical information to the technical rep's and managers. The information is also shared with Regional Support Managers who are a new addition to the Customer Service Division.

(continued on page 4)

Ultimate Operating System Highlights of Release 210

Faster File Saves

The faster file save capability introduced in Release 200 has been extended now include the 2MB Bull systems and the LSI-based 3040 and 3050 systems. Users of these systems can expect to gain a 30 to 50% improvement in the time required to perform a full formatted file save!

Faster File Restores

A faster file restore has been implemented on the Bull 6000, 6900 and 7000 systems! Preliminary test results indicate a 30-60% improvement in the formatted restore time!!!

Full Screen Editor

A full screen text editor has been provided as an alternative to the existing line editor for help in editing programs, procs and data records. The new editor, SE, allows a user to position the cursor anywhere on the screen to add, change and delete characters. It also provides additional features such as the capability to edit two items on the same screen, and cut and paste between the records.

TCL-PROMPT command

A new command has been introduced, TCL-PROMPT, which allows a user or system administrator to customize the prompt character which is displayed at TCL. Any number of characters can be specified as well as variable information such as account name, port number, and system date.

SHOW-CHARGES command

This new command allows a system administrator to monitor and list the computer charges for all of the ports on a system. It can be used to determine which ports are most active on a system to aid in determining system usage.

LEVEL PUSHING

This new feature provides unlimited ability for terminal users to easily switch back and forth between programs and applications in real time without exiting the primary application.

One-user copy of UltiWriter is now integrated

A one user copy of UltiWriter, Ultimate's state-of-the art word processing system is now available to all users of the Ultimate System.

Recall reports can now exceed 145 columns

The previous limit of reports generated with RECALL has been expanded to 465 characters on a report line.

GFE Reduction

Release 210 will prove to significantly reduce the occurrence of GFE's; especially transient GFE's. This effort has included identifying and resolving many of reasons that GFE's occur and has resulted in the addition of Read Locks to many areas of the system.

Customer Service

(continued from page 3)

Once the call for technical assistance has been logged with a CSR, the call is responded to by the organization that has been traditionally known as "TAC"— the Technical Assistance Center. Insan Farooqi, Director of Technical Operations, has finetuned this area with the results self-evident in recent customer satisfaction polls.

A recent organization change places the Quality Assurance function under Smith's direction. Director of Quality Assurance, Joe McCarthy, plays the role of Corporate Quality Advocate. As such, he is tasked with the responsibility of continually improving levels of product and service quality corporation-wide.

The critical task of expanding and improving service support offerings to better meet customer needs has been charged to Angelo DeSimone, Director of Business Development and Marketing, and Tom Staugaitis, Director of Sales Operations.

"Ultimate has built a successful service business. Our intentions are to build upon the capabilities that are in place today and gear them towards enhancing Ultimate's position as a premier provider of products and services," says Tom Staugaitis.

In a book Smith contributed to, "When America Does It Right — Case Studies in Service Quality", Smith concludes, "Servicers are in the world to serve — to keep their customers happy — a fact that should never be forgotten."

The Ultimate Operating System $^{\text{TM}}$, Release 200 (0/S200)

The Ultimate Operating System[™], Release 200 (O/S200) was announced on May 2, 1989. Among its advantages to business users are a built-in relational data base management system and portability across a wide variety of computer hardware platforms.

- •File indexing (B-Trees), for easier, quicker report generation using the data base;
- •Multi-lingual capabilities, so that users in different national languages can simultaneously use and communicate over the same system; and
- •A boost of as much as 50% in system performance, depending on computer hardware platforms.

Based in the Pick® Operating system, the Ultimate Operating System is known for its flexibility, ease of use, English-like (fourth generation) query language, and programming simplicity. The O/S200 improvements announced in May 1989 affect the IBM and Bull products. Among product-specific enhancements O/S200 provides:

- •Up to a 50% improvement in performance in the IBM 9370 configuration; •Faster backup capabilities on the Bull
- •Faster backup capabilities on the Bull 6930 series;
- •Increased protection from data loss, through disk shadowing on the Bull line; and
- •Increased end-user and programmer productivity on both systems, through enhancements to the Basic programming language and compiler.

These enhancements strengthen an already powerful business tool.

For a business person weighing a system choice today, O/S200 offers access to more than 3,000 proven industry-specific software packages, as well as the assurance that current investments in end-user training are protected, regardless of advances in computer hardware technology in the future.

Traditional Operating System Numbering Scheme

Starting with release 190, a standard for numbering Operating System Releases has been established. Examples of releases using this numbering scheme are:

190L, 195VB, 204DB

Breaking these numbers into their meaningful components provide us with four parts:

NN-N-A-A

Part 1 - The first two numbers signify the MAJOR RELEASE IDENTIFICATION. A change in this number indicates major feature enhancements. All releases with the same first two numbers generally provide the same functionality for all platforms.

190L, 194UC, 195VB - '190' Series Releases

200EC, 204DB, 205EA - '200' Series Releases

Part 2 - The third number identifies the HARDWARE PLATFORM. Although the major release features are the same for all platforms, a different boot tape is required for various implementations. This also allows for including platform-specific features or any other change required for the specific platform.

190L, 200E - A '0' indicates releases for Bull Firmware, and LSI systems

194UC, 204DB - A '4' indicates releases for IBM 370 systems

 $195,\,205 EA$ - A '5' indicates releases for the Bull 1400 systems

Part 3 - The first letter identifies a MINOR RELEASE LEVEL. Starting with the 'V' level on the 190 releases and including all future releases these minor release letters identify releases which are in sync with one another.

190VE, 195VB, 194V - 'V' Series releases for 190

200EC, 205EA - 'E' Series releases for 200

Part 4 - The second letter (if present) identifies that an "A" priority bug fix was merged into the specific release. This merging can occur either during our release testing process or once the release has been distributed to the field.

Current release numbers for the traditional Ultimate Operating system include:

<u>IBM</u>	<u>1400</u>	LSI/BULL
194UC	195VB	190WC
204EB	205EA	200EG
214AC	215AC	210AC

Operating System Distribution Policy

Ultimate will continue to make periodic announcements as to the status of all Ultimate Operating System Releases. These announcements will be made to dealers, subsidiaries and end-users. However, it is customarily the responsibility of the dealer or subsidiary to notify their customer base and plan upgrades accordingly.

Any customer who is currently paying maintenance can call the Technical Assistance Center at 1-800-727-ULTI, or submit an Ultimate Media Request form to obtain a current release of The Ultimate Operating System. Standard shipping will occur via U.S. mail at no additional charge. Overnight delivery of current Ultimate Operating System release tapes can be obtained upon request, and will include the appropriate delivery charges.

Any releases prior to current releases will be considered "frozen". No bug fixes will be applied to these "frozen" releases. The fixes for any bugs found in these releases will be merged into a more current revision of the Ultimate Operating System.

If a request is made for Ultimate to provide an Operating System Release Tape for a "frozen" release, a \$500 charge will be assessed. Overnight delivery of "frozen" releases will include a 50% surcharge in addition to the appropriate delivery charges.

Calls to Ultimate's Technical
Assistance Center from customers on
"frozen" releases will be accepted. However, any problem known or suspected to be
a bug which is fixed on a current release
will not be addressed until the system is
upgraded to the current release.

Release Documentation

The following documentation will be provided for each Ultimate Operating System Release:

Upgrade Procedures

Whether you're installing the Ultimate Operating System for the first time or upgrading your current Ultimate software to the latest release, Upgrade Procedures guides you through the process. A chart directs you to the appropriate procedure for your system. Each method is explained step-by-step, with pictures of the screens you'll see so that you can check your progress. This guide also contains instructions for booting your system, writing disk labels, and formatting disks. Upgrade Procedures are shipped with each new SYS-GEN tape, and can be separately ordered at any time with no additional charge!

Delta Documents

If you're interested in upgrading your system, but you don't know the features of each operating system revision, then refer to the current Delta Document for a complete list of changes in each revision. Each Delta Document lists all changes for the revisions in that series. Delta Documents are included with each SYS-GEN tape, and are also available on request by stating the system revision level required (at no charge).

Guide to New Features

The Guide to New Features describes the new features and enhancements in the latest release of the Ultimate Operating System. Some of these features include file indexing, BASIC language enhancements (including the use of reserved words), foreign language translation capabilities, and new system commands. The Guide to New Features can be separately ordered at any time with no additional charge!

Ultimate Corp. Expands Service With West-Coast Technical Assistance Center

The Ultimate Corp. has expanded its customer service capabilities by opening a new Technical Assistance Center (TAC) in Irvine, CA on November 26, 1990, according to an announcement made by Ultimate chairman, President and CEO Michael J. O'Donnell. "Our New Jersey TAC has been the heart of our Customer Service operation since it was first opened in 1978," said O'Donnell at the opening ceremonies. "We have expanded the TAC concept to California to increase our geographic presence and to provide our large installed base on the West Coast with direct local support. The West Coast had traditionally been strongly receptive to systems using Pick® and Pick/UNIX®-based software. The TAC expansion also fulfills a basic concept of our business strategy: to offer the finest in software, service, and total systems solutions.

The New Jersey TAC is an operation of Ultimate's North American Customer Service Division, which employs approximately 150 people, and is widely considered one of the best customer-support operations of its kind with a primary objective to maintain the highest customer satisfaction. Jack Smith, Senior Vice President of Ultimate's North American

Customer Service Division stated," The opening of the West Coast TAC is a continuation of our commitment to provide more regional and local support to our customers. Earlier this year Ultimate added staff of Regional Customer support Managers, geographically located across the United States and Canada. The Irvine office will provide direct local support for one of the nation's largest installed bases of Pick systems. We expect to see strong growth in our service operations in the west. We also expect our staffing of this operation to grow steadily as we expand our customer base."

Insan A. Farooqi, Director of Technical Operations said, "The Irvine TAC will be part of Ultimate's worldwide support network which will soon add the company's Canadian customers. The linking of Ultimate's Support Centers worldwide via a sophisticated telecomunications network makes all TAC's resources available to handle all calls, regardless of location, while providing the customer the ability to receive more local support if necessary."

O'Donnell added that veteran TAC manager Ken Rotopel will head up the Irvine TAC. All customers will continue to call Ultimate's Customer Support Center's toll-free number, 1-800-727-ULTI for support and West Coast customers requiring direct local support will then be routed immediately to the Irvine TAC. The Irvine office is located at 1063 McGaw Ave., Irvine, CA 92714.

Hands-On Learning, Pick Division (HOLC) Get Your Edge in Education... Today!

Your company has made a sizable investment in its information systems. Not just in computer hardware, system software and applications. But also in personnel, procedures and staff training at every level of your organization.

To get the maximum possible return on your information systems investment, you must insure that all staff—management, operations, and technical—are able to tap the full potential of you information systems. Anything else would sacrifice your investment in both your systems and your people.

And that means education and training. Comprehensive, ongoing training—on PICK®- and UNIX®-based systems—that can boost individual productivity and streamline your day-to-day operations. The kind of education and training you'll find only at Hands-On Learning.

Hands-On Learning, Pick Division is a subsidiary of The Ultimate corp., a leading supplier of computerized PICKand UNIX-based business solutions to companies of all types and sizes, virtually in every industry. HOLC is dedicated to



Insan Farooqi, Director Technical Operations: Ken Rotepel, Manager West Coast Support; Mike Florman, Senior Customer Support Technician; and Rich Gibbs, Technical support Technician, joined Ultimate Chairman Mike O'Donnell at ribbon cutting ceremony for the Grand Opening of Ultimate's West Coast Technical Assistance Center in Irvine, California on November 26, 1990.

providing you with a unique "Edge in Education" that will help you protect and leverage your information systems investment.

Our large and growing range of courses are designed to meet the very different needs of programmers, system managers, executive level system users, and operational staff.

At HOLC, we offer a wide variety of technical and end-user oriented courses that can help you and your staff take full advantage of the power and versatility built into your PICK and/or UNIX operating systems.

Our generic PICK and UNIX offerings range from courses on operating system fundamentals, BASIC programming, and end-user application packages to advanced programming and the migration of PICK applications to the UNIX environment via ULT/ix.TM In addition, we offer overview courses on PICK, UNIX and ULT/ix for MIS management and other top executives.

No matter where your business is located, you can gain the HOLC "Edge in Education."

We offer our full range of courses at HOLC facilities in East Hanover, New Jersey and Irvine, CA. We also regularly make our courses available in Florida,

Chicago and Atlanta—and we are committed to offering them in major cities as well, when the demand arises. We can even arrange to conduct selected classes on customer premises, when necessary, to meet specific customer requirements.

Now is the time to secure the best technical skills possible for your employees. So look closely at all of your options and I think you'll find that no other educational organization can match HOLC's:

- Breadth of course offerings—in generic PICK, UNIX and ULT/ix.
- Flexibility—in responding with new and more challenging courses to meet your constantly changing needs.

Hands-On Learning is clearly your best choice for one-stop business and information systems education and training. Call 1-800-866-2668 or simply complete and return the attached business reply card for course and enrollment information today.

Announcing New Partners . . . HOLC and JES & Associates!

Nothing is more important to HOLC than the success and proficiency of its systems customers. Having the right class available, at the right time in the right location has motivated HOLC to join forces with JES & Associates. Together HOLC and JES & Associates provide the most comprehensive curriculum of quality PICK-and UNIX-training, in the most convenient locations. You can enroll in either or both educational programs by simply contacting our account representatives at 1-800-866-2668.

The Ultimate Corp. Customer Service Division "Simply the Best"

- •Total System Support
- •Single Point of Contact
- •Customer Satisfaction Driven
- Access to O/S Updates & Enhancements
- •24 x 7 Problem Reporting
- •Customized/Flexible Service Programs
- ·Local Stocking of Mfg. Certified Spares
- •ECO and FCO Availability
- •Unique Value and Superior Quality
- •State-of-the-art Service Technology

Toll Free 1-800-727-ULTI

"A Foundation Built on Quality, Committed to Achieving Customer Satisfaction Through Service Excellence!"

For more information call Tom Staugaitis at (201) 887-9222 ext. 206.

HANDS-ON LEARNING PICK DIVISION COURSE DESCRIPTIONS

Course #002

ULTIMATE RECALL FOR THE NON-**TECHNICAL USER**

This non-technical, hands-on course explains how to obtain reports using the Ultimate RECALL processor. It is designed for managers, administrative assistants, and other personnel with little or no computer experience. Students will create tabular and summary-type reports both on the CRT screen and at the printer.

Tuition: \$300

Course #003

Dictionary/PROC

This one day seminar focuses on the advanced uses of dictionaries and the PROC language to enhance the functionality of the Data Retrieval language. Special emphasis will be placed on the use of the output buffers in the PROC language.
This course will expand on the

concepts covered in Course 200/210.

Tuition: \$300

Course #006

UltiCalc

This hands-on course will introduce the user to all necessary commands to create, modify and print an UltiCalc spreadsheet using inputs supplied by the user or from the user's data base. Some topics that will be covered in this course include layout, formatting commands, cursor movement keys, help screens, input data and text, basic formulas and functions, saving and retrieving spreadsheets and accessing the data base.

Tuition: \$300

Course #200

PICK O/S Fundamentals Series—Level I

This hands-on course meets the needs of those with little or no PICK experience. Topics include: The operating system itself and file structure, use of the PICK editor, the production of detailed, complex reports using RECALL, how to create your own dictionary items, the use of conversions and correlatives, and writing in PROC. In addition, spooler commands, tape commands, and file-save procedures are discussed.

Tuition: \$995

Course #220

PICK O/S Fundamentals Series—

This hands-on course provides further and more detailed instruction in the use of the operating system processors. Topics include: advanced PROC, use of the fcorrelative and A-correlative in dictionary items, use of the Forms Processor, and an introduction to Ultimate's fourth generation language UPDATE. This course assumes either successful completion of course #200/210 or that the attendee is comfortable with most of the following: using the PICK editor, creating simple RECALL reports, creating simple dictionary items, and writing simple PROCs.

Tuition: \$995

Course #230

PICK O/S Fundamentals Series— Level III

This hands-on, technically oriented course is designed for senior programmers or those who are responsible for the technical maintenance and support of the system. In addition to detailed discussions of such topics as operating system behavior and file structure, attendees will learn the use of the system debugger and how to identify and fix Group Format Errors.

Tuition: \$750

Course #300

PICK Basic Programming Series— Level I

This hands-on course teaches programmers and/or system administrators the skills needed to maintain existing BASIC programs or to create new ones. All of the fundamental statements and functions will be covered, and during the class, each member will write a file maintenance program. An introduction to the debugger is included as well. While programming experience is not required, it is very strongly recommended that an attendee complete course #200/210 before attending this class, as knowledge of file structure and ability to use the editor will be assumed by the instructor.

Tuition: \$995

Course #320

PICK Basic Programming Series—

This hands-on course goes beyond the topics covered in the Level I course (#300/310). Topics include: redirection of EXECUTE and SELECT statements, use of COMMON blocks, and exchanging data between PROCs and BASIC programs. The instructor will assume either completion of Level I or the ability to write programs of simple to average complexity.

Tuition: \$1,095

Course #400

Accelerated Pick O/S Workshop

This hands-on course combines the material from #200/210, #220, and #300/ 310, and presents this material in a fastpaced manner. It is intended for those who have little or no PICK background, but several years experience with other multiuser systems.

Tuition: \$1,495

Course # UX0

Introduction to ULT/ix

This one day class is specifically designed for those who will be attending the ULT/ix Administration class and have no PICK or UNIX experience. The PICK portion will be an introduction to concepts of virtual memory, PICK editor, RECALL, PROC, and concepts of PICK file dictionaries and the MD. The UNIX portion will cover the concepts of files and devices as files directory structure, paths and relative/ absolute pathnames, and introduction to the 'vi' editor.

Tuition: \$300

Course # UX2

ULT/ix Administration

This four day class is intended for those persons who are to administer ULT/ix systems. It is not intended to teach PICK basics, other courses are available to do that. Úpon completion of this course, you will understand basic UNIX fundamentals and ULT/ix installation, system concepts, files and command flow paths. Additionally the course covers device, account, user and spooler administration, plus PICK account importations.

PICK—is a registered trademark of Pick Systems

UNIX—is a registered trademark of AT&T ULT/ix—is a trademark of The Ultimate Corp. Phone: (800) 866-2668

HANDS ON LEARNING PICK DIVISION

Cours	e #/Name	Tuition	#Days	Roseland NJ	Irvine CA	
002	RECALL	\$300	1	4/12 6/28	7/26	
003	DICTIONARY/PROC	\$300	1	5/10		
006	ULTICALC	\$300	1	5/3		
UX0	INTRODUCTION TO ULT/ix	\$300	1	6/24	8/12	
200	PICK OPERATING SYSTEM FUNDAMENTALS SERIES I	\$995	4	5/13-5/16 8/5-8/8	5/6-5/9	
220	PICK OPERATING SYSTEM FUNDAMENTALS SERIES II	\$995	4	4/8-4/11 7/9-7/12	4/1-4/4 7/22-7/25	
230	PICK OPERATING SYSTEM FUNDAMENTALS SERIES III	\$750	3	4/15-4/17 5/20-5/22 7/16-7/18	8/5-8/7	
300	PICK BASIC PROGRAMMING SERIES I	\$995	4	4/22-4/25 6/3-6/6 8/12-8/15	5/13-5/16	
320	PICK BASIC PROGRAMMING SERIES II	\$1095	4	6/10-6/13	6/3-6/6	
400	ACCELERATED PICK OPERATING	\$1495	5	4/1-4/5 6/17-6/21		
UX2	ULT/ix ADMINISTRATION	\$1300	4	5/6-5/9 6/25-6/28	8/13-8/16	
UP1	ULTIMATE PLUS ADMINISTRATION	\$1300	4	7/9-7/12		

Hands-On-Learning Pick Division

Course Registration Form

Address: _				
City, State,	Zip:			
)	
ax Nullibe	r: ()	Course Lo	cation:	Tuition:
	ut Hands-On-Learning thr			ruition
		ne call 📮 Referr	ed by:	
→ Mail	Former S		•	
		REGISTRATION P	OLICY	
	Student's application to this course is with indicated in the course descriptions.	the understanding that course prere	quisites have been sat	tisfied. Course prerequisites are
	mulcated in the course descriptions.			
		CANCELLATION P	OLICY	
	A customer may cancel, without charge, probefore the start date of the class. Notification		ceived by Hands-On- l	Learning at least 14 calendar days
	Cancellation notices received less than 14	calendar days before the start of cla	ss will be subject to a	25% cancellation charge.
	Class "NO SHOWS" will forfeit the entire tu	ition fee.		
	Hands-On-Learning is NOT responsible	for reservation penalties incurred b	ecause of cancelled co	urses.
	Hands-On-Learning reserves the right to a credit in the amount paid to be applied to	cancel any class. In the event a cla any other class or Hands-On-Learn	ss is cancelled by Han iing will refund to cust	ds-On-Learning customer will receive comer the tuition paid.
have reac	I the above Cancellation Po	olicy and meet any pi	erequisites (i	f any) for this course.
				Signature of Student
Please mak	ke all checks payable to:	Hands-On-Learn	ng Pick Division	
		717 Ridgedale Av		
		East Hanover, NJ		
		(201) 887-9222 6	xi. 559	
		send registration fo able Post Office Bo		• •
		Internal Use Only	,	

ULTIMATE USER DOCUMENTATION ORDER FORM

					YOUR P.	O. #	ŧ	
BILL TO:		SH	IP TO:					
Na	nme:	_						
C	ompany:	_						
A	ldress:	_						
Ci	ty, State, Zip:	=						_
	TITLE	ORDER#	PRICE		QTY		TOTAL	
Sy	ystem Manuals							
Ul	timate System Manual Set*	6922	\$210.00	X		=		
	(includes the 8 manuals marked with *, 2 binders, and dividers)							
*	Beginner's Guide to Ultimate (updated)	6977	25.00	X		=		
*	Editor/Runoff Manual	6968	25.00	X		=		
	1400 Operations and Maintenance (updated)	6998	15.00	X		=		
	Bull Operations and Maintenance (updated)	6996	15.00	X		=		
	LSI Operations and Maintenance	6997	15.00	X		=		
	PC Operations and Maintenance	6999	15.00	X		=		
	9370 Operations and Maintenance	15075	15.00	X		=		
	Ultimate VAX/VMS Installation	6986	15.00	X		=		
*	and Operations	(0(7	25.00	37				
*	PROC Manual	6967	25.00	X		=		
*	Recall and Update User Guide	6971	40.00	X		=		
*	System Commands Guide	6985	30.00	X		=		
*	System Management and Support	6964	30.00	X		=		
-,-	System Overview Manual (updated)	6924	10.00	X		=		
	UltiKit Users Guide	6991	15.00	X		=		
Pı	ogramming Languages							
	Assembler Manual	6914	90.00	X		=		
*	BASIC Manual (updated)	6929	25.00	X		=		
U1	tilities							
	UltiCalc III Reference Guide	6950	20.00	X		=		
	UltiCalc III Training Guide	6951	20.00	X		=		
	UltiCalc III Set of Both Guides (includes binder)	6954	40.00	X		=		
	UltiMation User's Guide	6993	15.00	X		=		
	UltiPlot Reference Guide	6980	25.00	X		=		
	UltiPlot Training Guide	6979	25.00	X		=		
	UltiPlot Set of Both Guides	6981	50.00	X		=		
	(includes binder)		2 0					

Aumorized Signature		1 IUC			L	
Shipping Method: UPS Regular Federal E Authorized Signature	_	_			г	Date
Chinging Method, UDC Dogular Endard F			(tax a	TOTAL and shipping	\$ charges	will be added)
Guide to New Features	Kev Level	IN/C	Λ			
Guide to New Features	Rev Level		X		_	
	Rev Level Rev Level	N/C N/C	$X \\ X$		=	
Release Documentation and Upgrade I	nformatio	on National	7.7			
9370 Site Planning Guide Site Preparation Guide (updated)	15971 15107	N/C N/C	X X		=	
Site Planning	15071	N/C	V			
UltiNet User's Guide (Bridge version) UltiNet User's Guide (Micom version)	6994 6995	15.00 15.00	$X \\ X$		=	
Communication UltiLink User's Guide	6992	15.00	X		=	
UltiWriter Key Caps	UWKC	5.00	X		=	
		8.00	X		=	
UltiWriter Wyse 50 Keyboard Template UltiWriter ADDS 2020 Keyboard Template	UW1	8.00	X		=	
UltiWriter Quick Reference Guide UltiWriter Programmer's Reference Guide	15123 15124	15.00 20.00	$X \\ X$		=	
UltiWriter System Administrator's Guide	15121	30.00	X		=	
UltiWriter Training Guide UltiWriter User's Guide	15122 15120	25.00 30.00	${f X} {f X}$		=	
UltiWord Set of Both Guides (includes binder)	6956	50.00	X		=	
UltiWord Reference Guide	6905	25.00	X X X		=	
7600 BPI Data Cartridge UltiWord Training Guide	6959 6948	78.00 25.00	X		=	
1600 BPI Magnetic Tape	6947	78.00	X		=	
800 BPI Magnetic Tape 1400 BPI Data Cartridge	6909 6990	78.00 78.00	${f X} {f X}$		=	
UltiWord 48,000 Word Dictionary:	(000	79.00	v		_	

Fold and tape. Please do not staple.



NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS

PERMIT NO. 23

EAST HANOVER, NJ

POSTAGE WILL BE PAID BY ADDRESSEE

The Ultimate Corp. 717 Ridgedale Ave. East Hanover, New Jersey 07936



ID	
Number	
	(Leave blank /For Ultimate use)

Problem Identification Form

Name	Phone Nu	mber	System Number	Date
	[()			
At TCL, execute REV verb and ent	ter the	Hardware	Platform: (manufa	cturer, model no.)
following information:				
Firmware rev.		TT + 0/G	1	
Kernel rev.		Host O/S a	and revision	
Async rev.				
Abs rev.		Deeles No		
Diags rev.		Dealer Na	me	
ECOs				
At TCL, execute WHAT (LSWP) v	zerh and atte	ach listing t	o this report	
Description of what happened and steps				available).
Bescription of what happened and steps	o necessary u	o recreate (att	acii iistiiigs, aepes, ii	avanaoie).

FROM:		
Name:	System Number:	
Company:		
Address:		
City:	StateZip:	
	Fold and tape. Please do not staple.	
		NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES
	BUSINESS REPLY MAIL FIRST CLASS PERMIT NO. 23 EAST HANOVER, NJ POSTAGE WILL BE PAID BY ADDRESSEE	
	The Ultimate Corp. 717 Ridgedale Ave. East Hanover, New Jersey 07936	
	Fold and tape. Please do not staple.	



ID		
Number		
	(Leave blank /For Ultimate use)	

ULTIMATE OPERATING SYSTEM UPGRADE MEDIA REQUEST FORM

Name	Phone Nu	mber	System Number	Date
	()	Г		
Company Name		Hardware	Platform: (manufa	cturer, model no.)
Dealer Name		Host O/S	revision number, d	ocumentation and
		media typ	e required:	
Type of delivery requested: (check of Standard U.S. Mail	one)		4 4	
☐ Standard U.S. Mail	Į.	Fed Ex	leral Express x Account Number	
Comments:				

FROM:		
Name:	System Number:	
Company:		
Address:		
City:	StateZ	ip:
	Fold and tape. Please do not staple.	NO POSTAGE NECESSARY
	BUSINESS REPLY MAIL FIRST CLASS PERMIT NO. 23 EAST HANOVER, NJ POSTAGE WILL BE PAID BY ADDRESSEE	IF MAILED IN THE UNITED STATE
	The Ultimate Corp. 717 Ridgedale Ave. East Hanover, New Jersey 07936	

Fold and tape. Please do not staple.



ID		
Number		
	(Leave blank /For Ultimate use)	

Suggestion Form

Ultimate welcomes your suggestions. If you have a suggestion or would like to recommend an enhancement, please complete this form. Please attach additional sheets, if necessary.

Name	Phone Nu	mber	System Number	Date
Company Name		Hardware Platform: (manufacturer, model no.)		
Dealer Name		Host O/S and revision		
Suggestion:				

FROM:						
Name:	System Number:					
Company:						
Address:						
City:		State	Zip:			
	Fold and	l tape. Please do not staple.		NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATE		
	FIRST CLASS	ESS REPLY MAI PERMIT NO. 23 EAST HAN GE WILL BE PAID BY ADDRESSEE	L IOVER, NJ			
	717 R	JItimate Corp. idgedale Ave. er, New Jersey 07936				
	77.11	land Discussion of stands				

Fold and tape. Please do not staple.

NOTES



THE ULTIMATE CORP.

717 Ridgedale Avenue East Hanover, NJ 07936 201-887-9222

ULTIMATE CANADA

40 Bathurst Drive Waterloo, Ontario, Canada N2V 1V6 519-885-4546

ULTIMATE COMPUTER LTD.

54-68 Kavanagh Street So. Melbourne, Victoria Australia 3205

ULTIMATE U.K.

7 Awberry Court The Croxley Centre Watford, WD1 8YJ England

ULTIMATE FRANCE

30 Avenue de l'Europe 78140 Vélizy-Villacoublay France

ULTIMATE COMPUTER (N.Z.) LTD.

44 Khyber Pass Road Auckland, New Zealand