KHOROS 1.0 (Patch Level 5) RELEASE ANNOUNCEMENT

INTRODUCTION

Khoros is an integrated software development environment for information processing and visualization, based on X11R4. Khoros components include a visual programming language, code generators for extending the visual language and adding new application packages to the system, an interactive user interface editor, an interactive image display package, an extensive library of image processing, numerical analysis and signal processing routines, and 2D/3D plotting packages.

X Windows Applications

Animate - Interactive Image Sequence Display Tool
Cantata - Extensible Visual Programming Language
Concert - A system for distributed X user interfaces (group ware)
Editimage - Interactive Image Display & Manipulation Program
Xprism2 and Xprism3 - Comprehensive 2D and 3D Plotting Packages
Viewimage - A basic interactive program for surface rendering
Warpimage - An interactive program for registering and warping images

Data Processing Algorithms

Khoros contains over 260 programs, in the following categories: arithmetic, classification, color conversion, data conversion, file format conversion, feature extraction, frequency filtering, matrix algebra (LINPACK and EISPACK), spatial filtering, morphology filtering, geometric manipulation, histogram manipulation, statistics, signal generation, linear operations, segmentation, spectral estimation, sub-region, and transforms. Khoros supports the following file formats: TIFF, pbm, BIG, DEM, DLG, ELAS, FITS, MATLAB, Sun raster, TGA, and xbm.

User Interface Tools

Preview - Graphical User Interface Display Tool
Composer - Interactive Graphical User Interface Editor
Conductor - Code Generation Tool for a Graphical User Interface
Ghostwriter - Code Generation Tool for a Command Line User Interface
Source Configuration & Management - Tools to install and maintain a distributed source tree.

KHOROS DISTRIBUTION METHODS

1) Anonymous FTP

Khoros is available via anonymous ftp from pprg.eece.unm.edu (129.24.24.10). Use your e-mail address as the password (for example, ralph@whizbang.wmu.edu). Once you have logged in, cd to the "pub/khoros/release" directory and get the ascii file install.ftp. This file will give you complete instructions on how to get Khoros and install it on your system. To get this file, execute the following commands or steps:

a. Use **ftp** to connect to pprg.eece.unm.edu.
```
% ftp pprg.eece.unm.edu
```
-or-
```
% ftp 129.24.24.10
```

b. Use "anonymous" or "ftp" as the user name.
```
Name (pprg.eece.unm.edu:login): anonymous
```
-or-
```
Name (pprg.eece.unm.edu:): ftp
```

c. Use your e-mail address as the password; please carefully use a valid e-mail address, as this version site logs all anonymous ftp's.
```
Password (pprg.eece.unm.edu:user): {your valid e-mail address}
```

```
331 Anonymous login ok, use your E-MAIL address as the pass-
word.
230 Guest login ok, access restrictions apply.
```

d. Get the release notes for acquiring Khoros via anonymous ftp (note that "install.ftp" is the plain text file - both ".ms" and ".ps" files are available for those who would like them).

```
ftp> cd /pub/khoros/release
ftp> get install.ftp
```

2) Tape and Printed Documentation

If you would like to order a tape and printed documentation, fill out the order form below (last page). The cost is, $250.00 (US and Canada) and $350.00 (International). Please include a check or purchase order payable to UNM EECE Dept., in U.S. funds. If you need additional information or confirmation of your order, call the Khoros Group at 505-277-0806 and leave a message.

All communication to the Khoros group should be via e-mail. If you have questions, comments or problems of a general nature, then either mail the Khoros mailing list (khoros@chama.eece.unm.edu), or post to the Khoros USENET news group (comp.soft-sys.khoros). To subscribe to the mailing list, mail to khoros-request@chama.eece.unm.edu. Once you have the system and want to report bugs, mail to khoros-bugs@chama.eece.unm.edu.

KHOROS REQUIREMENTS AND LIMITATIONS

To run Khoros, you must have a UNIX platform running the X11R3, X11R4, X11R5, or OpenWindows servers. The Khoros system consists of ˜450,000 lines of C code; you will need a maximum of 120 Megabytes of storage for source, documentation and binaries. To compile Khoros, the system requires X11R4 (patch levels 1-18) or X11R5 (patch levels 1-9) client software from MIT and an additional 50 Megabytes of storage.

Khoros 1.0, patch level 5 Compiles On These Machines (MIT X unless otherwise noted)		
Vendor	Name	Configuration
Apollo	DN10000	OS 10.3, Fortran 10.8, cc 6.8
CRAY	XMP, YMP, Cray 2	UNICOS 6.1
DEC	5000/3100	Ultrix 4.2, mips cc 2.0, DEC f77 V3.0-2
DEC	Vax 3600	Ultrix 4.1, cc1.37.1
HP	HP9000/*	HP-UX 7.05/8.05
IBM	RS/6000	AIX v3.1
OMRON	Luna88k	Mach 2.5, gcc 1.37, f77 1.8.5
NeXT	68030,40	MACH 2.0, gcc 1.37, Absoft f77 2.0, Pensoft X
SGI	All	OS 3.3.2, OS 4.0, X11 1.2, f77 3.3
SUN	SPARCstations, SUN4/*	SUN OS 4.1.1/4.1.2, f77 1.4.5
SUN	SUN3/*	SUN OS 4.1.1, f77 1.3.1, gcc 1.39/2.0

The Khoros user community has ported Khoros to various other platforms such as the Convex, the Sequent, Data General Aviion, MacII, and 386/486 machines. At this time, these platforms are not directly supported by the Khoros Group.

KHOROS CONSORTIUM

If your organization is interested in distributing the Khoros software system, and/or supporting further research and development of software environments for data processing and visualization please contact Tom Sauer at the address below or e-mail consort@chama.eece.unm.edu.

Tom Sauer, Khoros Consortium
Department of EECE, Room 110, University of New Mexico
Albuquerque, NM 87131

KHOROS
Room 110
Department of EECE
University of New Mexico
Albuquerque, NM 87131

SHIP TO:

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PHONE NUMBER:

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E-MAIL ADDRESS:

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PURCHASE ORDER NUMBER:

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CREDIT CARD ORDERS - Please include the type of credit card, your credit card number, and its expiration date. In order to process your order, we need to have your full name (as it appears on the card) and also a number where we can reach you during the day.

NAME (as it appears on credit card):

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CREDIT CARD NUMBER:

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EXPIRATION DATE and CARD TYPE:

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Media: (Please circle one of the following types of media)

1) DC600A cartridge tape (Low Density/Sun3)
2) DC6250 cartridge tape (High Density/Sun4)
3) 9-track tape (1/2 inch, 1600bpi)
4) 9-track tape (1/2 inch, 6250bpi)
5) DAT 4mm tape

Binaries: (If you would like a compiled version of Khoros, please circle one of the following machine architectures)

1) DEC MIPS (Ultrix 4.2)
2) SUN3 (SunOS 4.1.1)
3) SUN4, SPARCstation (SunOS 4.1.1b)
4) SGI (OS 4.0)