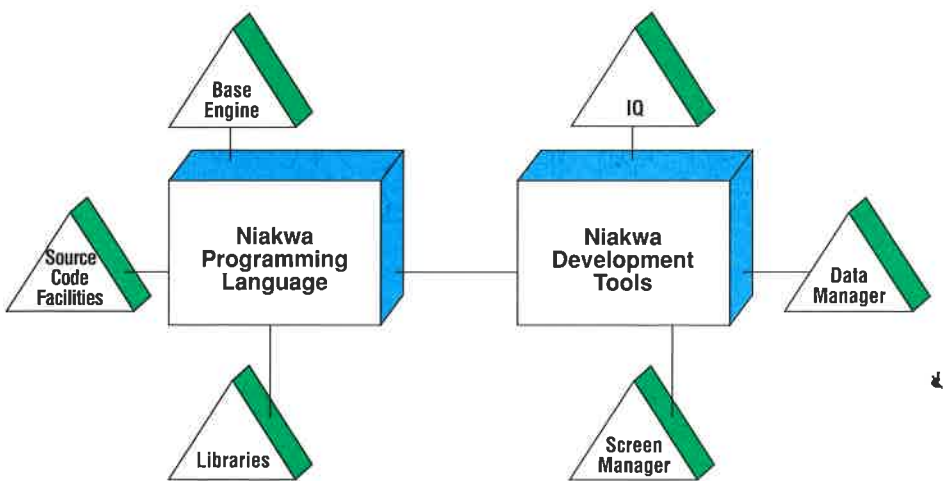


Niakwa Development Environment

Introduction

In today's fast-paced software business, developers are searching for a development environment that will help maintain and enhance the competitiveness of their applications. To maintain a competitive edge, developers must provide portable, high quality applications that are both easy to learn and maintain.



The Niakwa Development Environment, designed especially for the professional application developer, delivers all of this and more as one of the world's most portable and reliable programming languages.

Supporting most major operating environments (a complete list is located on the back page), the Niakwa Development Environment provides developers a wide variety of markets in which to promote their applications.

The Niakwa Programming Language (NPL) and Development Tools incorporate many advanced features which greatly reduce the time needed for program development and maintenance, thereby, increasing productivity and profitability.

The Niakwa Development Environment has proven to be very successful in the development of thousands of powerful software applications for both the commercial and scientific fields and a variety of vertical markets, including:

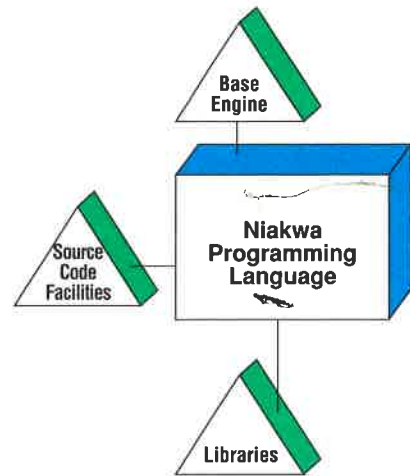
- Accounting
- Advertising
- Agriculture
- Automotive
- Broadcasting
- CAD/cam
- Construction
- Dental
- Distribution
- Education
- Engineering
- Entertainment
- Financial
- Healthcare
- Hospitality
- Insurance
- Legal
- Manufacturing
- Printing
- Property Mgt.
- Retail
- Trucking

Niakwa has incorporated powerful fourth-generation capabilities into a third-generation language to provide 100% true portability and flexibility. The result is a highly robust development environment including:

- Niakwa Programming Language
 - Base Engine
 - Source Code Facilities
 - Library Support
- Niakwa Development Tools
 - Screen Manager
 - Data Manager
 - Report Manager

The following product summaries provide an orientation to the structure of the Niakwa Development Environment.





NPL is a robust, high-level programming language which operates on hundreds of the computer industry's most popular computers, under most major operating environments.

NPL provides full object and source code compatibility across all Niakwa-supported platforms. In addition to providing absolute portability, this protects NPL users from reliance on a single technology.

By incorporating many operating system-like specifications into its language definition, NPL significantly increases programmer productivity and, thus, profitability.

In addition, NPL allows for localized development which has led to great success in the international marketplace. Because NPL allows for keyboard, screen, and printer remapping, programming using foreign character sets can easily be arranged. Remapping may be accomplished with language-level statements or NPL user-friendly utilities (provided in the NPL Development Package).

In addition, NPL provides excellent advanced math functions which have led to the development of numerous, powerful scientific applications.

NPL consists of a Base Engine, Source Code Facilities, and full third-party Library Support.

Base Engine

NPL's Base Engine provides numerous features which allow for quick and easy program generation:

- Superior Performance
- Interactive Environment
- Absolute Portability
- Easy to Learn and Maintain
- Fast Coding
- Multi-User
- Program Encryption
- Documentation
- Localized Application Development
- Demo Diskette Feature
- Fast Prototyping
- Error Control
- HELP Subsystem
- Character Sets
- Advanced Math Functions
- Device Independence
- Data Conversion
- Dynamic Strings
- I/O Devices
- FUNCTIONS/PROCEDURES
- Modules
- Program Constructs
- RECORDS/FIELDS
- Diskimage Technology

Source Code Facilities

NPL's Source Code Facilities allow for easy program maintenance by providing an integrated editor/debugger, incremental compiler, and comprehensive set of utilities.

Editor/Debugger

The combined use of NPL's interpreter and line editor enables developers to edit programs quickly and efficiently. In addition, a series of powerful debugging commands, including: LIST, TRACE, PRINT, and RETURN commands makes NPL one of the easiest languages in the business to use for debugging.

Incremental Compiler

The Incremental Compiler allows for interactive program development and debugging. As a result, source code is fully compatible from one platform to the next.

Utilities

The NPL Development Package contains a set of convenient utilities (i.e., file backup, recovery, copy, diskimage creation, listing, scratching, device settings, options, etc.) designed to aid NPL developers.

Library Support

NPL's modular technology enables developers to create and employ true application-independent library programs. Using these libraries, developers can easily integrate added functionality without devoting time to writing new routines.

NPL Developers enjoy access to and compatibility with libraries written by Niakwa and other third-party developers (NPL is compatible with DLLs and C libraries).

Libraries, in turn, provide NPL Developers access to a host of Niakwa and third-party products. This greatly extends the developers' ability to incorporate advanced technology into their applications.

Niakwa publishes library availability in the Niakwa Library Catalog (published periodically) and on the Niakwa Bulletin Board System (BBS).

To complement the language and complete the Development Environment, Niakwa has added a host of powerful Development Tools. These tools add fourth-generation language capabilities to NPL and, thus, significantly increase the robustness of the Development Environment. The Niakwa Development Tools product line consists of Intelligent Query (IQ) for structured queries and report generation; the Niakwa Data Manager (NDM) for data management; and the NPL Gateway to MS-Windows API for screen management.

Intelligent Query

Used in conjunction with NDM, IQ, by IQ Software, offers simple, English-like access to NPL data files - without the time and expense of special programming. IQ enables end users to present NPL application data in four ways:

- Preformatted reports, queries, and labels
- Custom reports, queries, and labels
- XY-graphs or histograms for visual interpretation
- Data export capabilities to other programs (i.e., Lotus 1-2-3 and dBase)

IQ also enables end users to merge NPL application data with other file types; such as, standard ASCII, Lotus 1-2-3, or dBase files. In short, IQ enhances NPL applications by giving end users new and more effective ways of retrieving, viewing, and analyzing information.

Niakwa Data Manager

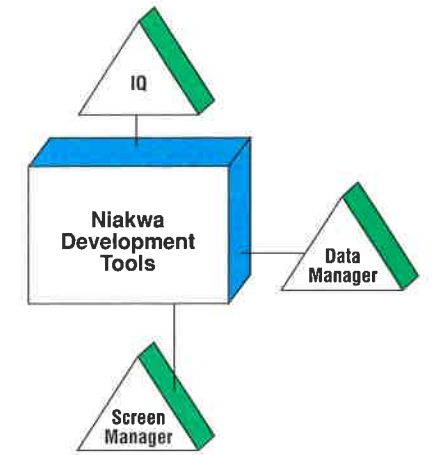
NDM is an application program interface (API) developed by Niakwa to provide a consistent, fully portable interface to commonly used ISAM products; such as, Informix's C-ISAM, Btrieve Technologies' Btrieve, and IBM's OS/400.

By providing data independence (files stored in a non-proprietary format), NPL applications can share files with and be enhanced by popular third-party products; such as, Informix, IQ, SQL, Xtrieve, etc.

NDM supports extended platform specific features and native field types which provide even greater programming power.

In addition, NDM provides Data Dictionary support which allows for the efficient cataloging and tracking of data files, formats, and file indices.

Most importantly, NDM improves performance and productivity by enabling developers to off-load ISAM maintenance and development to the Data Manager.



Niakwa Screen Manager

The Niakwa Screen Manager consists of the NPL Gateway to MS-Windows API. This product provides a variety of convenient screen management features, including: pull down menus, push buttons, dialog boxes, etc.

The Windows Gateway allows NPL applications to **fully** utilize all capabilities present under the MS-Windows API. In addition, NPL's implementation is nearly 100% compatible with the native C API.

Niakwa...The Company

Niakwa

Privately owned, Niakwa is headquartered in the Chicagoland area with its research and development laboratory in Winnipeg, Canada.

Since the early 1980s, Niakwa has provided high quality, high performance, highly portable development software and services to application developers worldwide.

Niakwa's distribution network covers the globe, with 55% of all revenue coming from the domestic market and 45% from the international market. International sales are handled by Niakwa's Master Distributors located in:

Australia	New Zealand
Belgium	Singapore
France	Sweden
Germany	United Kingdom
The Netherlands	

Niakwa is renowned for delivering superior quality products - NPL developers often say that 'NPL beta versions are considerably cleaner than most other companies' final versions.'

Product Line

The Niakwa product line consists of NPL, the Development Tools, imaging systems, and systems integration services.

- **NPL**
- **Development Tools**
- **Imaging Systems**
As a Value Added Reseller (VAR), Niakwa sells and supports imaging solutions.
- **Systems Integration**
Through the Systems Integration Department, Niakwa provides a host of services that ensure each project is a success. These services, include: training, installation, contract programming, scripting, and on-going support.

Technical Support

Niakwa provides one of the most prompt and comprehensive support systems in the industry today. In 1993, 99% of all support calls were responded to within one hour, with an average resolution time of 15 minutes or less.

Customer Base

Niakwa's software products are distributed through a worldwide network of over 500 resellers who represent more than 130,000 users. Most of Niakwa's resellers service their own vertical markets. Niakwa resellers have written thousands of business, engineering, and scientific applications utilized by end users worldwide, as well as horizontal applications; such as, spread sheets, database systems, word processors, and even fourth-generation languages. In addition, Niakwa has contracted directly with some of the world's largest organizations in insurance, manufacturing, banking, etc.



Niakwa Supported and Accessible

Operating Environments

AIX	Novell NetWare
Intel UNIX	OS/400
MS-DOS	SuperDOS
MS-Windows	VMS
NetBIOS	Xenix

ISAMs

Btrieve Technologies' Btrieve
Informix's C-ISAM
IBM's OS/400

Operating Environments

ASSEMBLER (limited)
C
PASCAL (limited)
DLLs from MS-Windows