

# Solutions for Unisys Users Worldwide

## Diversity is the Key

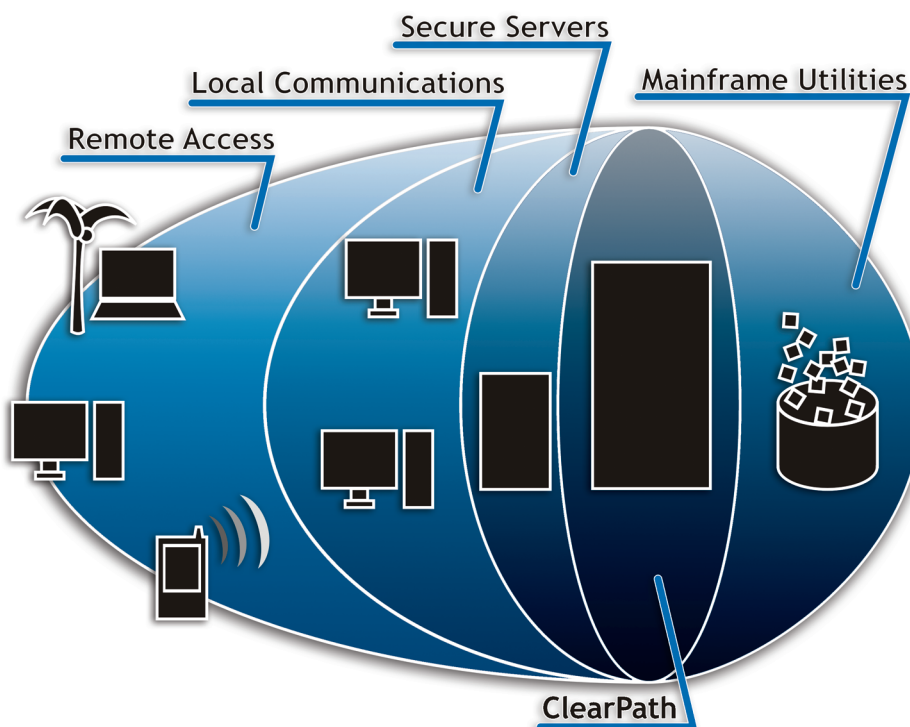
With over 23 years of experience, KMSYS Worldwide, Inc. continues to bring the best connectivity and productivity solutions to the Unisys marketplace.

We started with the most effective ClearPath OS2200 utilities for timesaving database reorganizations and data transfer, and expanded into state-of-the-art client-to-host communications.

Sites can choose to create custom applications that communicate with the host, or utilize several legacy options. Whether at the office, or sitting on a beach, a ClearPath can always be in reach with our remote access solutions.

Installed in front of your mainframe, our Host Gateway Server will provide the security you need to protect critical and confidential data.

KMSYS Worldwide truly provides a flexible solution set to accommodate your every need.





## OVERVIEW

KMSYS Worldwide, Inc. has developed the most flexible and powerful line of terminal emulation solutions for the ClearPath OS 2200 and MCP mainframes. The eXpress family of products range from basic, yet robust, terminal standalone emulation to shared connectivity through a file or web server. An option is even available to combine customized Windows applications development with emulation. No matter what the situation, there is an eXpress that is right for the job.

## PRODUCT LINE

**eXpress Plus** – eXpress Plus provides full-featured standalone connectivity for information technology professionals and end users alike.

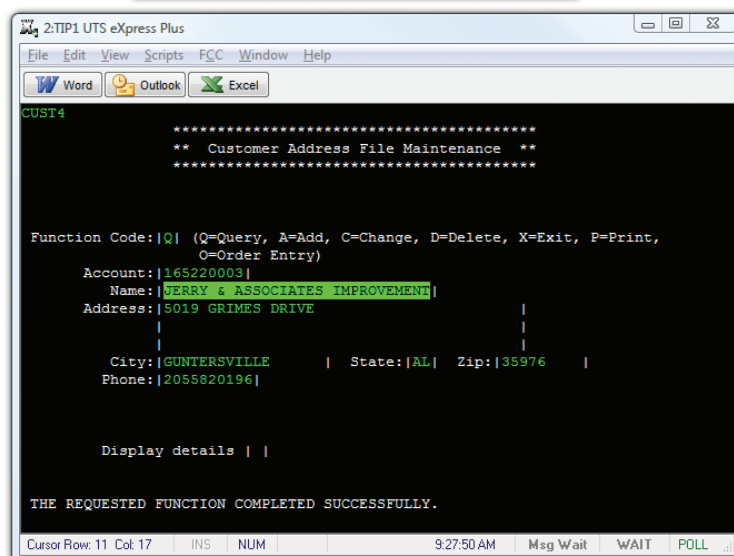
**eXpress Net** – eXpress Net is best suited for those companies where centralized convenience is key. Administrators can maintain configurations globally for groups of users or for each user individually. Users can be configured to have full or limited permission to change their settings. Our Application Deployment System drastically simplifies the installation and implementation process. Furthermore, since installation is on a web server, enhancements are available immediately to all users.

**eXpress Pro** – eXpress Pro was specifically designed for programmers, technicians and developers who need, in addition to emulation, the ability to develop Windows applications that access mainframe data. eXpress Pro includes controls allowing applications developed with products like Visual Basic™ or Delphi® to interface with the host.

**eXpress IT** – We realize that sometimes "more" can be "too much" and you don't want to pay for extra features you will never use ... when simple terminal emulation is all you need. We have taken the tried and true engine of eXpress Plus, plucked it down to the essentials, and dropped the price to rock bottom. You will be surprised with how much power a few bucks can buy.

## KEY BENEFITS

**Integrate your Desktop** – eXpress easily interacts with other applications that you may already use, tools like Microsoft Outlook, Word and Excel<sup>1</sup>. Leverage your existing investments by allowing eXpress products to help increase productivity in today's environments.



*Manage free-floating screens and access important features with the Control Panel. eXpress provides the user with a customizable interface that allows for a more productive experience.*

**Increased Productivity** – Using features such as Input Recall can save the time it takes to type repetitive commands. The included Scripting Engine<sup>2</sup> can be launched by the click of a toolbar button or hot key to perform tedious or repetitive functions and save user time with each use.

**Enhanced Visibility and Functionality** – eXpress can run up to 24 simultaneous terminal screens<sup>3</sup> that are independently configurable. The screens in eXpress are free floating windows allowing you to arrange them about your desktop to suite your needs without having them all contained within a parent window. Each screen may be customized to a particular environment, providing the user maximum familiarity. Whether the environment is BIS, MARC, DPS, or other, each screen can have its own look and functionality with personalized keyboards, toolbars, script menus and appearance.

**Security Where it Counts** – eXpress, when partnered with Host Gateway Server, will provide users the SSL encrypted and authenticated connections that are required at most sites. Built on the Microsoft .NET Framework, HGS is compliant with Federal Information Processing Standards (FIPS 140) and is a serious consideration when data security is of utmost importance.

<sup>1</sup> Trademarks of Microsoft. <sup>2</sup> Functionality may vary between products.

<sup>3</sup> eXpress IT is limited to 2 screens.

## TECHNICAL FEATURES

### New in Version 4.2

- IPv6 DNS Resolution
- FIPS 140-compliant cryptographic security modules (requires HGS)
- FDCC standards
- Unisys single-point sign
- Microsoft .NET Framework
- Quick and easy web deployment

### General

Provides control panel for session initiation and configuration.

- Float, dock or auto-hide panel for convenience
- Easily identify session information

### Standard Terminal Emulation Features

Emulates entire UTS and T27 family of terminals.

- Change standard T27 Video, Datacomm and Keyboard options
- Alter UTS initial transmit types
- Utilize all UTS 20/30/40/60 types and graphics
- Edit standard UTS control page

### Extended Terminal Emulation Features

Supports up to 24 simultaneous terminal screens.

- Configure international screen character translation
- Replay previously entered text and commands
- Print, save or e-mail screens
- Allow BIS "look and feel"
- Transport screen data between Windows applications

### Printing Capabilities

Fully supports UTS and T27 pass-through printing.

- Configure multiple printers per UTS screen
- Select direct, Windows bypass or print-to-file printing
- Select optional pass-through print character translation
- Utilize user-developed Local Printer Objects

### Connections

Provides intuitive configuration manager.

- Easily make initial host connection
- Visually manage multiple connections for multiple hosts
- Supports both IPv6 and IPv4 DNS resolution

### Scripting

Includes a VB-like scripting language to enhance screen activity.

- Record frequent actions with built-in script recorder and editor
- Assign scripts to menus, keystrokes and buttons for playback
- Easily create dialog forms to be used with scripts
- Content Sensitive Scripting allows user-friendly implementation of frequently performed tasks

### Screen Customization

Allows full control over all aspects of screen activity.

- Assign colors by field attributes
- Select screen fonts and scaling from installed Windows fonts
- Design script menus, keyboards and toolbars by application
- Assign initial open and mouse click action scripts and pop-ups

### Keyboard Customization

Includes an easy-to-use visual keyboard for configuration.

- Map keys and key combinations to terminal functions and scripts
- Switch keystrokes for standard terminal actions
- Add alternate keystrokes

### Custom Toolbars

Includes a custom toolbar designer.

- Assign custom toolbars to individual screens
- Dynamically select toolbars by script
- Position toolbars at top or bottom of screen
- Create a toolbar button to initiate scripts or terminal functions
- Edit button caption, bitmap button face and popup tool tip

### Security

Provides transaction and configuration security.

- SSL Encryption is available through Host Gateway Server connections and is FIPS 140-2 certified
- Lock configuration settings by user or groups of users
- Configure 2200 single point sign-on feature

### Charting Capabilities with eXpress Chart

Enhances visual presentations with graphics.

- Presenter acts as a OLE server
- Control from any Windows application or manually execute and utilize as a standalone application
- Obtain data from a host application via scripts

## SUMMARY OF BENEFITS

- Improve productivity through efficient configurations
- Reduce time spent working by scripting repetitive tasks
- Tailor screens to host applications
- Assign customized menus, toolbars and keyboards to screens
- Quickly recall previously entered strings
- Gain data confidence through SSL encryption

## SYSTEM REQUIREMENTS

Any Unisys ClearPath Dorado or other Unisys OS 2200 system is accessible by UTS eXpress. Any ClearPath Unisys Libra or other Unisys MCP system is accessible by T27 eXpress. eXpress requires any currently supported release of the Windows® operating system. Microsoft .NET Framework 2.0 or higher



# eQuate

Windows Application Development Tool  
Interacting with ClearPath MCP and OS 2200 Applications

## OVERVIEW

eQuate enhances mainframe applications by introducing Windows® and Web functionality without the necessity of changing host programs. With eQuate, host screens are associated with eQuate forms that are presented to the user. eQuate forms may house all the features and advantages to which Windows users have become accustomed, including action buttons, selection lists, graphics, and more.

## PRODUCT LINE

**eQuate** – A completely self-contained development system, eQuate requires no other software to develop a total Windows application that interacts with existing or new host transactions. eQuate contains all the tools that are needed for easy implementation.

**eQuate Web** – The same eQuate applications developed for Windows may also be executed from a web browser with eQuate Web. This implementation of eQuate makes legacy data available from anywhere as long as the user has access to the Internet/Intranet and a Web browser.

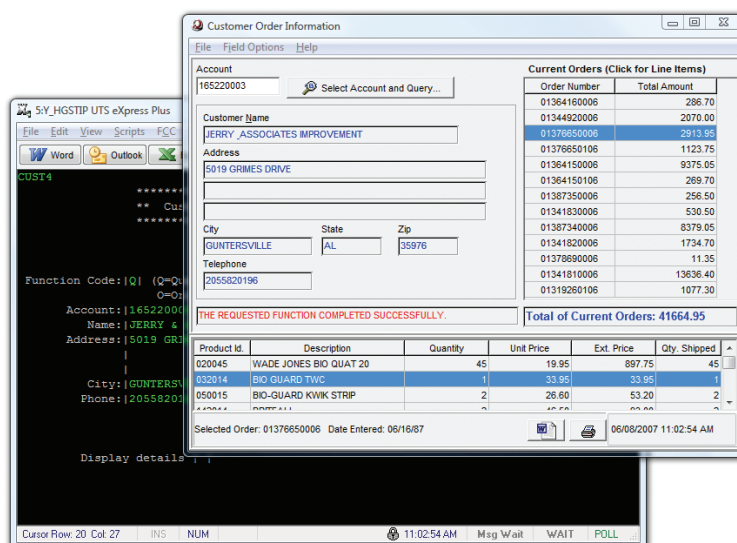
## KEY BENEFITS

**Decreased Training Time and Expense** – A growing concern today is the harsh fact that less and less people are familiar with the mainframe interface. With applications developed in eQuate, that issue no longer exists. Users will be able to instantly recognize eQuate applications as Windows applications and valuable resources will not have to be spent on training.

**Reduced Host Resources** – In the pay-per-use era, administrators are always looking to decrease host access without cutting productivity. With eQuate, host access can be decreased and productivity increased without sacrificing data integrity. Let the eQuate application preprocess the data on the PC prior to submission to the host. Preprocessing will help correct errors, save system usage and save your organizations valuable resources.

**Intuitive Interface** – Users who are comfortable with Windows-style processing will find an “old friend” when using eQuate applications. With familiar keystrokes and commands, or customized GUI interfaces, eQuate makes a great choice when users need to interact with host data at kiosks, service terminals, or even touch screen interfaces.

**All Tools are Included** – eQuate comes with its own development package allowing developers to begin creating applications right off the mark. The eQuate application interface is similar to other popular development tools, so the learning curve is a short one.



*eQuate transforms Unisys terminal screens into fully functioning Windows programs that can be launched from a PC or via a web page.*

**Development is a Snap** – From a quick screen scraping capture utility to a sophisticated forms designer, eQuate allows fast transformation of host legacy applications to Windows. Other tools are provided to maintain eQuate applications and the registration of users that may access them.

**Access from Virtually Anywhere** – Not only can someone run an eQuate application locally, but that same application can be run from any remote corner of the world. All that is needed is access to the Internet and the eQuate Web component that allows the application to be launched via a web browser.

**Easy to Run** - Once an eQuate application has been developed, a user simply clicks the desktop icon to launch the eQuate Session Manager and picks which application to run. Alternatively, if being run via the web, the user browses to the appropriate web page from where application is launched.

**Optional Thin Client** – Multiple user installation options are available to meet the requirements of any site. One option provides for users to run the eQuate Session Manager from a remote file server or web page. Coupled with the fact that applications are stored on a server, this option provides a truly thin client opportunity.

**Security Where it Counts** – eQuate, when partnered with Host Gateway Server, will provide users the SSL encrypted and authenticated connections that are required at most sites. Built on the Microsoft .NET Framework, HGS is compliant with Federal Information Processing Standards (FIPS 140) and is a serious consideration when data security is of utmost importance.

# Q eQuate (Continued)

## TECHNICAL FEATURES

### New in Version 4.2

- IPv6 DNS Resolution
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- FDCC standards
- Unisys single-point sign
- Microsoft .NET Framework
- Quick and easy web deployment

### Installation and Distribution

Provides the means to manage installation and publication, easily.

- Install eQuate components locally or on a server
- Requires little or no end-user installation
- Thin client capable
- Easily publish developed eQuate applications to a server
- Users gain transparent updates to applications and software
- Run eQuate applications from a file server or Web page
- Access eQuate applications from anywhere in the world

### Form Design

Includes an easy-to-use development environment.

- Quickly design forms with visual canvas and control palette
- Drag and drop Windows controls onto form
- Point and click control property editor
- Add actions scripts to controls (executed upon access)
- Create scripts for host messages and errors
- Design menus and assign action keys to forms
- Assign online help to forms or individual controls

### Screen Capture

Provides a quick method to capture legacy host screens into the eQuate form design process.

- Capture screens from Unisys 2200 or MCP applications
- Identify repeating fields
- Add or delete fields from captured images
- Generate form definitions

### Application Management

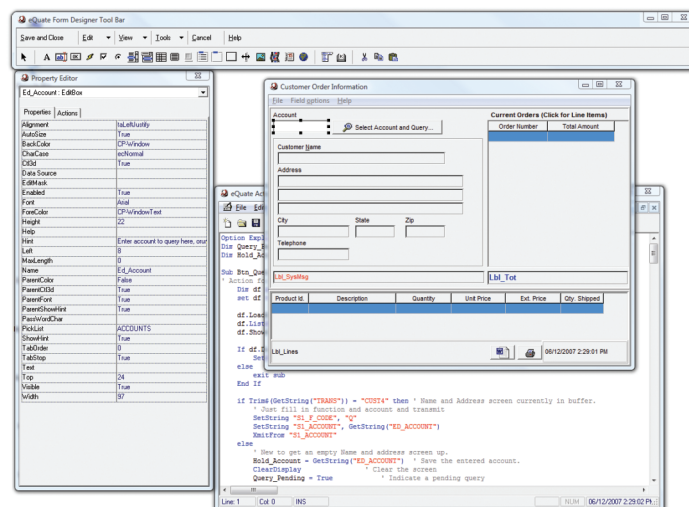
Includes a program to manage the eQuate applications and the forms that are included in each application.

- Link host screens to eQuate designed forms
- Initiate eQuate Form Designer
- Import form definitions from capture or previously stored source
- Add and maintain eQuate applications

### Security

Provides transaction and configuration security.

- SSL Encryption is available through Host Gateway Server connections and is FIPS 140-2 certified
- Configure 2200 single point sign-on feature



*The development environment is feature rich and is an environment that will be familiar to most developers. Equipped with everything a developer would want, eQuate applications can be ready for use, quickly.*

### Administration and User Registration

Allow an administrator to package runtime files and determine user access.

- Register and administer users
- Assign network user station names
- Assign sign-on scripts
- Maintain eQuate databases
- Publish runtime files to a shared server
- Package runtime distribution files

## SUMMARY OF BENEFITS

- Quickly transform legacy applications to graphical forms
- Easily learn to design forms
- Access eQuate applications from anywhere in the world
- Zero maintenance for end users
- Gain data confidence through SSL encryption
- Reduce host dependence for processing

## SYSTEM REQUIREMENTS

Any Unisys ClearPath Dorado (or other Unisys OS 2200 system) or Libra (or other Unisys MCP system) is accessible by eQuate. eQuate requires any currently supported release of the Windows operating system. eQuate Web recommends any supported level of Microsoft Internet Explorer. Microsoft .NET Framework 2.0 or higher





# Host Gateway Server

Secure Data Transmission to Unisys Mainframes

## OVERVIEW

Many organizations are beginning to realize the need for secure communications to and from legacy mainframes, but they have learned that the legacy mainframe does not provide a secure communication channel. Host Gateway Server (HGS) is the solution for secure connectivity to Unisys ClearPath OS 2200 and MCP servers. Fully compliant with Federal Information Processing Standard (FIPS) 140, Host Gateway Server (HGS) offers a flexible solution to data protection with a mixture of encrypted and non-encrypted connections.

Based on the Microsoft .NET framework, Host Gateway Server provides concurrent support for a variety of clients, from a lightweight browser-based client, to the feature-rich eXpress Plus emulator, to an application modernization product such as eQuate ... all from KMSYS Worldwide. Its support of standard emulators allows an enterprise to leverage its current investment in terminal emulation.

## KEY BENEFITS

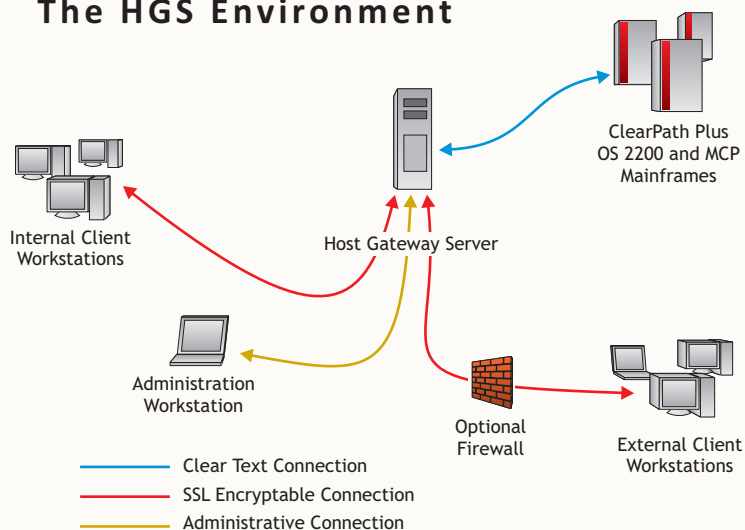
**Flexible** – Host Gateway Server's multifaceted client support allows an organization to mix and match clients as dictated by application and user requirements.

**Easy to Administer** – Host Gateway Server has a low total cost of ownership. Utilizing Microsoft's one-touch deployment methodology for the administration tools and ClickOnce technology for browser-based clients, as well as centralized configuration of the client connectivity options, makes Host Gateway Server simple to maintain.

**Flexible Security** – Host Gateway Server has the ability to accept a mixture of encrypted and non-encrypted connections. This feature allows for secure connections when required, such as from systems outside of the enterprise network, and clear text connections when encryption is not required.

**Easy to Configure** – There is no need to go to the server to do configuration because all configuration actions may be done remotely. Host Gateway Server offers the same easy-to-configure host connectivity as found in all KMSYS Worldwide emulator solutions.

## The HGS Environment



*Host Gateway Server – The Universal Connection*

**Does not Require VPNs** – Virtual Private Network (VPN) solutions are expensive, complex to deploy and difficult to maintain. With a typical VPN deployment, local network users are presented with different connection scenarios than remote users. The different scenarios are potentially confusing to workers who connect for both the local enterprise network and the internet.

**Offers Security not Provided by a Typical VPN Deployment** – Host Gateway Server transparently provides encrypted traffic for all desired connections. The typical VPN solution is only deployed for remote connections, which leaves local network traffic in clear text.



# Host Gateway Server (Continued)

## CLIENTS

**Host Gateway Server** – Provides a framework for the transmission of encrypted data which enables the following products to have secure data access to and from Unisys mainframes:

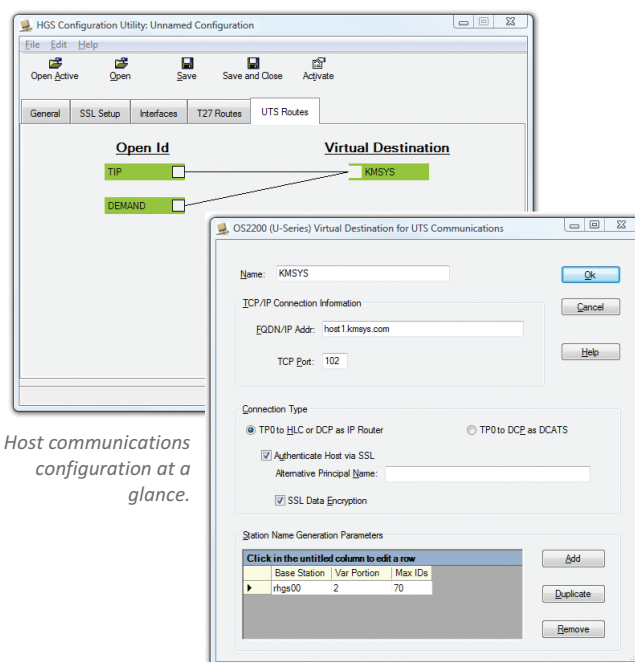
**eXpress Plus** – Provides full-featured standalone connectivity for information technology professionals and end users alike.

**eXpress Pro** – Offers the same functionality as eXpress Plus with an added ActiveX control for developing customized Windows applications through host communications.

**eQuate** – Allows development of Windows and Web applications for existing legacy transactions without making host changes.

**QPlex Client** – Allows emulation directly from a Web page.

For more information on Host Gateway Server client options, please visit [www.kmsys.com](http://www.kmsys.com) or contact a representative.



*Host communications configuration at a glance.*

## TECHNICAL FEATURES

### General

- Runs on Microsoft Windows Servers
- Microsoft .NET Framework-based application

### Manageability and Maintainability

- Runs as a Windows service
- Local or remote GUI configuration
- Local or remote monitoring

### Protocols

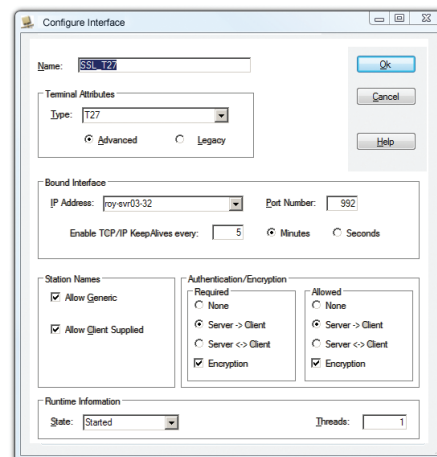
- UTS DCA/Int-1 over TP0
- UTS DCS/Int-1 over TP0S (Secure TP0)
- T27 ND L over Telnet
- T27 ND L over SSL encrypted Telnet

### Data Security

- Uses Microsoft supplied SSL routines
- FIPS 140-compliant cryptographic security modules
- Encryption algorithms and key lengths may be negotiated

### Licensing

- Licensed by physical or virtual server instance
- Client licenses by client type and count



*Configure client connections.*



# OS 2200 Productivity

Save Time and Money While Performing Important Database Reorgs

## I-QU PLUS-1

Designed to minimize production downtime when reorganizing DMS 2200 databases, I-QU PLUS-1 allows the Database Administrator to target individual database areas for reorganization. A selected area is reorganized without the necessity of linking to associated areas, thus reducing I/O and providing runtime savings of up to 80% over conventional methods.

### Database Maintenance Advantages

- Realize shorter database unload/reload times
- Do in-place global pointer changes when expanding number of allowed areas/pages
- Manipulate database pointers and keys stored in records
- Ignore set linkages during reload
- Save and restore pointers
- Cross-reference old record locations to new when correcting pointers
- Significantly reduce production downtime
- Always load database areas in page number sequence ... even for CALC records
- Easily add new set relationships
- Add new set pointers (owner/prior)
- Isolate reorganizations by area for speed
- Use built-in calc simulator for more efficient loads
- Minimize impact of cross-area designs
- Easily patch broken links
- Realize quicker reorganizations regardless of hierarchical levels

### Additional Benefits

- Access all Unisys supported file types
- Conversationally browse files and database structures
- Patch database areas, relational tables and files
- Prototype new applications
- Develop entire I-QU PLUS-1 applications

### Required Software

Any currently supported OS 2200 level with supplied Unisys software.

## I-QU REORG COMPOSER

I-QU ReorgComposer automatically generates I-QU PLUS-1 database reorganization code reducing development time by as much as 90%. A Windows® client program interacts with host component to examine a DMS 2200 schema file and performs a dialog with the Database Administrator to produce the generated code. During the dialog, the Database Administrator chooses recovery and verification options, reload strategy, file specifications, type of sorting, etc. The result is a complete runstream including I-QU PLUS-1 unload and reload programs with all the required utilities and ECL to accomplish the most complex of reorganizations, hands free.

I-QU ReorgComposer also contains features that analyze the impact of schema changes on program source libraries and automatically generate accurate shifting code when adding, removing, expanding or compacting data fields.

### Client Benefits

- Downloads schema related information from the host component
- Search for changing data field specifications
- Make data field specification changes
- Expand, compress, insert or remove data fields
- Specify date aging
- Retain field change specifications between sessions
- Automatically generate shifting logic when inserting/removing fields
- Calculate correct starting locations and lengths when shifting data
- Maintain dialog with database administrator regarding reorgs
- Generate all required I-QU PLUS-1 code and ECL
- Develop unload/ reload strategies to minimize downtime
- Include optional IRU/DMU code for backups and verification
- Allow site-specific alteration of generated code before reorg
- Upload generated code and runstream
- Search source libraries for code affected by database

### Host Features

- Extract schema information from host file
- Transfer extracted information to client

### Required Software

Any currently supported OS 2200 level with supplied Unisys software. The I-QU ReorgComposer client component requires any currently supported release of the Windows operating system.





# OS 2200 Productivity

Easy Ad Hoc Reporting from Any 2200 Source

## Q-LINK

Created to provide BIS users access to non-BIS data, Q-LINK operates outside of BIS, acting as a server that executes Q-LINK programs. BIS runs call a unique run function requesting that the server execute the program and return the data to BIS. Consequently, the Q-LINK program handles all data access independent of BIS.

Q-LINK's high-level language provides the BIS run writer all the flexibility necessary to access any 2200 data model. The language is easy to learn and boasts a command set that lends itself to highly structured and efficient code.

### Application Development Benefits

- Select multiple date formats, including those used in date arithmetic
- Use wildcard characters on IF statement comparisons
- Control case sensitivity on IF statement comparisons
- Shift characters to all upper or lower case
- Trim insignificant leading and trailing spaces from data
- Automatically detect overflow of numeric edit masks
- Dynamically assign files, free files, etc.
- Easily convert dates
- Abbreviate commands for quick development
- Develop in-line and procedural DO loops for highly structured code
- Easily code data and variable definitions
- Save programs in object form to secure source code

### Supported File Types

- SFS 2200 and PCIOS
- DMS 2200
- Direct I/O
- RDMS 2200
- BIS DTM
- SORT

### Required Software

Any currently supported OS 2200 level with supplied Unisys software.

## INFOQUEST

InfoQuest was developed with the end user truly in mind. Data is readily available to end users from any 2200 file source, without any programming required. Users select data items from lists of available items and determine how the data is to be presented. From a variety of easy-to-use options, requests can be tailored to sort the data, provide totals and subtotals, perform special calculations, stipulate custom formatting requirements and much, much more.

InfoQuest Client, a Windows program, interacts with a host component to build a Q-LINK request that, when executed by a Q-LINK server, retrieves data to be presented to the user in the format requested by the user. A host program is provided to maintain user registration, data views for user selection, etc.

### End User Benefits

- Control selection of InfoQuest applications, views and request activities
- Create and maintain reports
- Create and update files
- Present data items for selection
- Offer sort and subtotal options
- Allow selection of column
- Create and calculate derived items
- Add conditional logic for derived items
- Add headings and footers to reports
- Specify cross-foot calculations
- Customize column headings and column editing
- Select run options
- Enter data selection criteria
- Choose request run times
- View request results
- Maintain reports/files/requests

### Administration

- Maintain user and application registration
- Enforce off-line runtime security
- Generate and maintain views of user data
- Generate and maintain data access logic

### Required Software

Any currently supported OS 2200 level with supplied Unisys software. The InfoQuest Client component requires any currently supported release of the Windows operating system.



KMSYS Worldwide, Inc.

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