FIRST CHOICE SOFTWARE

First View™

Welcome to the second issue of *First View*. The response to the first edition was tremendous, and we are looking forward to publishing this newsletter for a long time.

Clarify Purchase

These are uncertain and confusing times in the Clarify world. With the purchase of Clarify by Amdocs, many Clarify customers are wondering where to turn. Fortunately, First Choice Software is doing better than ever.

Whether your company remains committed to your Clarify system or you are already planning to invest in a new system, First Choice offers products and services that can make your task easier, faster, and less expensive.

Read below about some of our new products and services. Call us, we offer Building Blocks for Clarify.

This issue of *First View* contains articles about:

- Details about the Connections technical forum
- Information about our newest products and services
- A proposal to build a fast ASP-based LAN client
- The winner of our contest at Nortel's Inform User Group
- Information about First Choice's upcoming class offerings
- An announcement about our partnership programs
- A listing of products you will soon see from First Choice
- A technical customization article
- An employee profile

If you know of someone who might enjoy a copy of *First View*, please share it with them. Also, have them send an email to add-firstview@fchoice.com. Make sure they include their name, phone number, and email address. We will send them future editions of the newsletter.

If you do not wish to receive future copies of *First View*, please send an email to remove-firstview@fchoice.com. Make sure your email address is either in the title or body of the email. We will remove you from our mailing list immediately.

Connections

First Choice Software hosted our first annual **Connections** technical forum last September. Almost 100 Clarify professionals traveled to Austin to participate in the event. **Connections** is a forum for Clarify customers to get together, learn, share with each other, and get value from their existing investment in Clarify.

The response from the people who attended Connections was incredible. Well over 90% of the attendees gave Connections a ★★★★ or ★★★★★ rating (out of a possible 5). Here are a few of the comments we received:

"Without question, the best Clarify conference ever. We learned more in two days than in weeks of training."

"Compared with other conferences I've attended, this one was excellent. A lot more technical, a lot less sales. I think that was the key of the conference."

"This is what I Clarify should have been doing. First Choice deserves a lot of credit for arranging/hosting this event. Thank you First Choice!"

"It was nice to be able to informally discuss issues with other Clarify customers/vendors."

"Clarify should have done things like this."

"I liked that the vendors were not pushy with sales."

Connections 2002

First Choice is planning on hosting "Connections 2002" in fall of 2002 if there is sufficient interest. Let us know your thoughts on a future Connections by emailing us at connections@fchoice.com.

What's New

This section details new products and services from First Choice Software. For more information about any of the items listed, please contact us at www.fchoice.com or at sales@fchoice.com.

New Products

Here is some information about the exciting new products available from First Choice Software.

Multi-Version Upgrade Tool

First Choice Software is pleased to announce the availability of the Multi-Version Upgrade Tool. This set of programs allows you to upgrade a Clarify database **from any version** of Clarify **to any other version** in a one-step process! This upgrade tool handles schema, form customizations, and customized code.

First Choice uses Clarify to support our customers. Like many of you, we do not upgrade as soon as Clarify releases a new version. Our recognition of how difficult it can be to upgrade "multiple versions" led to the creation of this product. We found it to be a tremendous help and are sure you will too.

In addition, version 1.1 (which is under development) will allow you to upgrade **from any database** type **to any other database** type. For example, you will be able to upgrade a Clarify 6.0 database (SQL Server) to a 10.0 database (Oracle) in one step! This enhancement provides the functionality many businesses need when they change databases.

Customization Replicator

First Choice is excited to offer new customization technology for Clarify. The Customization Replicator (CR) is a set of tools that allows you to extract your customizations from a Clarify database. You can immediately install those customizations in multiple databases (development, test, training, and production), all with one simple command! You never have to touch schema files again, nor will you have to use other tools to implement or install your customizations. This tool handles all aspects of the data schema, ClearBasic code, resource configurations, forms, user-defined lists, Clarify lists, stored procedures, and any other item you need for a customization.

Browser-Based Online Tools

Developers rely on Clarify's data dictionary; however, the Clarify dictionary is limited to base-line Clarify. It does not detail your schema customizations. First Choice developed a web-based tool that displays a hyperlinked version of your data schema, including custom objects. Every piece of information you want is available in a couple of clicks. In addition, the tools include First Choice's "Forms Dictionary", a set of web pages that lets you see and access complete information about Clarify forms, including user-defined forms.

Please ask us about on-line access to a version of BOLT that you can use to try it out.

Business Object (COM) API Toolkits

First Choice is pleased to announce the availability of 7 different Business Object API Toolkits with all of the same functions and features as our ClearBasic API Toolkits. Business Object API Toolkits are now available for ClearSupport, Sales Force Automation, Field Operations, ClearQuality, ClearLogistics, ClearContracts, and Interfaces. For six years, Clarify customers have relied on First Choice's API toolkits to develop their Clarify systems - Over 100 of Clarify's largest customers use First Choice's API toolkits.

Enhanced Email Out for Clarify

First Choice's new Enhanced Email Out for Clarify provides an email form that looks and acts like a standard Outlook mail message. It adds the improvements you have wanted in the Clarify "Log Email" function. It includes features such as subject line, blind carbon copies, unlimited attachments, full commitment data (not just one line of text), duplicate email address removal, and an address book that can access both Outlook data and the Clarify contact list. Our new version currently supports email for ClearSupport, ClearSales, and ClearCallCenter.

New or Extended Services

First Choice is extending its traditional services to enhance your Clarify investment.

First Choice HelpDesk: Clarify-based Support

First Choice offers pay-per-incident support for Clarify questions. This service allows you to get quick, accurate answers to tough Clarify problems. This service allows you to tap our extensive Clarify knowledge without going through the hassles of a consulting engagement.

First Choice customers have known for many years that First Choice provides fast turnaround on support issues. We are committed to our customers being able to speak to a developer quickly and have their question or issue addressed promptly. Our customers have often asked us to also provide this same level of support and assistance for questions that have nothing to do with our products.

First Choice has now expanded our HelpDesk in two important ways:

1. We provide a customized code writing service under the umbrella of our pay-per-incident support. You can get the small, but difficult code you need written without the long, complicated process of contracts, paperwork, and purchase orders.
2. We provide significant discounting for customers purchasing 5, 10, and 20 packs of incidents.

Please contact us for more information and to set up your incident profile. For more information about the HelpDesk, please visit our HelpDesk page.

Training Classes

First Choice offers a regular series of classes aimed specifically at the Clarify developer in your company. We are currently teaching both Advanced ClearBasic programming and Clarify Business Object programming. Please see our web site for more details and to register for a class.

Custom Training

Need a specialized class tailored just for your company? Contact us to see what we can put together for you.

Credit Card Orders

First Choice takes Visa and MasterCard payments for your pay-per-incident issues and for any product or service that we offer. Please contact sales@fchoice.com for more details.

New Partnership Programs

First Choice recently introduced a family of partnership programs called the **Advantage Partner**™ programs.

As First Choice has grown, we have come to realize that our customers want more from First Choice than for us to be just a vendor that writes great products. So, we are expanding our offerings to create programs that reflect of our customer's needs and their increasing investments in First Choice and their Clarify systems.

As an **Advantage Partner** you can expect benefits such as:
- Discounts on products
- Priority customer support, with guaranteed service levels
- Access to "partner-only" products and services, such as the exciting **Interface Builder**
- Discounts on training classes
- First access to consulting services
- Partner pricing on HelpDesk services
- Schedule customized training classes
- A dedicated account manager responsible for all aspects of your relationship
- Direct pipeline into product development process - Watch your ideas turn into products

Contact us to customize a partnership program that fits your needs. We offer programs for end customers and system integrators. Please contact us at sales@fchoice.com for more details of the program.

What's Coming

This article focuses on the products and services available in the near future from First Choice. We want to make sure that the Clarify community is aware of these items, so they can plan appropriately. For more information about these items, please contact us.

Thin Client

First Choice is releasing a family of fully-functional, thin clients for Clear Support. Please see the Ideas article about this major new initiative from First Choice Software.

ClearBasic ⇒ Business Object Translator

First Choice will soon release a set of translators that enable translation of ClearBasic customizations directly to correct, parallel customizations using Clarify Business Objects. The translators are particularly useful for interfaces and the non-GUI portions of your customizations. Both COM and Java Business Objects versions are being considered.

You have made a significant investment in your Clarify system. One of the largest investments you have likely made is in your customized ClearBasic code that helps you run your business exactly as you need it to run. These translators allow you to upgrade to the latest versions of Clarify without having to repeat the same level of your investment on code customizations.

New Business Object (JavaBeans) API Toolkits

First Choice plans to make our best-selling APIs available in the JavaBeans format which is available as of Clarify 10.1. The timing of the release of these various toolkits will be based on customer need. So, if you have an urgent need for one or more of these toolkits, please contact us to help us schedule them to fit your needs.

Interface Builder

This exciting new tool allows you to describe a Clarify interface in our new GUI. You show data sources, map data, and describe validations with a few simple screen operations. Then, press a button, and the program generates the interface. Interfaces support data migrations into or out of Clarify, and the product supports multiple language formats.

New Ideas

In the previous edition of *First View* we asked you about the idea of holding a technically oriented forum/user group about all things Clarify. The response from our customers was huge and positive. The result: The *Connections* technical forum we held in September.

In this issue we want to solicit your input and ideas on a far different topic: thin clients for Clarify.

Based on strong customer demand, we are developing a thin, agent-facing client for Clarify. First Choice is in a unique position to produce such a tool. Not only do we have a large in-house body of both Clarify and web knowledge, but we also have a tremendous body of technology (in the form of over 500 callable APIs for Clarify) to write such a client quickly and well.

We have already written a ClearSupport thin client. A demonstration version of the client will soon be available for you to try on the web. Please see our web site for more details.

Please take a minute to email us at ideas@fchoice.com to let us know what you think about our idea of the thin client. Specifically, we would like to know:

1. What do you think of our ClearSupport client?
2. Are you interested in seeing First Choice continue to produce thin clients for Clarify?
3. If so, what should we produce first? Possibly clients for other Clarify products such as ClearQuality? Or should we port the thin client to other servers/languages (such as Java)? Or should we add new features to base Clarify function via the thin client?
4. How important is it to have a thin client that runs on Clarify versions earlier than 9.0?
5. What features are most important to you?

Contest Winner:

In the previous edition of *First View*, we announced a contest. We told readers that if they came to the First Choice booth at Nortel's Inform 2001, and told us that they saw the contest notice in *First View*, we'd enter them into our drawing for a free product.

The lucky winner of this contest is: Beverly Scott of Aon Innovative Solutions. Congratulations!! Thanks to Beverly, Aon will get to select a First Choice Software solution to help their Clarify implementation.

We will hold similar contests in upcoming additions.

Employee Profile: Cheryl Slavin

Cheryl comes to our team with many years of experience in Quality Assurance. After graduating from the School of Engineering at Texas A&M in 1989, Cheryl went to work for IBM. She worked there for 11 years, until joining the First Choice team last February.

While at IBM, Cheryl developed expertise in all phases of software verification, including Functional Verification, System Verification, and Customer Environment Test. Cheryl has extensive experience in all aspects of test case design and implementation, as well as project planning and management.

Her project experiences include verification of such products as IBM Database Manager (now known as DB/2 or UDB), a variety of networking products (LAN Server, LAN Netview, Warp Server, various Lotus and Tivoli products), and finally, Java and e-business products (JavaOS, IBM Java Development Kit, Warp Server for e-business, WebSphere, UDDI).

First Choice is known for the very high quality of our products. We are excited to have Cheryl's expertise on board to help us improve our quality even more!

Technical Corner

In each issue of *First View,* the Technical Corner section contains a tip, example, or technique we find useful. We will include them, along with appropriate code examples, in the hope that you will find them useful as well.

Hidden Gems in Clarify

This issues article is devoted to describing some hidden, but useful, features in the base Clarify package you already own. Many Clarify users do not know about these features. They are simple to install, and can help you a great deal. Most of them are documented in the Clarify books, but unless you know what to look for, are hard to find.

We hope you will find at least one feature you will use. Where appropriate, we identify a PD number (solution ID) from Clarify's ClearAnswer system will be given. If you are interested in more information on any of these features, you can query the Clarify knowledge base. The specific features this article discusses are:

- Automatic and integrated login for Clarify
- Batch installation of the Clarify client
- Forms with additional features that can be cut and pasted into Clarify
- Some useful clarify.env settings
- Some useful command-line options for Clarify

Automatic & Unified Login

Many users do not know about Clarify Auto-Login feature. Even fewer know about its "cousin" Unified Login.

Automatic Login

Most people know that Clarify, every time you log in, creates or updates a file named *clarify.env*. The clarify.env file is the located in the *working* directory where you start Clarify. If you start Clarify from both c:\ and c:\tmp, Clarify would create a clarify.env file for you in both directories. (As a side note, this feature allows you to be creative and have multiple logins in multiple clarify.env files, in different directories. In this way, you can easily use shortcuts to log in to the same database with different profiles.

Every time you start Clarify, you are presented with a Login form. Clarify automatically fills in three of the four textboxes for you: User Name, Server Name, and Database Name. The values supplied are read from the clarify.env file, as are the values from the last time you ran Clarify from the current working directory. The one value that is not filled in for you (and is not stored in the clarify.env file) is the password. This is done for security reasons.

Clarify provides a mechanism called Automatic Login, or *auto-login* that allows you to start Clarify without having to fill in the Login form. To use this feature, edit your clarify.env file by adding two new rows (the order of rows is not important).

```
auto_login=TRUE
db_password=<your password here>
```

If you then run Clarify from that clarify.env file, the program will start for you (assuming you provided valid login information) without presenting the login form. Remember, you must also set the login_name, server_name, and db_name attributes in the clarify.env file.

There is a tradeoff with using this feature, namely security. You now store all of the information you need for a valid Clarify login in a disk file. If others can see that file then they can also log in to Clarify as "you." It is recommended this feature either be used only for development situations, or when you are sure your clarify.env file is not readable by other people (using file system security).

Unified Login

This is a very useful feature built in the base Clarify product. It is only available for Windows clients (98/NT/2000), and only if the database is Microsoft SQL Server. But if you have this configuration, you might consider Unified Login.

Unified Login allows you to use your domain login (the login credentials you provided when you logged in to Windows) to log in to the Clarify system. It requires your domain user name be the same as your Clarify login. If it is not, you cannot use this feature. When you use the feature, Clarify will automatically log in to the database for you. It

is important to note the domain password and the Clarify password **DO NOT HAVE TO BE THE SAME**. Only the user names must be the same.

To use Unified Login, you must do the following:

1. Be using a Windows client.
2. Be using MS SQL Server as your database.
3. Configure your database (in Enterprise Manager) to use Integrated Security. There is full documentation for this in SQL Server. For SQL Server 7.x, Integrated Security is always on.
4. Add the auto_login line in your clarify.env file (see above), but you MUST NOT add your db_password line. When Clarify sees the auto_login line without a password, it knows to attempt Unified Login. Note that you must also have the login_name, server_name, and db_name parameters set in the clarify.env file.

As with automatic login, there are security issues. If you do not set up your domain security correctly (if you allow individual users to create new login IDs on their machines), you can have a security breach. For example, suppose that Joe and Fred both have login IDs in Clarify. Further suppose that Fred can create new users on his machine. If he creates one named "Joe" (with any password, remember that Unified Security does not validate passwords), then he can log in to Clarify as Joe. So it is crucial that if you use this feature that you properly set up your domain security.

Both Automatic Login and Unified Login are valuable features that can save you a lot of time in Clarify.

Batch Installation/De-Installation

Clarify provides a mechanism that allows you to install or de-install the Clarify client automatically. It will allow you to install the client on many machines at once, and to do it in an unattended, remote fashion. And you can schedule it at any time of the day or night.

This very useful feature is only available on Windows clients (95/98/NT/2000), and only on machines that are running the Microsoft SMS client on a network with an SMS server. It works with version 1.0 and later of SMS.

In SMS, you can set up *jobs*. Each job is capable of running an installer (or uninstaller) remotely at a specified time. This feature only works if the software in question (Clarify in this case) is enabled for SMS remote jobs. Fortunately, Clarify is so enabled.

For more information about this feature, please speak with Clarify support and see the Microsoft SMS documentation.

Additional Features Forms (Goodies Screens)

There are three forms in the Clarify LAN client that are never displayed in a Clarify client session, but which are extremely valuable. Clarify has placed a variety of controls on these controls that can be cut and pasted directly on to specific forms in Clarify, and they will work for you automatically. The code is normally not used, but if you put the proper controls on the forms, the features work automatically.

There are two forms provided for ClearSupport, and one provided for ClearQuality.

Goodie Form Number	Clarify form you can paste controls to	Description
415	411 (or 775 for Service Manager)	Controls to enhance the New Case Form
422	420 (or 776 for Service Manager)	Controls to enhance the Edit Case Form
300	337 (New CR) and 334 (Edit CR)	Controls to enhance the New and Edit CR Forms

New/Edit Case Enhancements

Virtually all of the controls on forms 415 and 422 are the same. There are only two buttons (one on each form) that cannot be used on both the New and Edit Case Forms. In addition, these controls can be pasted to any of the *default* tabs of those forms. Each of the enhancements are described in turn:

1. **Part Selection Controls**. On the default New/Edit Case forms, you can optionally associate a case against a site_part (an installed piece of equipment). This is a very useful feature, but there are times where customers wish to link cases to part numbers and revisions, but not to specific site_parts. Many customers don't even

use site_parts, and wish to have their cases only linked to part numbers and revisions.

There are four ways in which these controls can be customized on your forms:

- Only use site_parts (the default mechanism in Clarify)
- Only use parts/revisions
- Allow each case to either be related to a site_part OR a part/revision
- Cases cannot be linked to site_parts OR to parts/revisions

PD 02085 (and a chapter in the old System Administrator Guide) describes this process in detail.

2. **Quick Close**. This button, if placed on your New or Edit Case forms allows you to close the case (once it has been saved) without presenting the Close Case form. All of the times/amounts are totaled, just like the Close Case form, but you may not edit any of the data (such as the resolution code). This is very helpful for the "one and done" cases.

3. **Fast Close**. This button is exactly like Quick Close, only the subcase times/amounts are not totaled in to the Close Case record. This option is not generally recommended.

4. **Edit Contact/Site**. There are two buttons you may paste to either the New or Edit Case forms. On the baseline forms, Clarify presents you with a "…" more info button for more information about the contact or the site. If you press those buttons, the Contact or Site forms are presented, but in read-only mode. The Edit Info buttons allow you to present the Contact and Site forms, but in read-write mode!! Some customers put both the More Info buttons and the Edit Info buttons on the forms, and some simply replace the More Info buttons with the Edit Info buttons.

5. **Edit Alt Contact**. This button will allow you to view the alternate contact, and to edit it.

6. **Find Caller New (only for the New Case Form)**. This is an alternate version of the Find Caller flow, which allows for additional customization. Due to an uncorrected error (see PD12995), it is recommended that you not use this button currently.

7. **Next Case (only for the Edit Case Form)**. This button, when pressed, performs a "Find Case By ID" operation. It posts the Find Case By ID form for you to enter a case or subcase ID number.

New/Edit CR Enhancements

Form 300 provides several controls you can cut and paste onto the New CR form (337), or the Edit CR form (334). They include:

1. **Discard**. This button, if pressed, will close either the New CR or Edit CR forms. It is like the **Done** button, but it does not check to see if data is dirty. It will exit, even if there is unsaved new data on the form.

2. **Save/Done**. This button, which can be placed on both the New and Edit CR forms, saves any unsaved data (without a confirmation dialog), and exits the form.

3. **Save**. This button can be placed only on the Edit CR form. It allows you to save changes to the CR without having to press the **Done** button.

Clarify.env Settings

Most people know there are switches and settings you can place in your clarify.env file that make life easier when you run the Clarify client. For example, the automatic or unified login to Clarify described above is controlled by clarify.env settings.

There are some settings that are not as well known, but can still be very useful. Some will be described here.

Switch	Default Value	Sample Setting	Purpose
LICENSE	False	LICENSE=True	Should a license be checked out when you start up Clarify?
HIDE_TOOLTIPS	False	HIDE_TOOLTIPS=True	Should the tool tips on the message bar be hidden?

Cont.

Switch	Default Value	Sample Setting	Purpose
AUTO_DESTINATION	On	AUTO_DESTINATION=Off	Should auto-destination be evaluated on dispatches or assigns?
DEFAULT_APPLICATION	ClearSupport	DEFAULT_APPLICATION=ClearQuality	Which application should Clarify be in when you start up? Values are: ClearSupport ClearQuality ClearLogistics ClearCallCenter ClearSales ClearContracts Product Manager Policies and Customers
CbPublicSize	Too little	CbPublicSize=1000000	Size, in bytes, of the Clarify heap (where objects are allocated from). This should be at least 1,000,000 for modern PCs.
CbStackSize	2048	CbStackSize=8192	Size of stack (for function calls) in Clarify. Max is 8192, and should be set there.
CONSOLE_CLOCK	True	CONSOLE_CLOCK=False	Display the clock in the Clarify Console, or not.
CLR_EDIT	None	CLR_EDIT=c:\apps\myeditor.exe	The program to use to open up attachments. But this has become broken. DO NOT USE IT!!! Set your associations instead.
CLR_GRAPH	None	CLR_GRAPH=c:\apps\excel.exe	Application used to view trend data.

Clarify Program Settings

There are a few useful settings you can supply on your Clarify command line (or in the shortcut that starts Clarify) that can help in running or testing Clarify. Many of them are case sensitive, so make sure to enter them the way they are listed below.

Switch	Purpose
-cbtrace	If you include this statement, Clarify will print out (to the standard.out file) each of the ClearBasic commands it is executing. It also requires the –msg switch to be used.
-CBDebugger	This switch starts the Clarify run-time debugger.
-debugCB	If you encounter a run-time error in your code, this switch will cause Clarify to display the module and line number of the error. Otherwise, Clarify only displays the error message. This has no other performance issues, so it should **always** be used.
-sqllog<file>	All SQL generated by Clarify will be recorded in the file name supplied. Note that unlike all other –sqllog commands in Clarify, there is **no** space between the switch and the file name.
-msg	This switch should be used if you are using the –sqlout or –cbtrace commands.
-nocache	If you suspect you have cache issues, this switch will cause Clarify to ignore the caches, and get everything from the database. You should not run with this switch for production, as it slows down Clarify.
-sqlout	This command places the SQL that Clarify generates in the standard.out file. It requires the –msg switch. Very useful in conjunction with the –cbtrace switch.

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