



# *First View*<sup>TM</sup>

Volume 2, Number 1  
2002

March

Welcome to a new year of *First View*. We are very excited about the response to the last issue of *First View*, and hope that you find this issue both useful and informative.

These are exciting times at First Choice Software. If you haven't visited our web site (or called us) recently, you're in for some very pleasant surprises!! First Choice is rapidly re-defining directions for Clarify customers and Clarify systems.

For many years, First Choice Software has been known as the vendor of choice for tactical solutions for your Clarify needs. With over 50 product and service offerings, First Choice can satisfy many Clarify-based customer needs.

But Clarify customers need more than just point solutions today. First Choice has been growing to address those needs. In the past year, First Choice has been working on an exciting new set of technologies that will help you extend and protect your Clarify investment.

This issue of *First View* highlights many of these new technologies, products, and services. For more information about any of them, please contact us at [sales@fchoice.com](mailto:sales@fchoice.com).

This issue of *First View* discusses:

- [A new set of agent-facing thin clients for Clarify, the \*fcClients\*](#)
- [A powerful new business object technology, \*fc Foundation Library\*, that allows you to web enable any version of Clarify](#)
- [A customer-facing thin client, \*fcSelfService\*, that provides your customers with access to their key data](#)
- [A new performance analyzer tool that will help you maximize the performance of your Clarify system](#)
- [A conversion technology to help you convert your Clarify forms to HTML web forms](#)
- [The announcement of Connections 2002: A Technical Forum for Clarify Professionals](#)
- [A new user-group forum, \*fcConnect\*, that allows you to ask and answer questions about Clarify and First Choice products](#)
- [An implementation of \*fcSelfService\* for use by First Choice Software customers](#)
- [An ideas column about upcoming thin clients](#)
- [A customization article: How to create new queueable objects in Clarify](#)
- [The winners of our \*fcSelfService\* self-registration contest](#)
- [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](mailto:add-firstview@fchoice.com). Make sure they include their name, phone number, and email address.

## **Connections 2002**

First Choice Software has announced that it will host the 2<sup>nd</sup> annual **Connections** technical forum.

**Connections 2002** will be held on September 30-October 1, 2002 in Austin Texas at the Marriott at the Capitol – the location of last year’s successful event.

This year’s **Connections** will be bigger, better, and more informative than any Clarify-based conference ever.

As with last year’s event, technical events will be the heart of **Connections**. Sessions will include tutorials, code sharing, technical roadmaps, demonstrations, and the ever-popular ToolTime.

For more information about **Connections 2002**, please visit the website at: <http://www.fchoice.com/connections>.

## **Agent-facing thin clients: fcClient**

Based on customer input, and the results of our last **First View** “Ideas” column, First Choice recently announced the availability of the first client in our series of agent-facing thin clients for Clarify.

This first client, named *fcSupport*, is what the name implies: A fully-functional agent-facing thin client for ClearSupport.

The client supports all of the functionality you would expect, including:

- A familiar console, including Queues, WIPBINS, Queries, Find By ID, and an optional auto-refresh timer
- Case and subcase management
- Contact and site management
- Full log support (notes, phone, activity, research, etc.)
- All workflow operations (dispatch, accept, reject, status change, etc.)
- Other standard operations (previous cases, change contact/site, close, reopen, etc.)

Since this is an offering from First Choice, the *fcClients* also include some new, exciting technology including:

- Fast performance. The client is architected from the ground up for performance
- Localization. Different users can use the client in different languages/locales against the *same* database
- Use the *fcClients* against **any** version of Clarify – not just 9.0+ (Q2 02)
- The *fcClients* look/feel like base Clarify. No time/money needs to be spent on re-training

- Recently-opened objects available from the console
- The new *Clarify Explorer* technology that allows you to create/save/iconify/run queries against any table or view in Clarify
- Full firewall security, including optional secure socket layer support and certificates

The client includes many other exciting features and functions not detailed here. This is also the first product from First Choice Software that has a full demo available on the web.

To try out the *fcSupport* demo on the web, please visit <http://fchoice.com:10000/>.

## **New Business Object Technology: fc Foundation Library (FCFL)**

Customers have asked for it – now it is available. First Choice recently announced the Q1 availability of the new *FCFL* business object technology.

*FCFL* is a programmer’s toolkit that allows you to web-enable your Clarify applications with **any version of Clarify!!** *FCFL* is based on standard Microsoft technology, and is expandable for any Clarify system, no matter how large or complex. It is also designed, from the ground up, for internationalization – it supports Unicode databases, as well as any other standard code page.

An optional add-on for *FCFL* allows you to restrict your database to partition it into virtual Clarify systems for different groups of users.

Like all developer products from First Choice Software, the *FCFL* toolkit is extremely easy to use, very fast, and ships with numerous examples to make your programming of web applications, VB, and .NET applications as simple and painless as possible.

For more information about *FCFL*, please visit us at <http://www.fchoice.com/>, or contact us at [sales@fchoice.com](mailto:sales@fchoice.com).

## **A Free First Choice/Clarify Support Forum**

Recently, First Choice Software put on-line a new customer help forum/service, *fcConnect*. *fcConnect* is designed to allow customers to ask questions about First Choice and Clarify products.

Other customers can answer the questions, follow up, and begin dialogues that are valuable to all. In addition, the First Choice Software staff will monitor *fcConnect*, and try to answer any questions we can.

*fcConnect* is free to use, and is available at: <http://www.fchoice.com/fcconnect>.

## **Customer-facing thin client: *fcSelfService***

Rounding out the line of First Choice Software's new thin clients is a customer-facing module for ClearSupport, *fcSelfService*. *fcSelfService* provides a simple, intuitive interface for your customers, allowing them to perform all of the self-service tasks they need, including:

- Creating, modifying, note logging, closing of cases
- Self-registration for customers, with optional workflow for you to approve them before they're entered in your database
- Ability to query for open/closed cases
- Ability to view "My products". *fcSelfService* displays the customer's version and the current version. With a single click, the customer can view differences between the versions, and can also request an upgrade (or sales call)
- Ability to work *with any version of Clarify* (Q2)

For more information about *fcSelfService*, please contact us at [sales@fchoice.com](mailto:sales@fchoice.com) or use the First Choice support system (which uses the *fcSelfService* module for First Choice customers) at <http://www.fchoice.com/fcweb/logon.asp>.

## **Performance Analyzer**

First Choice is currently working on an amazing new tool that will help you get every bit of performance out of your Clarify system.

The tool is called *The Performance Analyzer for Clarify*. It is based on technology available today in First Choice Software's *Purge/Archive Enabled Data Import/Export Tool*.

Simply put, this tool can read standard Clarify SQLLOG files, and can analyze them (and your system) to identify (or automatically add) indexes that will improve the performance of slow operations.

So, if you have an operation (any operation) in Clarify that is not working as you think it should, all you need do is to turn on SQLLOG, run the slow operation, and then run the Performance Analyzer on the SQLLOG file.

For more information about this product, please contact us at [sales@fchoice.com](mailto:sales@fchoice.com).

## **Convert Clarify Forms to Web Forms**

### **Instantly**

This may sound too good to be true, but it is available now from First Choice Software.

The new *fcFormsConverter* technology from First Choice Software allows you to take a Clarify thick-

client form (any form, baseline or custom) and immediately convert it into an HTML form that can be loaded in your favorite web browser.

Coupled with the new *ClearBasic code converter* (available Q2 02), you will be able to greatly decrease your time in moving from thick to thin. In addition, this technology allows you to use UI Editor to maintain your thick client forms, and to keep your thin client forms in sync.

Please [contact us](#) for more information about this exciting new product.

## ***fcSelfService* on the web**

First Choice Software is now using our own *fcSelfService* product on the web to provide even better support to our customers. The service is free, and you can register for it, and all of the customer service it provides, at <http://www.fchoice.com/fcweb/logon.asp>.

This tool is described in this version of *First View*, and is available today. Please contact us at [sales@fchoice.com](mailto:sales@fchoice.com) if you have any questions about the product, or how to use the service.

## **New Ideas**

In the previous edition of *First View* we asked you about the idea of writing an agent-facing thin client for Clarify. As a result of your input, we have developed the *fcClient* family of ASP-based thin clients. Those clients, as well as the *FCFL* technology, and the *fcSelfService* client are all described in this newsletter.

Now it is time to look to the future again. In this issue of *First View*, we would like to solicit your opinion about more thin client topics.

Specifically, we are contemplating three new thin client projects for the upcoming quarters. We are considering authoring:

- *fcQuality* – An agent-facing thin client for ClearQuality
- *fcLogistics* – An agent-facing thin client for Order Ops and Spares Manager
- *fcFieldOps* – An agent-facing thin client for Field Operations
- *fcWebAdmin* – An agent-facing thin client for Policies & Customers, and Product Manager

As always, we want to know what *you* think. Specifically, we would like to know:

1. Which of these, if any, is important to you?
2. In what order?
3. Are there other thin clients your implementation needs?

4. Are there other projects (such as automatic code conversion) that have a higher priority for you?

Please take a minute to contact us at [ideas@fchoice.com](mailto:ideas@fchoice.com) to let us know what you think about our ideas for thin client projects.

### **Contest Winners**

Not too long ago, First Choice Software contacted our customer base and announced a contest for users who [self-registered](#) on our *fcSelfService* web site. All users who registered (or updated their registration) between January 1, 2002 and March 15, 2002 were eligible.

The prizes included a \$150 gift certificate for dinner at Ruth's Chris Steakhouse, ten \$25 gift certificates at Best Buy, and 25 \$10 gift certificates at Best Buy.

We are pleased to announce that the following prizes have been awarded:

<b>\$150 Dinner:</b>	Keith Sherry – Juniper Networks
<b>\$25 Gift Cert:</b>	Venkat Pamidimukkala – El Paso Corporation Jeff Clement – Intuitive Surgical Pete Burrell – British Telecom Mike Fanara – Siemens Jack Dermody – Foxrange Baber Hussian – Yorkshire Water Services Venkata Durgempudi – Echostar Arun G – Digital Globalsoft Mike Urciuoli – Eclipsys Corporation Gregory Leparoux – ADP France
<b>\$10 Gift Cert:</b>	Fischer Manfred – stadtwerte münchen Jason Posthauer – Guaranty Bank Tom Beigel – Bio-Rad Laboratories Ujjal Choudhury – GE Supply Karen McAlarney – Southern Company Anton Mlaker – BEA Systems, Inc. Zafar Khan – Equant Graeme Taylor – Logica Amanda Pearce – Motorola Ajay Mudduluru – Concert Brandon Goldfedder – Braun Consulting Richard Clark – Symbol Technologies Jay Stark – Tellabs Andy Aitchison – British Telecom Andy Flinn – Lattice Semiconductor Dan Schumm – Made2Manage Kevin Wilde – Clear Technologies Carol Avina – Compaq

Brandee Bruman – Dow Chemical Company  
Catherine Moles – SCANA  
Dawn Desmond – Innoveda  
Olga Moukhina – RCN Corporation  
Gary Badstebner – EDS  
Jonathan Hubbs – Warner/Elektra/Atlantic  
Dennis Moeller – PWC

All of the winners have been notified by mail of their winnings.

We will hold similar contests in upcoming mailings and editions of *First View*. Please make sure to read carefully so you can be entered into these contests.

### **Employee Profile: Steven Kresco**

Steven joins First Choice with over 12 years of experience in software development, technical sales, and account management, all in the software and CRM industries. After graduating from Worcester State College in 1986, Steven was recruited to Southern California by Hughes Aircraft Company. He worked as a software programmer for various radar system projects, including the F14, F15, F18 and B2 Bomber. During his employment at Hughes, Steven attained his MBA from Loyola Marymount University in 1989.

Steven then entered the technical sales world in 1991 when he joined Borland International. During his 4 years with Borland, he managed the Western Region technical sales teams and developed Borland's Partner/Integrator programs.

Steven joined Clarify in 1995, and helped grow the company's revenues from a \$4.8 million organization to its peak of over \$200 million. During his seven years with Clarify, Steven managed the technical sales engineer teams in the Southwest and Western Regions. He eventually managed the sales team in the Southwest, and was the Director of Sales for the U.S. before leaving Clarify/AMDOCS this past January.

Steven has extensive commercial enterprise sales experience, and looks forward to the opportunity to build relationships with First Choice and Clarify's customers. Steven is developing multiple programs within First Choice and is excited about sharing them with the customer base.

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## **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.

### ***New Queueable Objects in Clarify***

At our Connections 2001 user conference, we described how it is possible to create new queueable objects in Clarify. That talk was extremely well received, and we thought it might be useful to describe the technique in this edition of *First View*, which has a much larger audience.

The desire to have new queueable objects in Clarify is not a new one. A historical example illustrates some of the reasons. A few years ago, a Clarify customer asked First Choice to help them with their customized workflow. They were providing training classes to their customers, and wanted to track all information pertaining to the classes within Clarify. They wanted to have new objects for class instances, student registrations, and teachers.

They also wanted to have these objects be queueable. They wanted to be able to assign a class instance, for example, to the instructor who would be teaching it. If a student did not pay for their registration, they wanted to be able to dispatch it to an “AR” queue. Finally, they wanted to have full business rules on the objects.

Over the years, we have seen many other similar requirements. So, the question comes up, “Is it possible to create new queueable objects in Clarify?” On the surface, the answer is “No.” Clarify pre-defines a set of queueable objects, and you can’t add to that list.

But as with any technical topic, you can peel beneath the surface layers, and find a way to get done what you need done. In this case, there are two ways to implement new queueable objects.

#### **The Simple Way: Multiple tabs on a queueable object**

The easiest way to do what I discussed above is to simply add additional tabs to an existing queueable object. This is also the most common way of solving this problem.

For the example listed above, we added tabs and data fields to the case table. We also defined some new tables to hold class registrations and class instances, and added relations from these new tables to the case table. The forms that we customized were the New Case form (#411), and the Case Edit Form (#420).

When you add new tabs to a queueable object’s form, you must have a way of knowing which form/tab you wish to see. Clearly you don’t want a user to enter class registration data on a non-registration case!! Typically this is performed with the case type (although you can do it other ways). For the example we listed above, we simply added several new case types.

If the case type were set to “Class Registration”, for example, only that one new tab could be used on the case form. For other case types, other sets of data could be entered.

You might ask, how do you enforce it so that user’s can’t enter data on the other tabs? It’s pretty easy, actually. There are a couple of ways to do it:

- 1) If you are on a **really** old version of Clarify (< 4.5), you can actually make tabs visible or invisible. So, you could simply make the `.Visible` property of the other tabs = `False`. The newer (MFC-based) client doesn’t allow this, sadly. And, of course, there really aren’t any users still on the old XVT-style client. So...
- 2) You can add a small bit of code on the `_Click` method for each of the tab buttons. In that click method you can check the case type. If the selected tab shouldn’t be viewed for the current case type, you can post a message, and front a different tab. Or just front the proper tab. The following is an example of how to do this:

```
Public Sub TAB_D_1011_Click()  
    Dim case_type As String  
  
    case_type = Cobj_CALLTYPE_CHOICE.Contents  
    If case_type <> "Class Registration" Then  
        App.MsgBox "This tab is only valid for Class Registrations!"  
        TAB_D_762.Value = True  
    End If  
End Sub
```

```
End If
End Sub
```

- 3) If you are really adventuresome, you can convert your form to the newer 3 pane Clarify paradigm. This is the one seen in the Account and My Clarify forms. In this paradigm, the tab strips for the tabs are not shown. Instead, a Treeview control is added on the left of the form. The tab names are added to the Treeview control. Selecting the tab involves clicking the proper line in the Treeview. To make a tab “invisible”, simply remove the name of the tab from the Treeview control. Voila!! They can’t select the tab.

The code below shows an example of how to add items (tabs really) to a form using this paradigm. In this example, the case type dropdown will affect what is shown in the tab (Treeview) control. For example, you might have

```
        ' Put labels in tab treeview control
tv_ret = TV_TABS.Add(,,, "Case")
tv_ret = TV_TABS.Add(,,, "More Info")
tv_ret = TV_TABS.Add(,,, "Class Registration")
```

This is the approach we used in rewriting the New Case/Edit Case forms in the CommCenter application we wrote for Clarify, and it works wonderfully! You can then front the tabs with the NodeClick method for the treeview control. For example:

```
Sub TV_TABS_NodeClick(nodeID As Long)
    Select Case UCase(TV_TABS.GetItemText(nodeID))
        Case "HISTORY"
            TAB_D_763.Value = True
    ...
End Sub
```

Sometimes people don’t want to add new tabs to an existing form (such as the Case Edit Form (#420)). Instead, they will create whole new Clarify forms to post when the proper case type is selected. The choice of interface is yours.

### Some thoughts about “The Simple Way”

This method is indeed simple, but it has some serious drawbacks. The following is a list of some of the reasons I don’t like this approach particularly:

- 1) You can end up with way too many types of cases. It can be somewhat confusing for the end users if it is not designed well,
- 2) Base Clarify still shows these items as cases. This is particularly true in the console. You have to be aware of this, and make sure to make your case type (or other selection field) more prominent in WIPBINs and Queues,
- 3) Lots of items in Clarify need to be carefully monitored. For example, business rules have to have lots of conditions applied to them to make sure that they fire only on the proper types of cases. Also, query properties have similar issues.

### A more complicated, but pleasing mechanism

There is a better way. It’s a bit more complicated, but it can have **very** pleasing results. The basic idea behind this approach can be summarized in three words:

## THEFT IS GOOD

The basic idea behind this approach is to borrow (which is a much nicer word than steal) another queueable object that you are not using. Depending on the version of Clarify you are using, there are between 5-11 queueable objects already defined. The more common ones are:

- Case
- Subcase

- Solution
- Change Request
- Part Request
- Action Item
- Contract/Quote
- Opportunity
- Dialogue

In truth, very few (if **any**) Clarify customers use all of these objects. Most customers only use a handful of them. If you are one of those customers who use **ALL** of them, then you can stop reading – the rest of this article won't help you much.

The basic concept in this approach is to take over a queueable object completely. You will take over all aspects of this object – the name, the strings, the icon – everything. In effect, you will make it your own new queueable object. It's not really that hard to do!!

The two drawbacks of this approach are that there are a limited number of these objects available to you, and that it does take some work to do it right.

### **So how do I take over a queueable object?**

In a few simple steps that I will describe here.

- 1) Modify the schema. You need to either add fields to the base object you are modifying, or you have to create new tables that you relate to the modified object. Also don't forget that you can take over (use) some of the pre-defined fields on the object itself.
- 2) Change strings. Most of the strings that control these objects are stored in a database table, table\_string\_db. The conditions are stored in table\_gbst\_lst, and the auto-numbering scheme is contained in table\_num\_scheme. So, for example, you cannot only change the error messages, but you can also change the name of the object that is displayed in the caption banner. Further, you can change the name of the object that is shown in the console, and you can change the name of the object in a variety of base Clarify administrative forms.
- 3) Change the base form for creating and updating the object. For most Clarify queueable objects, practically none of the form fields are required. Almost all are optional. And if a field is required, you can always (in your ClearBasic code) prefill it with a nonsense value, and hide the field off of the displayable part of the form.
- 4) Change the code. You must write some code to handle your new queueable object form. But that's a small price to pay for what you're getting, isn't it?
- 5) Finally, if you want, you can even change the icon that is displayed for the object (in the button bar, and in the WIPBIN/Queue views of the console). This is a bit tricky, because the icons are actually stored locally in a client DLL file. If you make this change you either need to get the DLL file copied to each client machine, or you have to share that file among all your clients. But it can be done!

### **Does this really work?**

Yes, it really does!! We have written a sample demo for you. You can download it from our website at [http://www.fchoice.com/download/queue\\_demo.zip](http://www.fchoice.com/download/queue_demo.zip). This file contains all of the items we will discuss in this section. Start by looking at the file named 'read.me.' It will tell you everything you need to know.

This demo changes the Action Item queueable object to be a 'Course' queueable object. If you already use Action Items, you can use a different object instead. The customization will allow you to create/modify/close courses, and will also allow you to have new conditions, statuses, business rules, queries, and other workflow actions for your Course queueable object.

So, what does the sample do? It has you follow the steps above. First of all, it has you add some new data fields to 'table\_task'. This table is used by Clarify for Action Items. These fields are used by the demo to store course information.

After you have added these new fields to the data schema, you will have to modify the strings in the database. To make this easier, we have supplied you with a ClearBasic script that will make all the changes for you. All you have

to do is edit the script, and change the name of the old queueable object (if you are not using Action Items) and the new name (if you are not using Course). Then run the script. All of the string tables in Clarify will be modified.

Next, you will import the file 'course.dat.' (with data exchange). This file contains a new user-defined list that our new Course GUI will use.

The next step is to import the new Course GUI form into the database with data exchange. This form will still have the same number (14000) as the base Action Item form. This is important, as Clarify will load in a form 14000 whenever it needs to display the Action Item form. The trick is that we're providing our own version of that form to use. After it is imported, you will add the form to the proper resource configuration(s) with UI Editor.

Finally, you will compile the supplied code module for the form. It is a pretty basic form, but it does demonstrate that you can have your very own customized queueable object.

**Note:** There is one additional script provided named 'build\_course.cbs'. It can be used to add courses to the database table for you to view. Or, you can use the new Course GUI to do it yourself in Clarify!!

Remember that the Action Item object is part of ClearSales. You will need to go into that application to see the object. In a real application you could easily write a little bit of code to display your form 14000 (or whichever form you want) with a new custom menu item or a button click. There should be no reason to have your users go into a whole new application. In addition, you may not have a license for that other Clarify application!

The following two images show a course object in the new GUI, and the console, displaying a course (not action item) object!

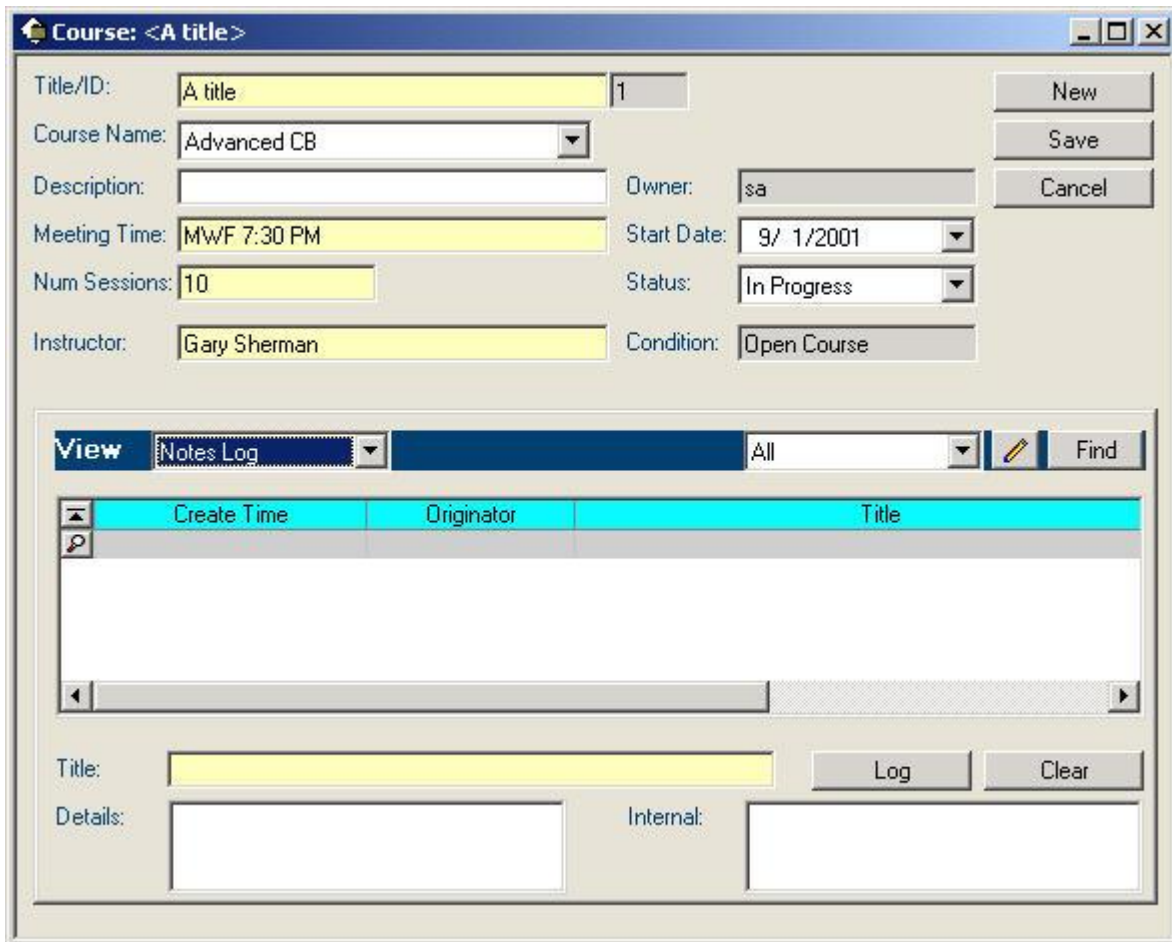


Fig 1. A Course Queueable Object



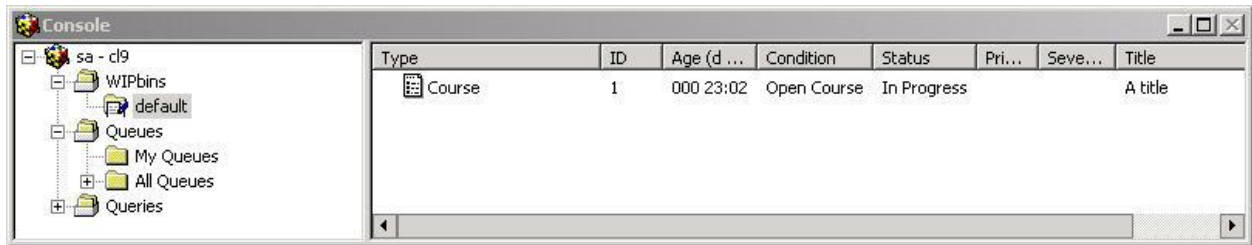


Fig 2. A Course Object Showing in a WIPBIN

Hopefully this trick is useful to you. If you have questions about it, please feel free to post them in the *fcConnect* user forum located at: <http://www.fchoice.com/fcconnect>.

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