

How to use the CAREWare Form Designer

Version 4.1

June 2006

The form designer is a major addition to CAREWare. It allows users to take virtually any field in CAREWare and drag and drop it on your own screen, in any location, just as you might create a data entry screen in MS-Access. The main impetus for building the FD was that users found it cumbersome to have to click a number of buttons to get to different locations in the application—jumping back and forth between the Services screen, then maybe clinical encounters to enter vital signs or diagnoses, and then case notes, etc. The form designer largely eliminates the need to jump around by allowing the user to place all the critical fields for data entry on one (or more) forms, and to place those fields in the order that mirrors your paper clinical encounter form.

The FD will likely reduce the amount of time needed to enter data for each encounter, and it may facilitate using CAREWare at the point of data entry and eliminate the need to first record information on paper forms. But this is a decision that should be made within the context of the work flow and demands of your own clinic.

It is important to remember, though, that the Form Designer is simply for data entry; it contains none of the graphing and reporting functionality found in other parts of CAREWare.

I. How to begin

There will likely be a fair amount of work up front to get your clinical forms set up properly in the Form Designer. However, once created, you probably won't need to fiddle with them too much, but it is always possible as Central Administrator to go back into a form, move fields around, change the layout, add other fields, or the like.

Terms to Know

We will be using a set of terms throughout this manual that identify where you are and what we are referring to specifically within the Form Designer.

Page: This is the main document on which the form is created.

Form: This is the actual workspace on which fields and their labels are placed. It is possible to have multiple forms per page.

Record: A record group is a set of fields that must be placed on the form together. For example, to enter services on a form, you must place at least 2 fields on the form within the same box--the checkbox for the service name itself and the *contracts* field that identifies the funding source for that specific service. When you drag the Service name onto the form, a box will appear. The contract field --and **any** other service-related fields such as Units and Price-- must also be dropped into that box and only that box! If you dropped them into another box, they would simply disappear.

Field: These are simply the data fields in CAREWare (e.g. gender or risk factor or body weight, etc.)

Labels: Once you drop a Record and field(s) onto a form you will want to label each of them to make sure their identity and location is clear to data entry personnel.

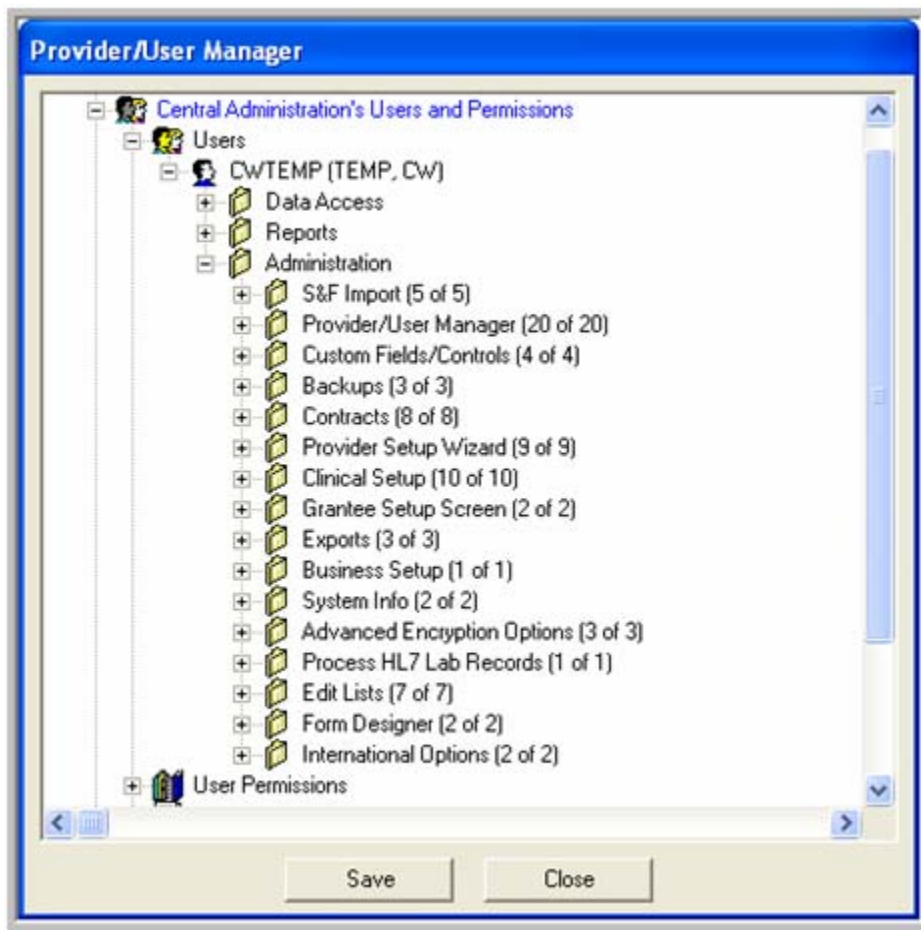
Properties: When you set up a form, you'll be doing a lot of formatting, like creating labels, setting Fonts, colors, etc. There's a lot you can do to design the form. In this guide we'll try and point out some of the more important form properties you might want to use.

II. Creating a Form:

****Forms can only be created and edited within Central Administration; Data entry can only be done within the *Provider* domain.**

To create a form in Central Admin, first check if the appropriate User within that domain has the rights to edit and view forms.

- Go into Admin Options and then select Provider/User Manager.
- Click on Users under Central Admin users and Permissions.
- Under Users, select the username of interest, expand the Administration node and look toward the bottom to ensure that the Form Designer rights (2 of 2) have been applied.



- To enter into the Form Designer module, press Ctl D and click the button.
- The Form Designer Start Screen will appear.

Designed Forms						
		Name	Action			Use Count
F1	Add Form					
D	Turn Form Defaults Off	Enrollment	Edit	Delete	Retire	2
Esc	Back	Follow-up	Edit	Delete	Retire	0
		New Form for Nigeria	Edit	Delete	Retire	2
		WHO Pre-ART Registry	Edit	Delete	Retire	1

We can either **Add** a new form by clicking the link on the left or pressing F1, or **Edit** an existing form. In this screen there are 4 forms that have already been created; We'll edit the existing 'WHO Pre-ART Registry' form.

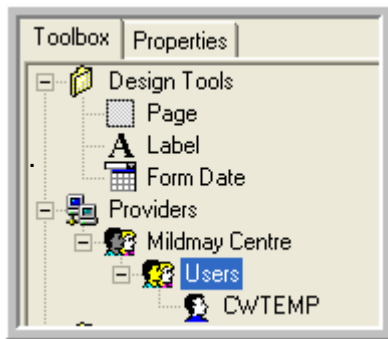
- Note that we could also Delete a Form or Retire a form that is no long in use but may one day need to come out of retirement.
- Edit the form of interest and wait a moment for it to load.

The screenshot shows the 'Add/Edit Design' interface for a form titled 'Pre-ART Registry'. The interface includes a 'Toolbox' on the left with categories like Design Tools, Providers, Demographics, Services, Annual Review, Vital Signs, Medications, Tests, Immunizations, Diagnoses, Case Note, Pregnancy History, Images, and Custom Subform. The main design area contains the following elements:

- 1**: The 'Add/Edit Design' window title bar.
- 2**: The main design canvas area.
- 3**: The 'Pre-ART Registry' title and the World Health Organization logo.
- 4**: The 'Demographics' section, which includes fields for First Name (FirstName1), Last Name (LastName1), Gender (radio buttons for Male and Female), Date of Birth (dropdown), Client ID, Address, AddressGeographicEntity11, AddressGeographicEntity21, AddressGeographicEntity31, HIV Care Entry Point (dropdown), and HIV Diag Date (dropdown).
- 5**: The 'Medical Care' section, which includes a checkbox for 'Medical Care', a 'Service Contract' dropdown, 'Contract' (radio buttons for PEPFAR), and two 'WHO Stage' dropdowns.
- 6**: The 'ART Information' section, which includes a 'Date Ready for ART' dropdown and a 'Date Selected for ART' dropdown.

Explanation of Numbers:

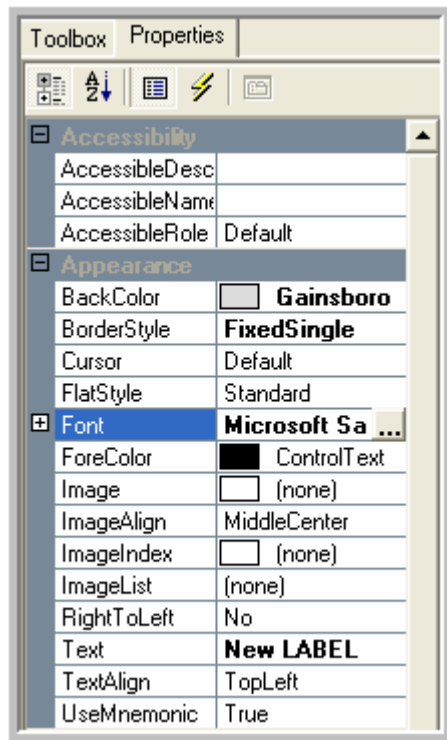
1: **Toolbox** with all available fields and Properties button



Expand the Toolbox button to view the main tools in the Form Designer. To use these tools, left click them with your mouse, hold down and drag and drop onto the screen in the location of interest.

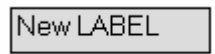
****Note the important entry for Providers: You must designate which provider, and which user within that provider can access which form. Right-click Users to see all user accounts within a specific provider.**

- **Page:** To create a multi-page form, drag and drop the page Icon onto the gray area on the right, #6 above
- **Label:** To create a label, drag and drop the Label icon onto the position of interest on the Form. You must go into **Properties** to type in the actual label.



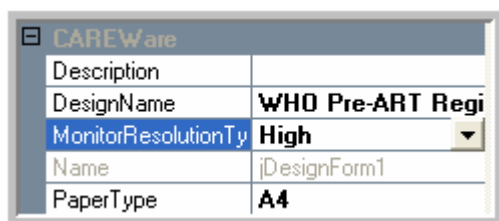
Under Properties, a number of options and sub-categories appear. For example, under **Appearance**, we can set the *BackColor*, the *BorderStyle*, *Font* and the *Text* itself of the label which was dropped onto the form.

Here we set the *BackColor* to “Gainsboro”, the *BorderStyle* to “Fixed Single,” the *Font* to 10, and the *Text* to ‘**New LABEL**’. The label now appears on the form like this:



When you click on a property, a short description of its purpose/function will be displayed at the bottom of the screen.

2: **Page:** Click on this outside border to access the Page attributes and properties. Here we can give the Form a meaningful name.

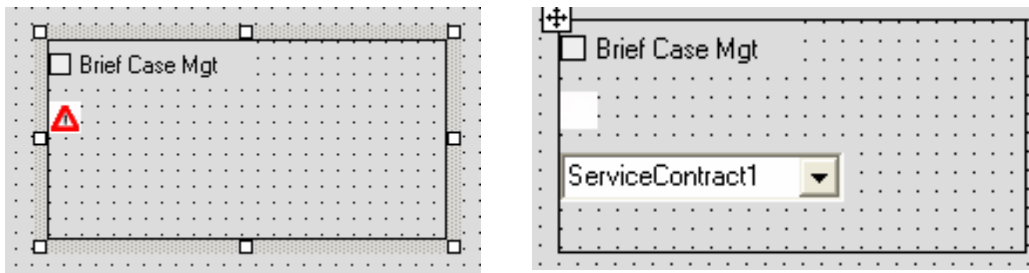


Under CAREWare, we named the form ‘WHO Pre-ART Registry.’ Also note that we set ‘**Monitor ResolutionType**’ to High; this last setting is recommended to increase the form workspace.

3: Form: Now click on the form itself; the workspace contains dots to assist you as you place and line up fields and labels. In Properties under *Appearance* we can change the Background color of the whole form; this might make the data entry screen easier to read and use.

4: Record Group: As noted, certain fields in CAREWare must be dropped onto the form as a group. For example, in the screen above (page 4), the Medical Service Field has been placed on the form. Services require as a complete record group the contract field. If you fail to place these fields within the record group box, you'll get an error.

Here we've dropped the service 'Brief Case Management' onto the form. Because we haven't placed the other required field in this record group box (the service contract field), a red warning triangle appears. As soon as we drop the accompanying Service contract field into this record box, the warning triangle disappears.



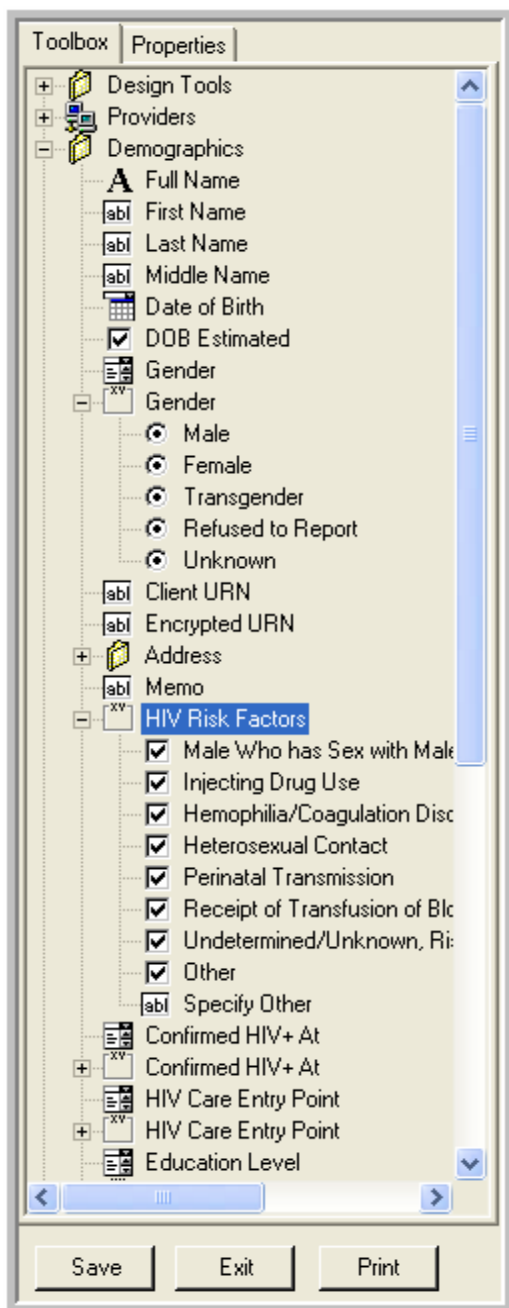
5: Labels: As described, labels are made by simply dragging and dropping the Label icon onto the form; after you drop it you should go directly into *properties* and type in the label, give it a color or set the font or any other attributes.

6. Second page of the form: If your form requires more than one page, drag and drop the Page icon in the Toolbox into the gray area between the form and page (see item #6 on the screenshot on page 4.)

Dragging and dropping fields: With your clinical encounter form in front of you whose layout you want to mimic on the CAREWare form, drag and drop the fields onto their appropriate location, label each accordingly and add other text boxes as needed.

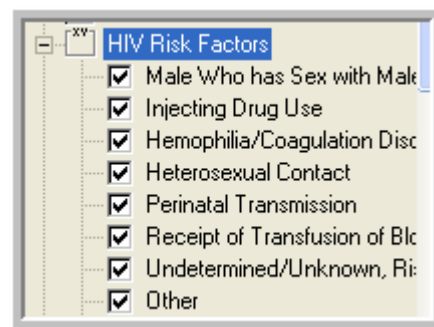
Image files can also be placed on the form (see the WHO logo at the top of the form on page 4.) On the Toolbox, right-click the **Images Logo** and add your own picture. Now you can drag and drop that image onto the form.

Some fields allow two different options: a radio box or combo box. For example, Gender can be placed on the form as a combo box with a pulldown menu. Alternatively, we could drag and drop each gender onto the form as we've done in the screenshot on page 4.



**To place the radio boxes on the screen, expand the field to see all response categories.

For example, drag and drop the HIV Risk Factor group box onto the form and then drag the individual risk factors of interest into the record box.

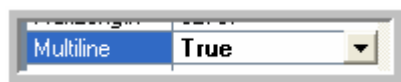


**As you make your form, don't forget to click SAVE periodically. The button is below the Toolbox.

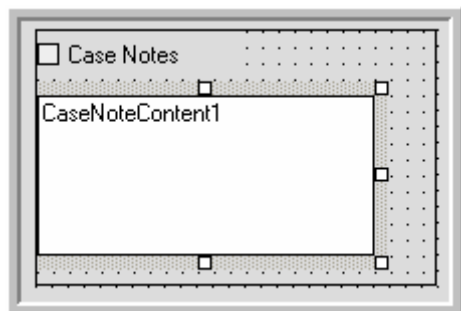
When you're done, click Exit to return to the main Form Designer menu and exit out of this screen to return to the main CAREWare menu.

Special case of Case Notes:

When you drop a Case Note onto a form, you must select a certain property to allow multiple lines to be typed in. With your case note field selected on the form, go to **Properties** and under 'Behavior' set **Multiline** to **True**.



Note that the Record Group Case Notes requires both the checkbox field Case Note and the accompanying content field; both need to be placed on the form to work. Otherwise an error would appear.



Setting up Rules for Quality Control

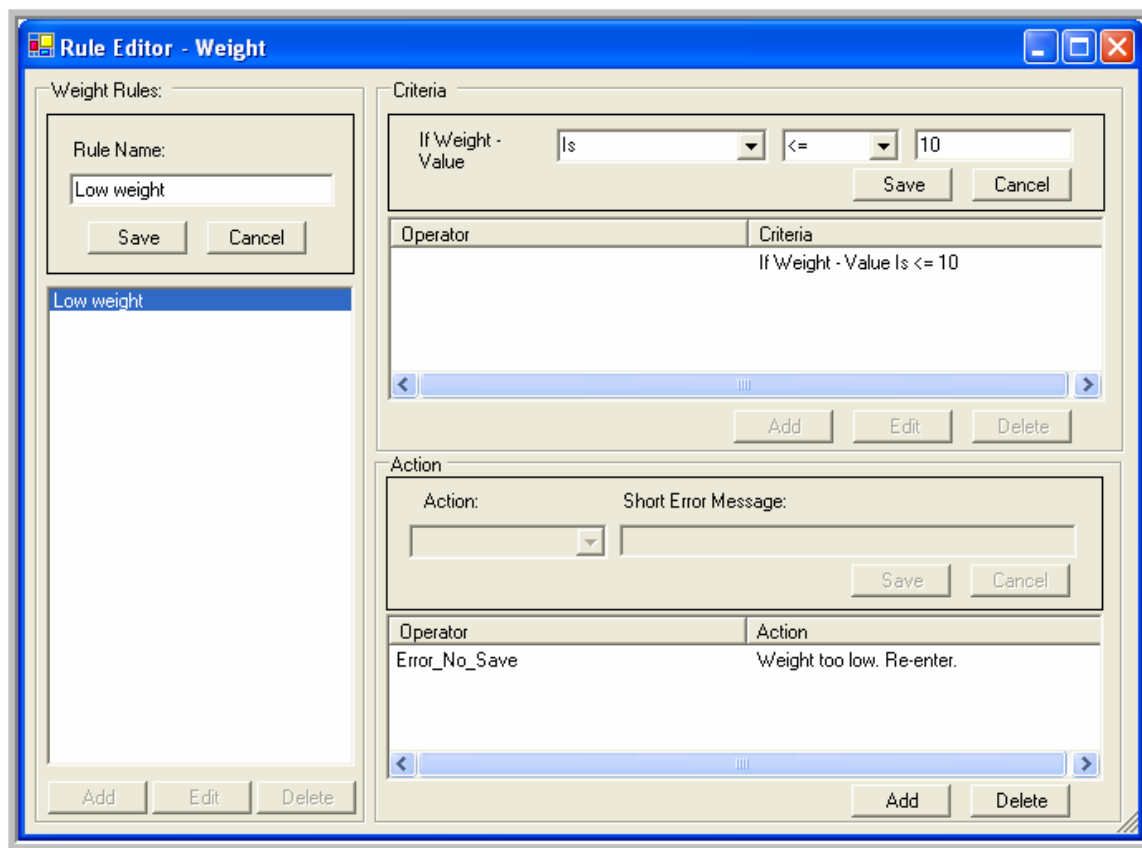
It is possible to set up data rules and restrictions for fields placed on the form in order to ensure data entry quality. For example, you may want to set ranges on body weight or height so that extreme high or low values get flagged. Or you may want to disable certain fields that are gender-specific (e.g. no Pap smear for males).

- To establish rules for a field, first select the field of interest on the form
- Go to **Properties** and find **Rules** under the CAREWare subhead.
- Click on the 3-dot ellipsis on the right to activate the rules module.

Here's a snapshot of the Properties location to access the rules module.

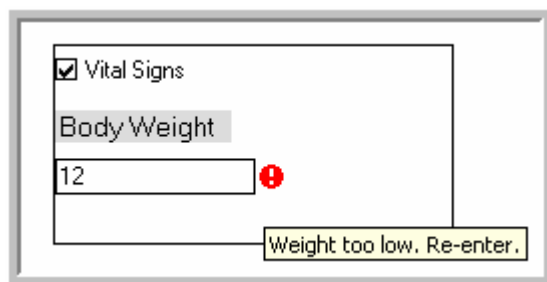


- In the Rule Editor, click **Add** on the bottom left.
- Name your rule in the top right box. Here we are creating one called 'Low Weight.' This rule will cause an error flag to be generated if a body weight below 10 pounds is entered.
- On the right, click Add to create a rule for weight. We select 'Is <= 10' and then hit save. The rule will now be listed in the box below.
- Now designate an Action to be taken if the criterion above has been met. Here we are going to have an Error appear and post a message to re-enter.
- To **SAVE** everything, you must click the Save button in the Rule Name box on the top left



We can add additional rules for this field. For example, we might add a warning if the body weight entered is high.

- Another type of rule allows you to perform an Action on one field depending on the value of another field. For example, we may want to disable the field for entering a Pap smear if the client is male.
- Another Rule might display a message if a lab test value is especially low or high, such as a CD4 count or Viral Load.
- When you go to enter data for a client (see below) and the criteria established above are true, a red warning triangle or exclamation will appear in the appropriate location. If you place your mouse over the warning, the warning text will appear.



Pre-ART Registry



Demographics

First Name: THOMAS Last Name: BAIRD Gender: Male Female Date of Birth: 10/05/82 Client ID: 332

Address: 14551 Never Land Road HIV Care Entry Point: TB Outpatient HIV Diag Date: 02/14/06

Uganda Northern District 11

Medical Care

Service Contract: WHD Stage: 2

Contract: PEPFAR

ART Information

Date Ready for ART: 08/01/05

Date Selected for ART: 09/20/05

Medications

isoniazid

Strength: 200 Frequency: qd

0

Start Date: 06/01/06

Stop Date:

trimethoprim

Strength: 300 Frequency: bid

0

Start Date: 02/01/06

Stop Date:

fluconazole

Brief Case Mgt