

OVEN LOG is an MS Access database that replaces the paper oven logs. The user is able to enter a TRAK ID, select an oven, modify its default temperature, select an application, modify its default bake time, modify the current date/time and TRAK quantity, and add the TRAK to the oven. A list of all TRAKs in ovens is displayed, along with their bake time remaining. The TRAK is removed by entering the TRAK ID (or selecting it from the list) and clicking the Remove button (or scanning the equivalent action barcode).

Everyone must use the central version of the database. Do not make local copies.

The barcode reader must be programmed to append a <Tab> autoterminator. The <Tab> character moves the text from the Notes field to the appropriate field.

Oven Log is located at P:\Access\Oven Log\Oven Log.accdb

The first time Oven Log is opened on a PC, a Security Warning may appear:

- Select Options.
 - Click Open the Trust Center in the lower, left corner of the dialog.
 - Click Trusted Locations > Add new location.
 - Type "P:\Access" in the Path field.
 - Check "Subfolders of this location are also trusted."
 - Click OK > OK > OK.
 - Close and re-open Oven Log.
-

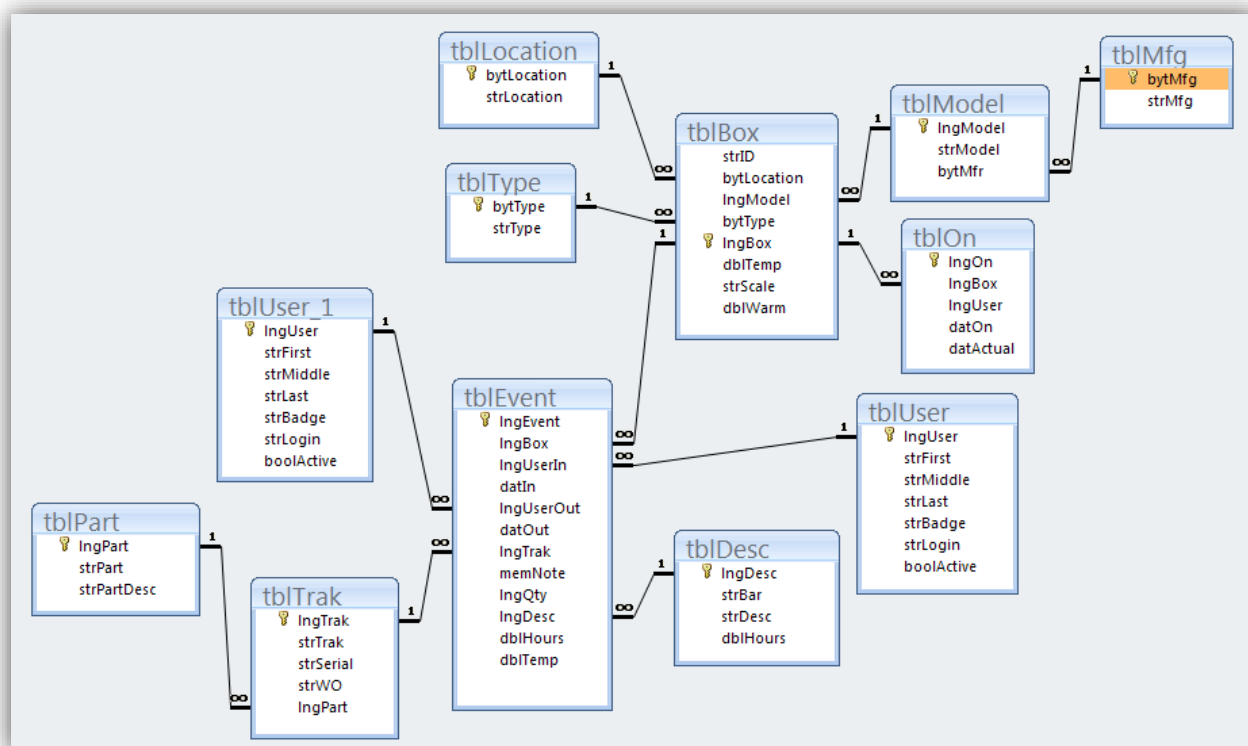
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1.0 Table Structure

The Part and TRAK tables are populated from CIMA when a TRAK is scanned (or when a TRAK is manually entered).

The Box table holds ovens, freezers, solder pots, refrigerators, or other such devices. The On table holds turn-on events for ovens without digital temperature displays.

Each record of the Event table holds a pair of oven-in and oven-out information, such as the TRAK, time, application, quantity, bake time, temperature, and notes.



2.0 Main Form

TRAK ID: TRK02 Oven: 105 °C Start Time: 8/10/2012 6:07:20 PM Qty: 1 Application: Hysol Notes: **BARCODE MODE**

TRAK ID	Oven	Location	PN	SN	TRAK	Q	Temp	Badge	In	Application	Time	Note
TRK01	1											
TRK02	1	800607	F2	PN001	SN01	1	65 °C		8/10 6:06 PM	Eccobond	1:59	
TRK03	1											

☒

TRAK ID: TRK02 Oven: 105 °C Start Time: 8/10/2012 6:08:17 PM Qty: 1 Application: Hysol Notes: **MANUAL MODE**

TRAK ID	Oven	Location	PN	SN	TRAK	Q	Temp	Badge	In	Application	Time	Note
TRK01	1											
TRK02	1	800607	F2	PN001	SN01	TRK02	1	65 °C		8/10 6:06 PM	Eccobond	1:58
TRK03	1											

☒

2.1 General Behavior of the Main Form

In **Barcode Mode**, all keystrokes falling on the form are intercepted. In **Manual Mode**, keystrokes are not intercepted but fall to whichever control has focus.

Barcode Mode is the preferred mode. In **Barcode Mode**, the form directs keyboard (or barcode reader) inputs to their proper controls automatically. A TRAK goes to the TRAK box, an oven goes to the oven list, an application goes to the application list, a bake time goes to the bake time box, and everything else goes to the Note box without the user having to pre-select the proper control by tabbing or clicking.

Unlock for manual entry puts the form in **Manual Mode**. **Lock for barcode entry** puts the form in **Barcode Mode**.

2.2 TRAK List

On the left side of the form is the TRAK list. It is populated by scanning a TRAK ID barcode or by typing a TRAK ID manually in the text box above (and then pressing Tab or Enter). If a TRAK does not appear in the TRAK list, it means it is not an active work order TRAK or the TRAK is already in an oven. If the TRAK is already in an oven, it is selected in the oven list instead.

Multiple TRAKs can be selected in the TRAK list for addition to an oven. In this batch mode, all TRAKs are assigned the same oven, temperate, start time, bake time, application, quantity, and note. Multiple TRAKs of the same work orders can be selected by scanning or clicking.

2.3 Oven List

On the right side of the form is the Oven list. It shows all TRAKs in ovens, including the oven, its location, the part number and serial number of the TRAK, the quantity, temperature, badge number of the user who added the TRAK to the oven, the oven-in date and time, the application, the hours and minutes remaining on the bake time, and the notes entered when the TRAK was added. The time remaining may be refreshed by clicking Reset.

One or many TRAKs may be selected in the oven list.

2.4 ✓ Check Button

The Check button selects or deselects all TRAKs in the TRAK list.

2.5 Add Button

The Add Button puts the selected TRAK(s) in the selected oven, at the entered temperature, at the specified start time, in the specified quantity, with the selected application, for the specified bake time, and with the entered note.

At a minimum, a TRAK, oven, temperature, quantity, start time, and bake time are required to perform the Add action. The application and note are optional.

2.6 History Button

With a TRAK or TRAKs selected in the TRAK list and/or oven list, clicking History will display all information about those TRAK's oven events.

The intent of this control is to provide undo information in the event that a TRAK is accidentally removed from the oven list.

2.7 Remove Button

With one or more TRAKs selected in the oven list, clicking Remove will remove the selected TRAKs from the oven list. If there is time remaining on the bake, the user is asked if they're sure they want to remove the TRAK(s) prematurely from the oven list.

In cases where the oven timer is set to turn off overnight, no one would be around to remove the TRAK from the oven list at just the right moment. So there is an expectation that the actual bake times, as recorded by the database, will tend to exceed the nominal bake times and the corresponding physical bake times. Therefore, it's best to think of the database's so-called "actual" bake time as how long the record spent in the virtual oven list, rather than how long the physical module spent baking in a brick-and-mortar oven.

2.8 Reset Button

The Reset button clears the TRAK list, deselects and updates the oven list, clears the other controls on the top of the Main form, and puts the form in **Barcode Mode**, restoring the default mode for keystroke interception.

2.9 Customize Button

The Customize button opens a form allowing the user to select ovens, applications, and standard time barcodes to be imprinted on a sheet of paper to speed up the data-entry process.

2.10 Oven On

With an oven selected in the oven drop-down menu, the Oven On button logs the time displayed in the Start Time field as an oven turn-on event for the selected oven. This button only works for ovens without a digital temperature display, for only those ovens require logging of when the oven was turned on. Such ovens also bear a label stating the minimum oven warm-up time delay.

Oven Log will not allow a TRAK to be added to an oven undergoing the warm-up process.

2.11 Tools Button

The Tools button opens a form with controls to maintain ovens, applications, users, etc.

2.12 Exit button

The Exit button closes Oven Log.

3.0 Customize Form

Cart	Erecta	Shelf	904	Coating	22 °C	0:00
Cart	Erecta	Shelf	Cart 905	Coating	22 °C	0:00
Cart	Erecta	Shelf	Cart 906	Coating	22 °C	0:00
Cart	Erecta	Shelf	Cart 911	Coating	22 °C	0:00
Cart	Erecta	Shelf	Cart 912	Coating	22 °C	0:00
Cart	Erecta	Shelf	Cart 926	Coating	22 °C	0:00
Dry Box	McDry	DXU-1002-100	702	341 crib	22 °C	0:00
Dry Box	McDry	DXU-1002-100	654	Auto	22 °C	0:00
Dry Box	Dr. Storage	X2E-480	E03328	Auto	22 °C	0:00
Dry Box	McDry	DXU-1002-100	842	Coating	22 °C	0:00
Dry Box	McDry	MCU-580SE	456	H6	22 °C	0:00
Dry Box	Dr. Storage	X2M-600	7682	Inline	22 °C	0:00
Oven	Associated	BK1104	81167	1C09?	65 °C	0:00
Oven	Associated	unknown	K68406	1C15?	225 °F	0:00
Oven	Sheldon	FX14-2	E02908	Auto	80 °C	0:00
Oven	Sheldon	FX14-2	E03010	Auto	105 °C	0:00
Oven	Sheldon	FX14-2	E03028	Auto	105 °C	0:00
Oven	Sheldon	FX14-2	E02909	Bond	105 °C	0:00
Oven	Despatch	LFD2-24	796296	Coating	105 °C	0:00
Oven	Blue M	OV-490A-2	E03416	Coating	77 °C	0:00
Oven	Blue M	OV-490A-2	110945	Comp Pre	105 °C	0:00
Oven	Despatch	LFD1-42	670252	F2	65 °C	0:10
Oven	Precision	29	800607	F2	65 °C	3:30

Ablefilm	5:00	102 to 108 °C
Air Cure 2	2:00	20 to 25 °C
Air Cure 24	24:00	20 to 25 °C
Air Cure 48	48:00	20 to 25 °C
Air Cure 8	8:00	20 to 25 °C
Arathane 2	2:00	74 to 80 °C
Arathane 8	8:00	74 to 80 °C
Armstrong C7	2:00	77 to 83 °C
C7 CAB-O-SIL	2:00	77 to 83 °C
Chipbond 3607	0:20	105 °C
Chipbond 3621	2:00	102 to 108 °C
Conap	4:00	105 °C
Dymax	0:30	105 °C
Eccobond	2:00	65 °C
Enthone Ink	1:00	105 °C
Humiseal 1B31	0:30	77 °C
Humiseal 2A64	3:00	77 °C
Hysol	0:30	105 °C
Label	0:15	100 to 110 °C
Lubricant	0:30	65 °C
Mask/Prebake	4:00	
Prebake	0:30	
Resiweld	1:00	65 to 105 °C
RTV	4:00	
Scotchweld	2:00	62 to 68 °C
Solder Mask	0:30	

0:03
0:10
0:15
0:30
1:00
1:30
2:00
2:30
3:00
3:30
4:00
4:30
5:00
5:30
6:00
6:30
7:00
7:30
8:00
12:00
24:00
48:00
72:00

Go Back
Barcode Sheet
Show Selection
Save Selection
✓

3.1 Oven List

The oven list shows the type, manufacturer, model, tool number, location, temperature, and warm-up time, if any, of all ovens.

3.2 Application List

The application list shows the name and default bake time, if any, of all applications.

3.3 Time List

The time list shows the standard bake times.

3.4 Show Selection Button

Show Selection selects those ovens previously associated with the current user. Only these ovens are visible in the main form. Users may only add/remove TRAKs to/from these ovens.

3.5 Save Selection Button

Save Selection takes the ovens selected in the oven list above and associates them with the current user. After which, only those ovens are visible in the main form.

3.6 ✓ Check Button

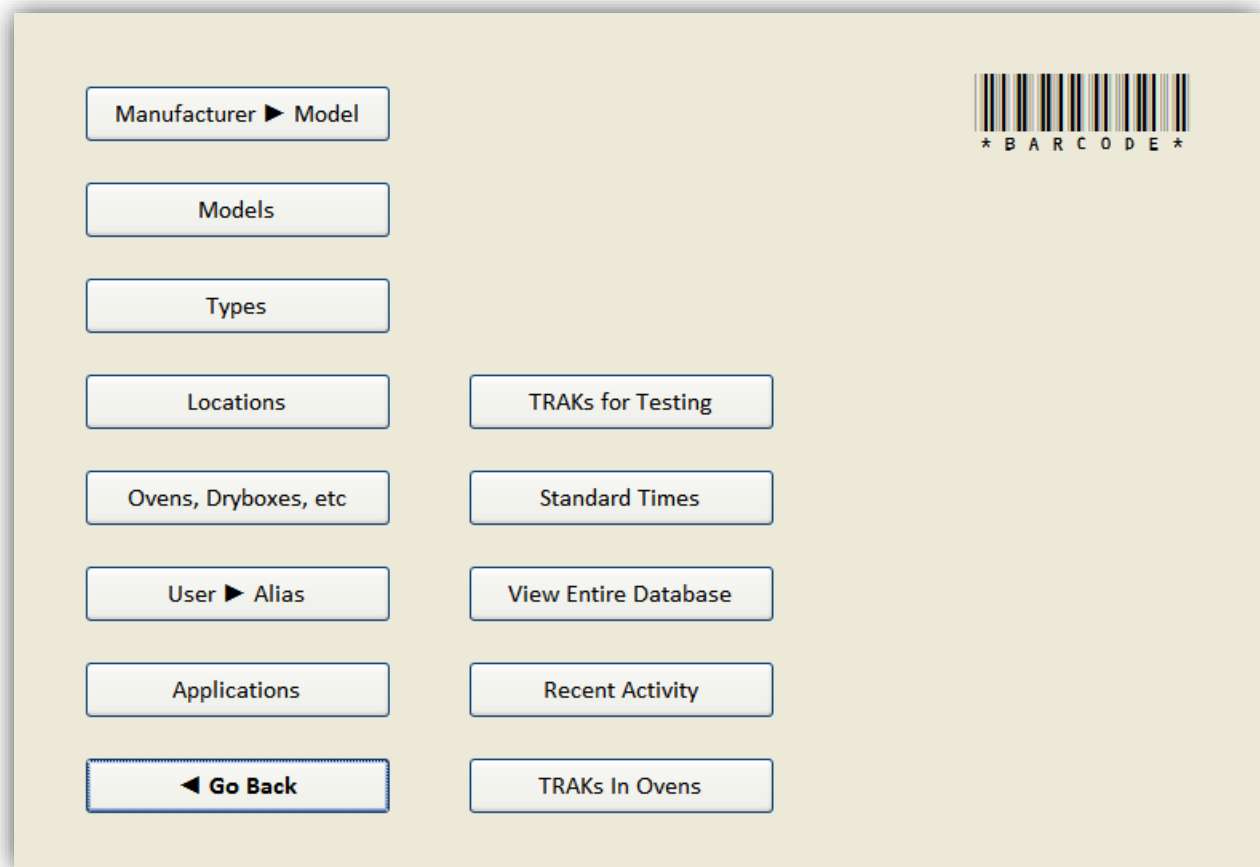
The Check button selects or deselects all ovens in the oven list.

3.7 Barcode Sheet Button

After selecting ovens, applications, and times, click Barcode Sheet to generate a customized printable report. Each page can hold up to eleven ovens, applications, and time and contains the four action barcode: Reset, Oven On, Add, and Remove.

If the barcodes do not render properly, drag **v100001_.ttf** in [\unc\Access\Oven Log](#) to [C:\WINDOWS\Fonts](#) to install the font.

4.0 Tools Form



The screenshot displays the 'Tools Form' interface, which is a menu of navigation buttons. The buttons are arranged in two columns. The top right corner features a barcode with the text '* B A R C O D E *' underneath it. The buttons include options for navigating between 'Manufacturer' and 'Model', viewing 'Models', 'Types', 'Locations', 'Ovens, Dryboxes, etc', 'User' and 'Alias', 'Applications', and a 'Go Back' button. The right column contains buttons for 'TRAKs for Testing', 'Standard Times', 'View Entire Database', 'Recent Activity', and 'TRAKs In Ovens'.

Manufacturer ► Model	
Models	
Types	
Locations	TRAKs for Testing
Ovens, Dryboxes, etc	Standard Times
User ► Alias	View Entire Database
Applications	Recent Activity
◀ Go Back	TRAKs In Ovens

4.1 Manufacturer ► Model Button

The manufacturer ► model button opens the manufacturer table and its indented model table for editing.

4.2 Models Button

The models button allows the maintenance of oven, drybox, etc. models.

4.3 Types Button

The type button opens the types table for editing box types: oven, freezer, refrigerator, etc.

4.4 Locations Button

The location button allows the maintenance of the oven locations.

4.5 Ovens, Dryboxes, etc Button

The button opens the ovens table for editing.

4.6 User ► Alias Button

The user ► alias button opens the user table for editing and its indented alias table. Aliases are used when the user's Windows login mismatches their email address and is inherited from other applications that send email via SMTP.

When the user's login is different from their email address, their *email* address (old login) should be in both **tblUser.strLogin** (yes, it is counter-intuitive to not have their login in a field called Login) and in **tblAlias.strAlias**, but their new *login* should be in **tblAlias.strUserName**. The email address tends to be their original login. The email address tends to be simple, such as `first.last`. Their new login tends to be more exotic, such as `first.m.last` or `first.last2`.

If a user's login changes and they open Oven Log as themselves, a second record will be created in **tblUser** for the "new" user. The proper course of action here is to link the child records associated with the "new" user to the original user record, add an Alias record (with their new login in the **strUserName** field), and then delete the new user record. See code **RelinkUser**.

4.7 Applications Button

The applications button allows the maintenance of the applications and their default bake times.

4.8 TRAKs for Testing Button

TRAKs for Testing displays a report with 63 TRAK ID barcodes for testing the interface of the application.

4.9 Standard Times Button

The standard times button allows the edition and creation of the standard bake times that appear on the barcode form.

4.10 View Entire Database Button

The view entire database button opens a query that shows all information about oven events.

4.11 Recent Activity Button

The recent activity button shows the same information as the view-entire-database button except limited to the past 24 hours.

4.12 TRAKs In Ovens Button

The TRAKs in ovens button shows the same information as the view-entire-database button except limited to only those TRAKs shown in the oven list on the Main form.

4.13 MAC Address Table

In the new version of the Oven Log, an Operator combo box was added. If the station is dedicated to an oven, the oven and temperature combo boxes are disabled and the operator combo box is enabled. If the station is not dedicated, the opposite is true.

4.14 What's my MAC?

If you want the station to be dedicated to an oven, click here to get your MAC address. Copy/paste the address to the MAC Address table and specify the oven index, which is lngBox under the **Ovens, Dryboxes, etc.** button.

Actually, as we determined, the thin clients all seem to have the same MAC address, so that approach didn't work. Now, to make something dedicated, it's a matter of the user having a value in the lngBox field of the user table.

4.15 Missing Badges

This button queries CIMA for THOR labor charged during the last three months and determines which of these badges are missing from the Oven Log's local user table. If the termination date is 1/1/1901, this is an active employee, and their badge should be added under User ► Alias. If the physical person already exists, their old badge should be moved to the alias table and their new badge put in the user table.