

CHANGE/LOG

Operation and Setup Manual

Revision 1.2.3

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CHANGE/LOG Users Manual

ON TIME SUPPORT, INC.

Version 1.2.3

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Section 1- Introduction

CHANGE/LOG Overview

CHANGE/LOG allows you to log all data changes to the FLUKE MET/CAL Plus database, including who was logged in, what field was changed, what change was made, what the original data was when the change was made, and what type of change (update, deletion, insertion) was made.

The logging of the changes to the database is automatic and no further intervention is required. The rest of the process is in obtaining the information you require. This is done by either running a Crystal Report or by using the SQL Command Interpreter (ISQL). An example of an SQL statement to obtain CHANGE/LOG info on a specific Asset and outputting to a file is:

```
Select * from mt.ots_cl_log where MTAG =(select mt.inventory.mtag where mt.inventory.i4201 = 'SAMPLE-87'); output to c:\metcal\chnlog\NewInv.txt
```

IMPORTANT NOTE: This product will record ALL CHANGES to the database. A mass change to 30,000 records in the database will create 30,000 entries in the 'ots_cl_log' table.

Primary Database Tables

There are 5 basic tables in the MET/CAL Plus database, they are;

MT.INVENTORY	Basic info about each Asset is stored here. (ID #, Mfr., Model, Description, Etc.)
MT.LOCATION	History info on who has used the Asset is stored here. (Name, Dept. When, etc.)
MT.REPAIR	History info on repair work or scheduled maintenance is stored here.
MT.CUSTOMERS	Info about the owner of the Asset is stored here. (V6.0 and above)
MT.CALIBRATION	History info on each Cal is stored here.

The MT.CALIBRATION table has 4 sub tables, they are;

MT.CALRESULTS	History of data for each Cal is stored here in a text file format in the database.
MT.RESULTS *	History of data for each Cal is stored here in separate database fields.
MT.RESULTS_RAW *	History of data for each Cal is stored here in data fields used for Measurement Uncertainty.
MT.STANDARDS	History of the ID # of each Standard used for Cal is stored here.

CHANGE/LOG Tables

When the CHANGE/LOG utility is loaded into a FLUKE MET/CAL Plus database, 6 new tables are added. They are;

These 8 tables store a copy of the data when a record from the primary table(s) is deleted.

MT.OTS_CL_INVENTORY	When an Inventory record is deleted, a copy is saved here.
MT.OTS_CL_LOCATION	When a Location record is deleted, a copy is saved here.
MT.OTS_CL_REPAIR	When a Repair record is deleted, a copy is saved here.
MT.OTS_CL_CUSTOMERS	When a Customer record is deleted, a copy is saved here.
MT.OTS_CL_CALIBRATION	When a Calibration record is deleted, a copy is saved here.
MT.OTS_CL_RESULTS *	When a Formatted Results record is deleted, a copy is saved here.
MT.OTS_CL_REUSLTS_RAW *	When a Raw Results record is deleted, a copy is saved here.

This table logs information about changes or deletions.

MT.OTS_CL_LOG	When a change to any data is made, the data field, original data, who and when the change was made, and the new data is saved here. A record that a deletion has occurred is also entered here.
---------------	---

Table: MT.OTS_CL_LOG

FIELD	Description of Field
Log Date/Time	This is the Date and Time that the change was made.
MT User	This is the user ID for who was logged in.
I4201	This is the Asset Number of the record that was changed.
MTAG	This is the unique ID for the record that was changed.
CTAG	This is the unique ID for the Calibration, Calibration Results, or Calibration Standard history record that was changed.
LTAG	This is the unique ID for the Location history record that was changed.
RTAG	This is the unique ID for the Repair history record that was changed.
KTAG	This is the unique ID for the Customer record that was changed.
C2430	This is the MTAG Number of the Standard that was changed.
C2502	This is the CalResult line number that was changed.
Action	This is the type of change performed. UPD Change to existing data. DEL Deletion of record. INS Additional Standard is Added.
Field	This is the field number of the data that was changed.
As-Found	This is the original data found in the field.
As-Left	This is what the data was changed to.

NOTE: The MT.OTS_CL_LOG table should be checked first to determine what type of change has been made to the database.

Changing/Adding Standards

To change a standard used during calibration, the original standard listed has to be deleted and the replacement standard added. Therefore the original standard listed is registered in CHANGE/LOG as a deletion.

NOTE: Adding a standard to a calibration record will be logged as a change to the record if the addition **occurs 2 minutes** after the Calibration record has been created. Otherwise, no change will be logged.

Changing/Adding CalResults

The mt.CalResults table was the original method used to store measurement data from MET/CAL into the database. If a change is made to the CalResults table, the original CalResults is deleted and the modified/new text is completely re-added. Therefore the original CalResults listed is registered in CHANGE/LOG as a deletion and a second set of data will be registered as an update.

NOTE: Adding/Changing CalResults will be logged as a change to the record if the addition/change **occurs 2 minutes** after the Calibration record has been created. Otherwise, no change will be logged.

Changing/Adding Results (Version 7)

The mt.results table will also store data from a MET/CAL procedure, but in separate database fields. This allows added flexibility when creating reports and data is stored in a more efficient format.

Special Fields

Certain fields within the database are automatically calculated fields and therefore are not able to be changed and evaluated for validation purposes. These fields are:

Field #	Default Field Name
C2309	Labor
C2310	Total
R3229	Total
R3232	Part Cost
R3235	Labor Cost
R3252	Total Cost

MERGE Data Tables are not supported by CHANGE/LOG. Changes to these tables will not be recorded.

- For V 7.0 and higher of Met/Base.

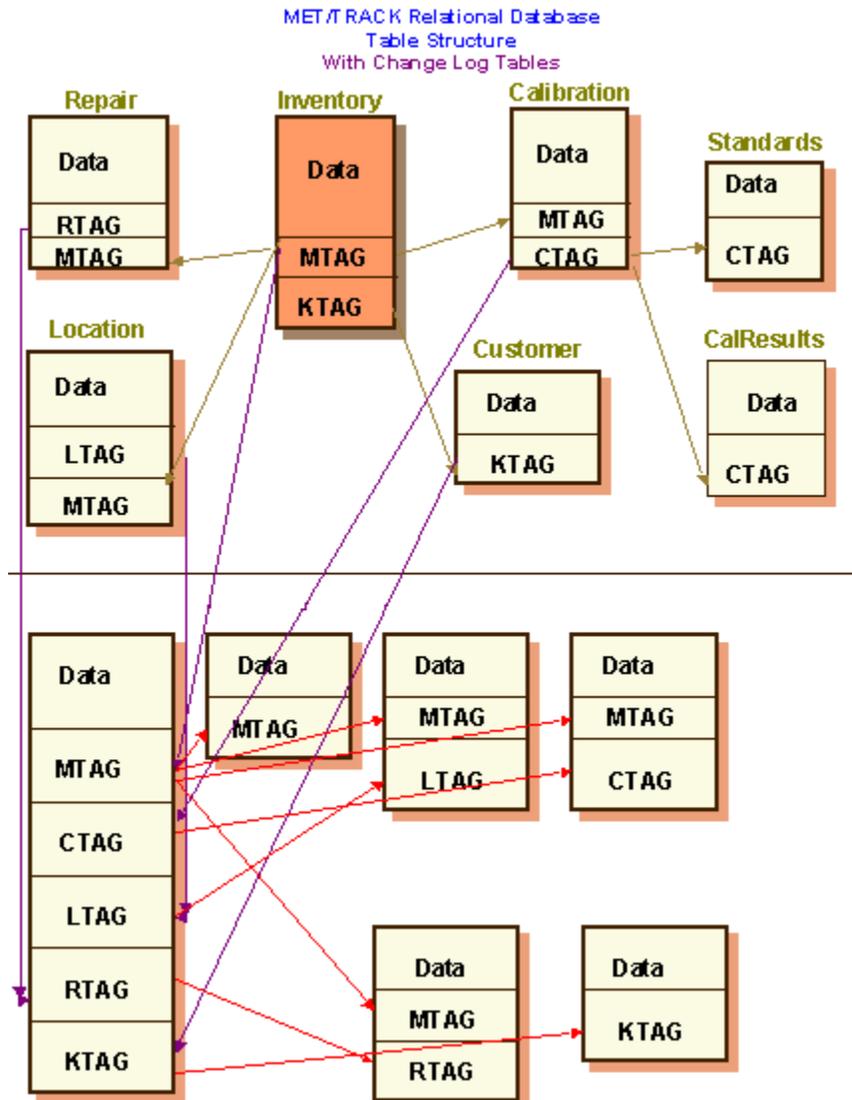


Figure 1 – Table Structure With CHANGE/LOG Tables

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Section 2-Installation

Software Registration

CHANGE/LOG is not able to operate until it has been registered. A registration certificate may have been included in the materials that CHANGE/LOG was shipped in. If no registration certificate was included, then please contact On Time Support using one of the methods listed on the back cover of this manual.

If you were given a registration certificate, or have obtained a registration code from On Time Support, then you are ready to proceed. **You should backup your database before installing CHANGE/LOG.**

IMPORTANT: Close all the Fluke Client applications and make sure ALL users are disconnected from the database prior to installing the CHANGE/LOG Program.

NOTE: If you already have CHANGE/LOG installed on a version of MET/CAL Plus and upgrade to a newer version of MET/CAL Plus, then you will need to re-register the product. CHANGE/LOG detects the version of the database that you are using and installs the appropriate program into the database. It does not automatically update the database when a MET/CAL Plus version is updated. If you have questions about this process, please call ON TIME SUPPORT for assistance.

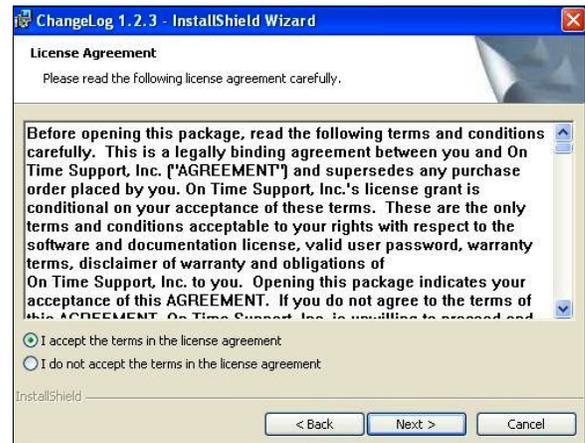
Important: Be sure to install Change/Log on an existing MET/CAL or MET/TRACK workstation. This is only necessary because ODBC will already be configured to run the registration program.

Insert the CD and run [Change_Log_1_2_3_install.exe](#). The installation program will start.

Step 1: Click Next.



Step 2: Acknowledge license and click Next.



Step 3: Read the notice regarding reports.

If you are upgrading to a new version of Change/Log your old reports may be overwritten. Please back up any existing Change/Log reports.

Step 4: Select the user(s) and click Next



Step 5: Select Install Directory. Click Next.



Step 6: Click Install.



Step 7: Click Finish.



The Install Program will create a Change/Log Program group.
Click Start | Programs | Change Log | OTS Registration Mgr.



You will be presented with a screen with 3 boxes requiring information. The first one requires your "MT" (MET/CAL Plus system administrator) password. Enter the password for the "MT" user. The next box is for the entry of the registration code. Enter the registration code provided, including the "dashes" (-). In the final box, select the 32BIT-ODBC data source that is used to connect to the MET/CAL Plus database. This is normally a source called "Calibration Data".

Click on Register, and the program will install and register CHANGE/LOG and update MET/CAL Plus to allow for CHANGE/LOG operation.

Figure 2 - OTS Software Registration Manager

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**Section 3-Verification Process for Logging Changes/Deletions to the
MET/CAL Plus Database using ISQL**

Verifying the Proper Operation of CHANGE/LOG – Manual Method

ON TIME SUPPORT provides for an automatic verification of the CHANGE/LOG program to verify proper database operation. The automatic verification is described in the next section. You should test the database using either the manual or automatic test method. The following procedure is a manual method to verify the operation of the CHANGE/LOG program.

- 1 Obtain a printout of the database configuration for a listing of all field numbers.
 Field numbers in the 1600 and 2100 series are the 'Find Customer' and 'Find Asset' tables, therefore, they do not contain any data and are not logged for changes or deletions.
 Field numbers C2339, L2815 and R3246 are indicators of the current history record and are not logged for changes or deletions.
- 2 Create a test record with an Asset # of 'LOGTEST', and a Location, Calibration and Maintenance history as well as a Customer named 'MEGA CAL'.
- 3 Obtain the MTAG value for the record to be used for this verification process using the following SQL statement: (for this and all subsequent examples, the asset # for the record is 'LOGTEST')

Select MTAG from mt.inventory where I4201 = 'LOGTEST'

Result Example: MTAG = 'LOGTEST:969468539'

Be sure to write down the MTAG value.

- 4 Obtain the existing value for field I4201 in Inventory using the following SQL statement:

Select I4201 from mt.inventory where MTAG = 'LOGTEST:969468539';

Result Example: I4201 = 'LOGTEST'

- 5 Change the data in this field to something different using the following SQL statement:

update mt.inventory set I4201 = 'NEW ID' where MTAG = 'LOGTEST:969468539';

- 6 Obtain the new existing value for field I4201 in Inventory using the following SQL statement:

Select I4201 from mt.inventory where MTAG = 'LOGTEST:969468539';

Result Example: I4201 = 'NEW ID'

- 7 Verify the log has captured the change data using the following SQL statement:

Select * from mt.ots_cl_log where MTAG = 'LOGTEST:969468539';

Result Example:

Log Date Time	Log In Name	I4201	MTAG	CTAG	LTAG	RTAG	KTAG	C2430	C2502	ACTION	FIELD	AS_FOUND	AS_LEFT
2000-09-20 17:12:38.040	mt	NEW ID	LOGTEST:9 69468539							UPD	I4201	LOGTEST	NEW ID

- 8 Repeat steps 3-6 for every field in the 4200 series to be verified.

- 9 Obtain the CTAG value for the record to be used for this verification process using the following SQL statement:

Select CTAG from mt.calibration where MTAG = 'LOGTEST:969468539';

Result Example: CTAG = 'LOGTEST:969468555'

- 10 Obtain the existing value for field C2301 in Calibration using the following SQL statement:

Select C2301 from mt.calibration where CTAG = 'LOGTEST:969468555';

Result Example: C2301 = '2000-09-20'

- 11 Change the data in this field to something different using the following SQL statement:

update mt.calibration set C2301 = '1999-12-15' where CTAG = 'LOGTEST:969468555';

- 12 Obtain the new existing value for field C2301 in Calibration using the following SQL statement:

Select C2301 from mt.calibration where CTAG = 'LOGTEST:969468555';

Result Example: C2301 = '2000-09-20'

- 13 Verify the log has captured the change data using the following SQL statement:

Select * from mt.ots_cl_log where CTAG = 'LOGTEST:969468555';

Result Example:

Log Date Time	Log In Name	I4201	MTAG	CTAG	LTAG	RTAG	KTAG	C2430	C2502	ACTION	FIELD	AS_FOUND	AS_LEFT
17/21/2000 10:17:47	mt	NEW ID		LOGTEST:9 69468555						UPD	C2301	09/20/2000	12/15/1999

- 14 Repeat steps 9-12 for every field in the 2300 series to be verified.

- 15 Obtain the LTAG value for the record to be used for this verification process using the following SQL statement:

Select LTAG from mt.location where MTAG = 'LOGTEST:969468539';

Result Example: LTAG = 'LOGTEST:969468625'

- 16 Obtain the existing value for field L2801 in Location using the following SQL statement:

Select L2801 from mt.location where LTAG = 'LOGTEST:969468625';

Result Example: L2801 = 'JAMES'

- 17 Change the data in this field to something different using the following SQL statement:

update mt.location set L2801 = 'ROBERT' where LTAG = 'LOGTEST:969468625';

18 Obtain the new existing value for field L2801 in Location using the following SQL statement:

Select L2801 from mt.location where LTAG = 'LOGTEST:969468625';

Result Example: L2801 = 'ROBERT'

19 Verify the log has captured the change data using the following SQL statement:

Select * from mt.ots_cl_log where LTAG = 'LOGTEST:969468625';

Result Example:

Log Date Time	Log In Name	I4201	MTAG	CTAG	LTAG	RTAG	KTAG	C2430	C2502	ACTION	FIELD	AS_FOUND	AS_LEFT
13/21/2000 11:13:12	mt	NEW ID			LOGTEST:969468625					UPD	L2801	JAMES	ROBERT

20 Repeat steps 15-18 for every field in the 2800 series to be verified.

21 Obtain the RTAG value for the record to be used for this verification process using the following SQL statement:

Select RTAG from mt.repair where MTAG = 'LOGTEST:969468539';

Result Example: RTAG = 'LOGTEST:969468669'

22 Obtain the existing value for field R3201 in Repair using the following SQL statement:

Select R3201 from mt.repair where RTAG = 'LOGTEST:969468669';

Result Example: R3201 = 'SMOKED'

23 Change the data in this field to something different using the following SQL statement:

update mt.repair set R3201 = 'DOES NOT WORK' where RTAG = 'LOGTEST:969468669';

24 Obtain the new existing value for field R3201 in Location using the following SQL statement:

Select R3201 from mt.repair where RTAG = 'LOGTEST:969468669';

Result Example: R3201 = 'DOES NOT WORK'

25 Verify the log has captured the change data using the following SQL statement:

Select * from mt.ots_cl_log where RTAG = 'LOGTEST:969468669';

Result Example:

Log Date Time	Log In Name	I4201	MTAG	CTAG	LTAG	RTAG	KTAG	C2430	C2502	ACTION	FIELD	AS_FOUND	AS_LEFT
09/21/2000 11:55:27	mt	NEW ID				LOGTEST:969468669				UPD	R3201	SMOKED	DOES NOT WORK

26 Repeat steps 21-24 for every field in the 3200 series to be verified.

27 Obtain the KTAG value for the record to be used for this verification process using the following SQL statement:

Select KTAG from mt.customers where K4601 = 'MEGA CAL';

Result Example: KTAG = 'MEGA CAL:969468837'

28 Obtain the existing value for field K4601 in Customers using the following SQL statement:

Select K4601 from mt.customers where KTAG = 'MEGAzCAL:969468837';

Result Example: K4601 = 'MEGA CAL'

29 Change the data in this field to something different using the following SQL statement:

update mt.customers set K4601 = 'MAGNIFICENT METROLOGY' where KTAG = 'MEGAzCAL:969468837';

30 Obtain the new existing value for field K4601 in Customers using the following SQL statement:

Select K4601 from mt.customers where KTAG = 'MEGA CAL:969468837';

Result Example: K4601 = 'MAGNIFICENT METROLOGY'

31 Verify the log has captured the change data using the following SQL statement:

Select * from mt.ots_cl_log where KTAG = 'MEGA CAL:969468837';

Result Example:

Log Date Time	Log In Name	I4201	MTAG	CTAG	LTAG	RTAG	KTAG	C2430	C2502	ACTION	FIELD	AS_FOUND	AS_LEFT
2000-09-21 12:24:53.530	mt						MEGAzCAL:969468837			UPD	K4601	MEGA CAL	MAGNIFICENT METROLOGY

32 Repeat steps 27-30 for every field in the 4600 series to be verified.

Automatic Verification Process for Logging Changes/Deletions to the MET/CAL Plus Data Base using ISQL

Run the automated verification program 'ValidateCL.sql' in ISQL and check for zero (0) failures. This will be indicated by the message "All validation tests passed!" Open the file in the ISQL editor first, and then click the Execute button.

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Section 4 - Reports

Reports to get started with

There are 16 Crystal Reports provided to assist in obtaining CHANGE/LOG data. The intent of these reports is to help the administrator get started with reports that can be modified for a specific format. Use this report(s) as a guide to create the format you need. These reports will only work with 7.x for the MET/CAL Plus database. They are:

ChangeLog_sample_1_2.rpt	Provides a list of all of the changes.
ChangeLogTF_sample_1_2.rpt	Provides a list of all of the changes with prompts for a time frame.
ChangeLogCalL_sample_1_2.rpt	Provides a list of all of the data for deletions from the Calibration table.
ChangeLogCalS_sample_1_2.rpt	Provides a list of the deletions from the Calibration table.
ChangeLogCalRL_sample_1_2.rpt	Provides a list of all of the data deletions from the Calibration Results table.
ChangeLogCalRS_sample_1_2.rpt	Provides a list of the deletions from the Calibration Results table.
ChangeLogCalRR_sample_1_2.rpt	Provides a list of all of the data deletions from the Calibration Results_Raw table.
ChangeLogCustL_sample_1_2.rpt	Provides a list of all of the data for deletions from the Customer table.
ChangeLogCustS_sample_1_2.rpt	Provides a list of the deletions from the Customer table.
ChangeLogLocL_sample_1_2.rpt	Provides a list of all of the data for deletions from the Location table.
ChangeLogLocS_sample_1_2.rpt	Provides a list of the deletions from the Location table.
ChangeLogRepL_sample_1_2.rpt	Provides a list of all of the data for deletions from the Repair/Maint. table.
ChangeLogRepS_sample_1_2.rpt	Provides a list of the deletions from the Repair/Maint. table.
ChngeLogComp_sample_1_2.rpt	Provides a list of all of the changes, between 2 dates.
ChangeLogInvL_sample_1_2.rpt	Provides a list of all of the data for deletions from the Inventory table.
ChangeLogInvS_sample_1_2.rpt	Provides a list of the deletions from the Inventory table.

Examples of some of these Reports and how to use them are described in more detail on the following pages. You can modify these reports to search between date ranges and any other parameters that you need to search on. ON TIME SUPPORT is available to modify these reports for your database at an additional cost.

Report file name: ChangeLog_sample_1_2.rpt

CHANGES MADE TO THE DATABASE

Printed: 03/21/2001

<u>Asset #</u>	LOGTEST	<u>Field:</u>	Arrive Date
<u>Log Date & Time:</u>	01/03/2001 7:10:15PM	<u>As Found:</u>	2001-01-03
<u>Action:</u>	UPD	<u>As Left:</u>	
<u>Who Made the Change:</u>	fluke		
<u>Asset #</u>	LOGTEST	<u>Field:</u>	Last Cal Date
<u>Log Date & Time:</u>	01/03/2001 7:10:15PM	<u>As Found:</u>	
<u>Action:</u>	UPD	<u>As Left:</u>	2001-01-03
<u>Who Made the Change:</u>	fluke		
<u>Asset #</u>	LOGTEST	<u>Field:</u>	Cal Due Date
<u>Log Date & Time:</u>	01/03/2001 7:10:15PM	<u>As Found:</u>	
<u>Action:</u>	UPD	<u>As Left:</u>	2002-02-03
<u>Who Made the Change:</u>	fluke		
<u>Asset #</u>	NEW ID	<u>Field:</u>	Asset Number
<u>Log Date & Time:</u>	01/03/2001 7:31:53PM	<u>As Found:</u>	LOGTEST
<u>Action:</u>	UPD	<u>As Left:</u>	NEW ID
<u>Who Made the Change:</u>	mt		
<u>Asset #</u>	NEW ID	<u>Field:</u>	Manufacturer
<u>Log Date & Time:</u>	01/03/2001 7:40:30PM	<u>As Found:</u>	OTS
<u>Action:</u>	UPD	<u>As Left:</u>	NEW I4202 DATA
<u>Who Made the Change:</u>	mt		
<u>Asset #</u>	NEW ID	<u>Field:</u>	Model
<u>Log Date & Time:</u>	01/03/2001 7:40:30PM	<u>As Found:</u>	OTS1
<u>Action:</u>	UPD	<u>As Left:</u>	NEW I4203 DATA
<u>Who Made the Change:</u>	mt		

The preceding report indicates the following;

On 1/3/2001 at 7:10:15 PM, Asset # 'LOGTEST' was updated by 'fluke'. The field changed was 'Arrive Date'. The original data was '2001-01-03' and the field was blanked out.

On 1/3/2001 at 7:10:15 PM, Asset # 'LOGTEST' was updated by 'fluke'. The field changed was 'Last Cal Date'. The original data was blank and the field was changed to '2001-01-03'.

On 1/3/2001 at 7:10:15 PM, Asset # 'LOGTEST' was updated by 'fluke'. The field changed was 'Cal Due Date'. The original data was blank and the field was changed to '2002-02-03'.

On 1/3/2001 at 7:31:53 PM, Asset # 'NEW ID' was updated by 'mt'. The field changed was 'Asset Number'. The original data was 'LOGTEST' and the field was changed to 'NEW ID'.

On 1/3/2001 at 7:40:30 PM, Asset # 'NEW ID' was updated by 'mt'. The field changed was 'Manufacturer'. The original data was 'OTS' and the field was changed to 'NEW I4202 DATA'.

On 1/3/2001 at 7:40:30 PM, Asset # 'NEW ID' was updated by 'mt'. The field changed was 'Model'. The original data was 'OTS1' and the field was changed to 'NEW I4203 DATA'.

Report file name: **ChangeLogCalS_sample_1_2.rpt**

DELETIONS FROM CALIBRATION BETWEEN Mar. 20, 2001 @ 16:34 AND Mar. 21, 2001 @ 16:34

Printed: 03/21/2001

<u>Asset #:</u>	NEW ID	<u>Cal Date:</u>	12/15/1999
<u>Log Date & Time:</u>	03/21/2001 4:27:28PM	<u>Cal Time:</u>	23:33:22
<u>Who Deleted:</u>	danh	<u>Who Entered:</u>	
		<u>Standard Used:</u>	SAMPLE-5500

Additional fields may be added to this report as your requirements may dictate.

The preceding report is a 'Short Form' containing only a summary. It indicates that a calibration record for Asset 'NEW ID' was deleted on 3/21/2001 at 4:27:28 PM by 'danh'. The date of calibration was 12/15/1999 at 23:33:22 with a standard used of 'SAMPLE-5500'. More information on this record may be found by using ISQL to locate this record in 'ots_cl_calibration' or by running the 'Long Form' of the report 'ChangeLogCalL_sample_1_2.rpt'

Report file name: **ChangeLogCustS_sample_1_2.rpt**

DELETIONS FROM CUSTOMERS BETWEEN Mar. 20, 2001 @ 16:41 AND Mar. 21, 2001 @ 17:41

Printed: 03/21/2001

<u>Cust Code:</u>	OTS	<u>Date Time Entered:</u>	
<u>Log Date & Time:</u>	03/21/2001 4:41:44PM	<u>Who Entered:</u>	
<u>Who Deleted:</u>	mt	<u>Cust Name:</u>	JOE BLOW

Additional fields may be added to this report as your requirements may dictate.

The preceding report is a 'Short Form' containing only a summary. It indicates that a customer record for customer code 'OTS' was deleted on 3/21/2001 at 4:41:44 PM by 'mt'. More information on this record may be found by using ISQL to locate this record in 'ots_cl_customers' or by running the 'Long Form' of the report 'ChangeLogCustL_sample_1_2.rpt'

Report file name: **ChangeLogLocS_sample_1_2.rpt**

DELETIONS FROM LOCATION BETWEEN Mar. 20, 2001 @ 16:45 AND Mar. 21, 2001 @ 16:45

Printed: 03/21/2001

<u>Asset #:</u>	NEW ID	<u>LOC Date & Time Created:</u>	12/13/1993 12:00:00AM
<u>Log Date & Time:</u>	03/21/2001 4:27:45PM	<u>User Name:</u>	ROBERT
<u>Who Deleted:</u>	danh	<u>Who Entered:</u>	JASON

Additional fields may be added to this report as your requirements may dictate.

The preceding report is a 'Short Form' containing only a summary. It indicates that a location record for Asset 'NEW ID' was deleted on 3/21/2001 at 4:27:45 PM by 'danh'. The User Name was 'ROBERT' and the record was created by 'JASON'. More information on this record may be found by using ISQL to locate this record in 'ots_cl_location' or by running the 'Long Form' of the report 'ChangeLogLocL_sample_1_2.rpt'

Report file name: **ChangeLogRepS_sample_1_2.rpt**

DELETIONS FROM MAINTENANCE BETWEEN Mar. 20, 2001 @ 16:48 AND Mar. 21, 2001 @ 16:48

Printed: 03/21/2001

<u>Asset #:</u>	NEW ID	<u>Maint. Date:</u>	03/27/1932
<u>Log Date & Time:</u>	03/21/2001 4:28:20PM	<u>Maint. Time:</u>	23:32:41
<u>Who Deleted:</u>	danh	<u>Who Entered:</u>	NEW R3245
		<u>Maint Type:</u>	Q

Additional fields may be added to this report as your requirements may dictate.

The preceding report is a 'Short Form' containing only a summary. It indicates that a maintenance record for Asset 'NEW ID' was deleted on 3/21/2001 at 4:28:20 PM by 'danh'. The Maint. Type was 'Q' and the record was created by 'NEW R3245'. More information on this record may be found by using ISQL to locate this record in 'ots_cl_repair' or by running the 'Long Form' of the report 'ChangeLogRepL_sample_1_2.rpt'

Report file name: **ChangeLogInvL_sample_1_2.rpt**

DELETIONS FROM INVENTORY BETWEEN Apr. 15, 2001 @ 22:21 AND Apr. 17, 2001 @ 22:21

Printed: 04/16/2001

Asset #:	NEW ID	INV Date & Time Created:	4/16/2001 12:00:00AM
Log Date & Time:	4/16/2001 12:40:13PM	Who Created:	fluke
Who Deleted:	fluke		

I4201	NEW ID	I4226	Y	I4251
I4202	FLUKE	I4228	M	I4252
I4203	87	I4229	12	I4253
I4204	DMM	I4230	0	I4254
I4205		I4231		I4255
I4206	1234567	I4232		I4256
I4207		I4233		I4257
I4208		I4234		I4258
I4209	9	I4235		I4259
I4210		I4236	4/16/2001 12:00:00AM	I4260
I4211		I4237	fluke	I4261
I4212		I4238		
I4213		I4239		
I4214		I4240	MT	
I4215		I4241		
I4216		I4242		
I4217		I4243		
I4218		I4244		
I4219		I4245		
I4220		I4246		
I4221		I4247		
I4222		I4248		
I4223		I4249		
I4224		I4250		
I4225		I4299	A	
			MTAG	NEWzID:987424806
			KTAG	

The preceding report indicates that an inventory record for Asset 'NEW ID' was deleted on 4/16/2001 at 12:40:13 PM by 'Fluke'. The data for each of the fields for this record is located under the summary. This is a 'Long Form' of this type of report which has the details of the record. The summary may only be obtained by running the 'Short Form' of the report 'ChangeLogInvS_sample_1_2.rpt'.

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SECTION 5 – Purging Data and Archiving Historical Data

Purging Data in the CHANGE/LOG tables

WARNING: Backup your database before performing this procedure.

Run the stored Procedure 'ots_cl_log_purge' in ISQL, with a date to clear all entries in the ots_cl_log table dated on or before the supplied date. (Ex. 'Call ots_cl_log_purge ('2001-01-01)') will purge everything in the log table where 'log_date' is 2001-01-01 or earlier.

WARNING!! Once this stored procedure is run, the data is gone.

You may wish to write the data from the ots_cl_log to a file for archive purposes. The following is an example of how to do this with an ISQL statement;

```
SELECT * FROM ots_cl_log WHERE log_date <= '2001-01-01'; output to c:\CLlogArchive.txt
```

You may wish to write the data from the ots_cl_inventory to a file for archive purposes. The following is an example of how to do this with an ISQL statement;

```
SELECT * FROM ots_cl_inventory WHERE i4201 = 'NEW ID'; output to c:\CLInvArchive.txt
```

The following statement would then purge the same records from the ots_cl_inventory table;

```
DELETE FROM ots_cl_inventory WHERE i4201 = 'NEW ID';
```

Removing CHANGE/LOG from the Database

WARNING: Backup your database before performing this procedure.

You can remove Change/Log from the database by running 'sqlclean.sql' in the ISQL editor. This will eliminate the Change/Log components. The 'sqlclean.sql' script is located in the installation directory where Change/Log is installed. You may want to move this script file to a more secure location to eliminate the possibility that it is executed by mistake.

