

MEI633

Maintenance Terminal User Manual

MEI633_MT UM_1_1
Version 1.1

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Version History

Author	Date	Title or brief description of change	Version
Shalini B	15 th Nov 2008	Initial Release	Draft
Venu D	20 th Aug 2009	Updated menus	Version 1.0
Venu D	10 th July 2010	Added new screen shots, Checksum Display, Provision to copy the selected events/faults from online window.	Version 1.1

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1. Introduction

This section provides an overview of the Maintenance Terminal Software. Using this software Maintenance Engineers and Application Engineers can view and monitor the Events/ Relay Status and MEI System Faults.

Maintenance Terminal has a very user friendly Graphical User Interface:



Graphical user Interface of Maintenance Terminal for MEI633 is as shown above:

Maintenance Terminal provides you a wide range of options.

- Maintenance Terminal can be configured using configuration settings where you can configure the MT (PC) according to the CIU like Setting COM Port (used for communicating with the CIU), Setting Date and Time etc.

- Through MT you can view Online Data of the system namely Events and Faults status respectively in Tabular View and Graphical Views,
- Through MT you can view offline data of **Events** and **Faults** in both list view and graphical views,
- Maintenance Terminal cautions you when any Fault occurs in the system so that you can take necessary action,
- Also, MT shows and produces buzzers for Faults and Critical Faults in both the channels, Channel-A and Channel-B
- MT provides an option to view offline data between selected dates in Events, Faults, and Graphical view of Events.
- A password protected Application Data upload to the CIU (Central Interlocking Unit) and Download Application Data to the CIU is also provided in this software,
- You can View the Online Yard status and Offline Yard status from MT.

2. Menu Options

2.1. File Menu

In this menu you have the following options:

- Online
- Offline
- View History Data
- Exit

MT operates in two modes namely:

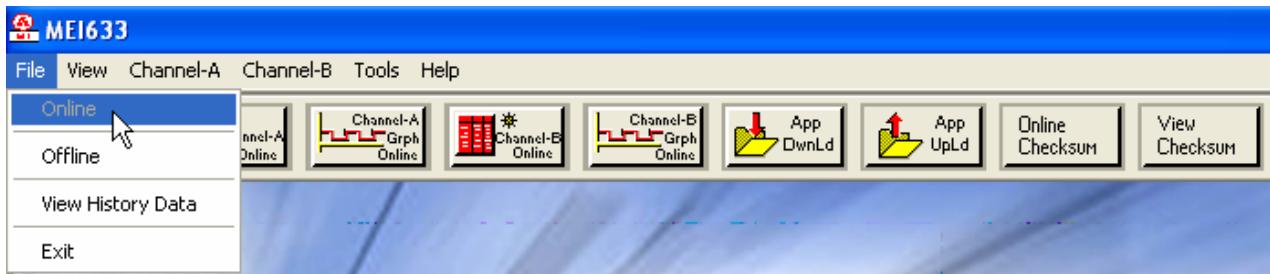
- Online Mode
- Offline Mode

2.1.1. Online

This option is used to communicate with Central Interlocking Unit. Maintenance Terminal receives data from the system through two Serial Ports, and its status is shown in separate windows simultaneously for Channel-A and Channel-B. These windows can be activated through Channel-A and Channel-B menu items and by selecting "View Event Log/Fault Log Online" option.

Graphical View of Online Events of both the Channels can be selected through "View Event Graph Online" option.

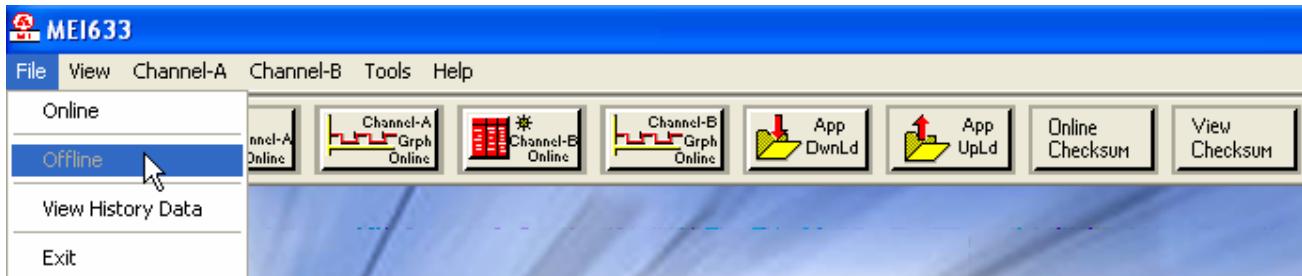
The following is the Menu option:



When you connect to the CIU, Online option in the File Menu is disabled and the Offline Option is enabled. The Application Download and Upload tool buttons are disabled, since application Upload and Download options cannot be done when MT is in Online Mode.

2.1.2. Offline

This option is used to Disconnect from the CIU, The following is the Menu option:



When you disconnect from the system online option in the File Menu is enabled and the Offline (Disconnect from System) Option is disabled. The Application Download and Upload options are unavailable in online mode. Application Upload and Download options can be performed only when MT is in Offline Mode.

2.1.3. View History Data

View history data option is used to view the log reports of Channel-A and Channel-B.

You can view Event Log in tabular form and in Graphical view. You can view a part of log with in the specified Date and time, and also depending up on the Relay Types. There are filters where you will be able to view the desired records.

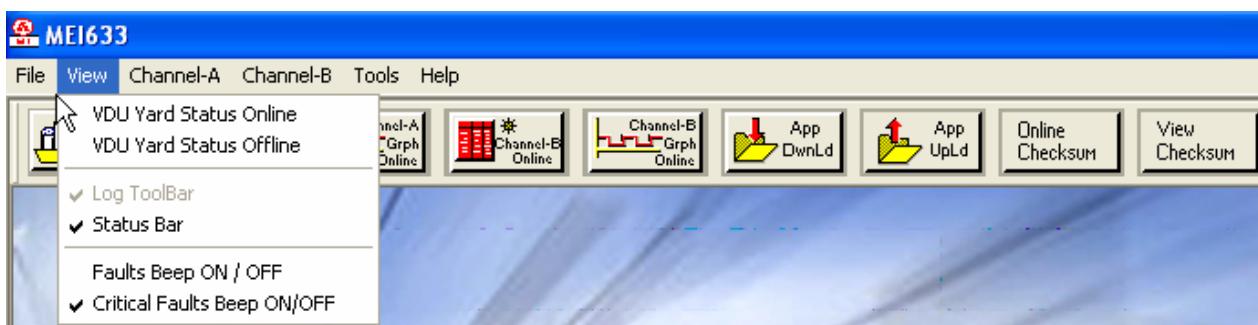
You can view Fault Log between specified Date and Time in tabular view, MT provides a filtering option through which you can view the log Module wise. Also, you can view all the Critical Faults occurred during that time. This option is unavailable in online mode.

2.1.4. Exit

This Menu option is used to close or Exit from Maintenance Terminal.

2.2. View Menu

- VDU Yard Status Online
- VDU Yard Status Offline
- Status Bar
- Faults Beep ON/OFF
- Critical Faults Beep ON/OFF

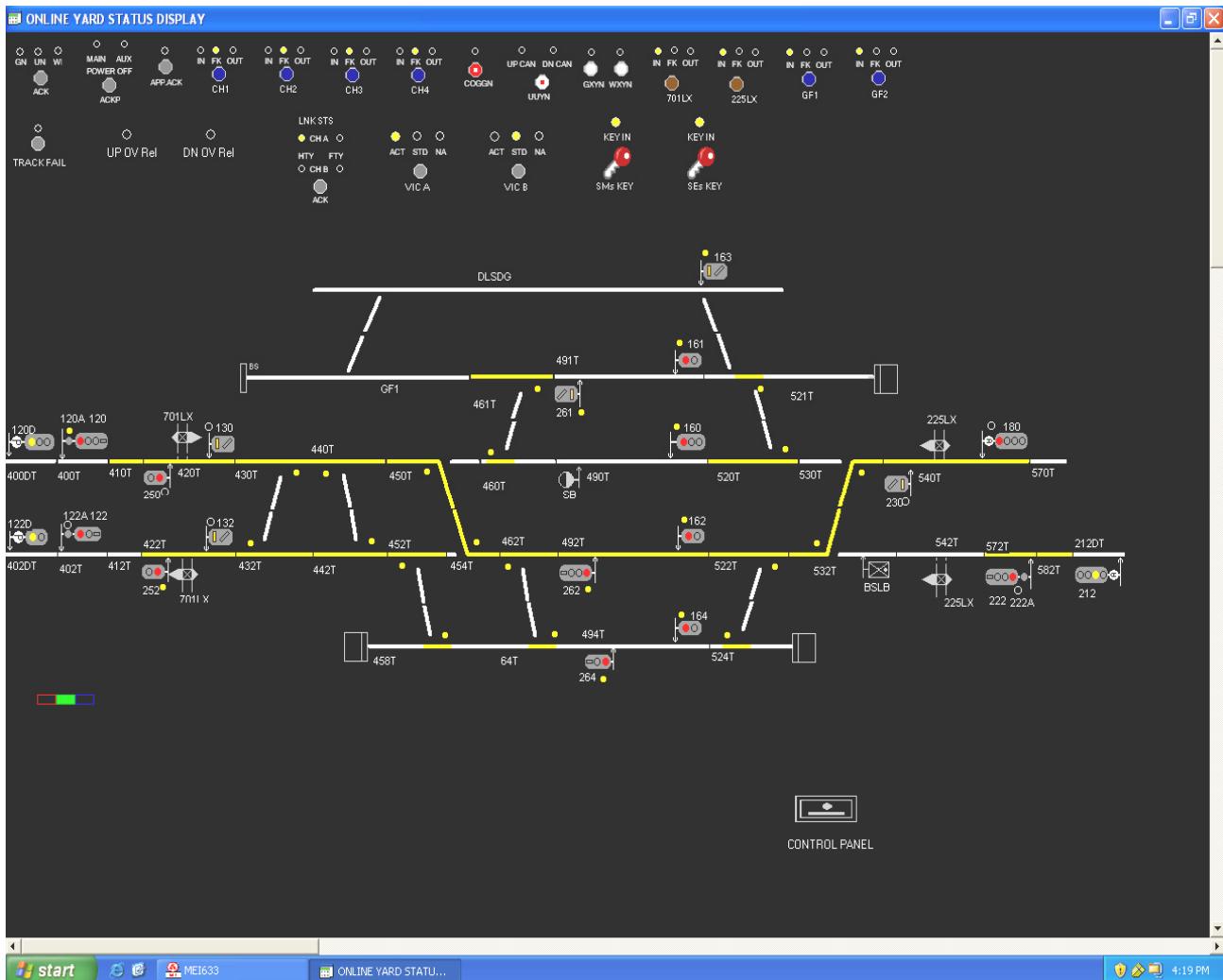


If MT is in Offline mode VDU Offline option is available. When MT is in Online Mode, VDU Online option is available and VDU Offline status is unavailable.

When MT is in online mode "VDU Yard Status Offline" option is unavailable.

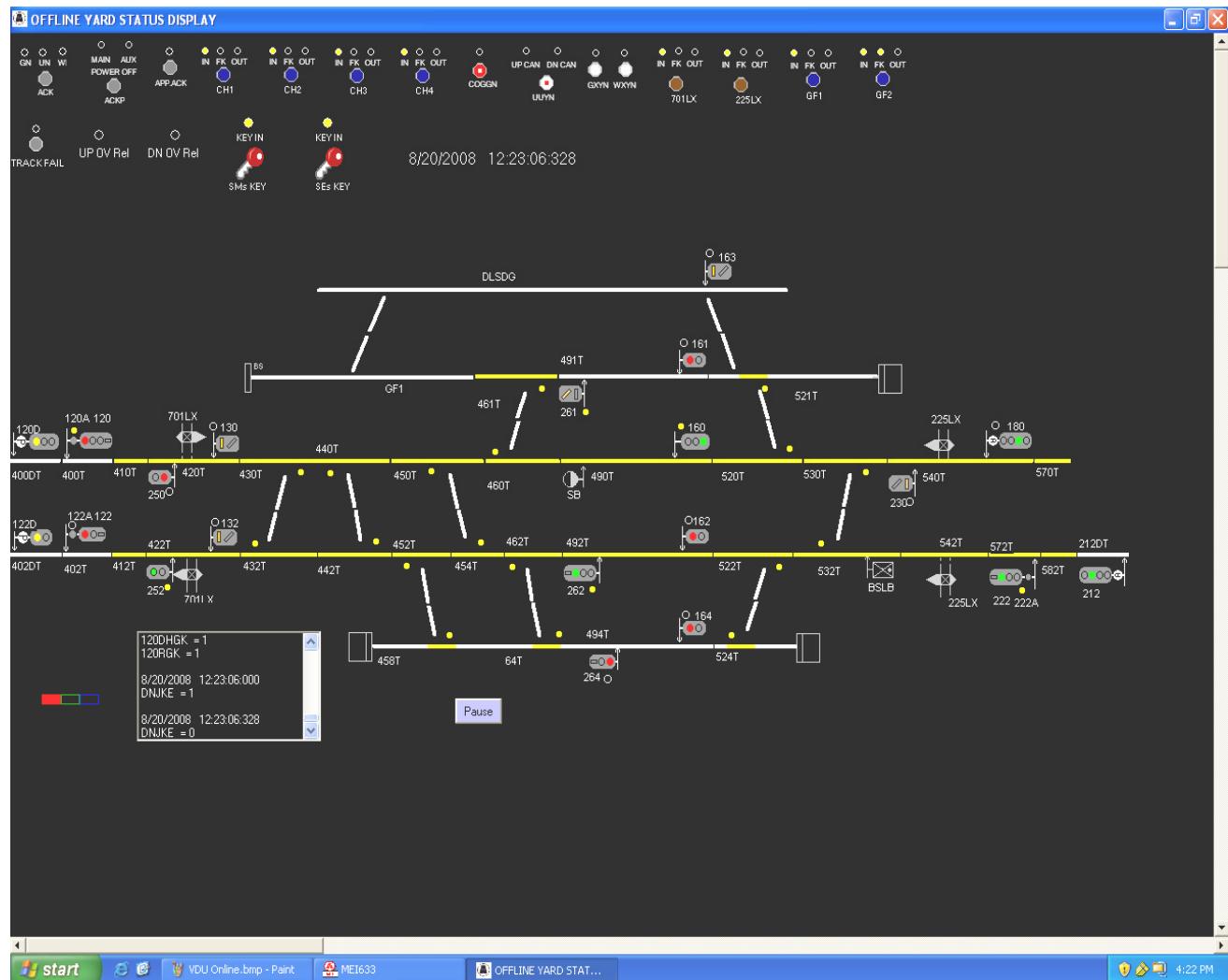
2.2.1. VDU Yard Status Online

VDU Yard Status Online option allows you to view the online yard status in a separate window.



2.2.2. VDU Yard Status Offline

"VDU Yard Status Offline" option allows you to view the Offline yard status, you can view the status of the yard at a defined period of time in this option.



2.2.3. Status Bar

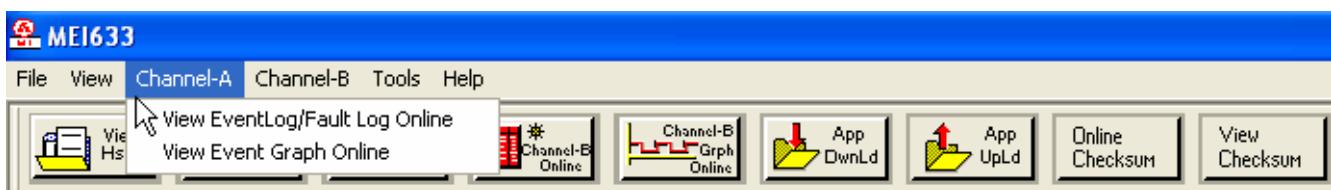
This option is used to show or hide the status bar. A typical MT Status Bar is as shown here.



The Status Bar in MT gives you a bunch of information.

- The second left pane where "CHANNEL-A" is shown gives you information on Channel-A's status. It gives you brief information on the communication between CIU and MTs Channel-A.
- The third left pane where "CHANNEL-B" is shown gives you information on Channel-B's status. It gives you brief information on the communication between CIU and MT.
- The fourth left pane tells you if the Caps Lock is on,
- The fifth left pane tells you if the NUM Lock is on,
- The last pane tells you if the Scroll Lock is on.

2.3. Channel-A Menu



Channel-A menu option has the following Sub-Menus:

- View Event Log/Fault Log Online
- View Event Graph Online

2.3.1. View Event Log/Fault Log Online

This option gives you a detailed status like Date and time of current Events and the current Faults, their current status, their sequence number etc; in the CIU. Further options in this Window are:

Printing Online Event log reports and Printing Online Fault log reports.

Setting Date and Time of the MT.

Clearing data in both the lists

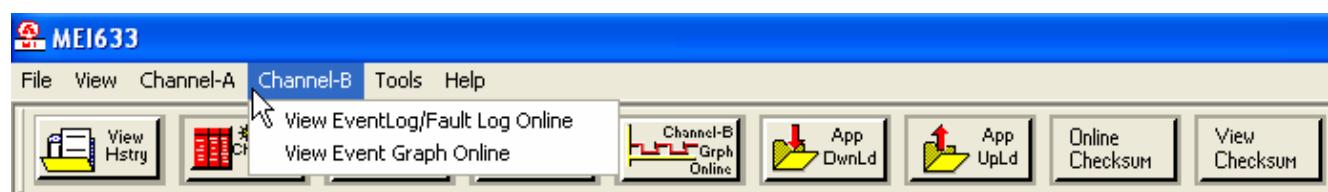
Freezing display from the CIU while communicating continues with CIU in background.

2.3.2. View Event Graph Online

This option allows you to view the status of the current Events in Graphical view.

You can view the current status of the desired Events through a selection dialog, where you can select the desired Events and then View the Graphical representation of Relay Status in Graph.

2.4. Channel-B Menu



Channel-B menu option has the following Sub-Menus:

- View Event Log/Fault Log Online
- View Event Graph Online

2.4.1. View Event Log/Fault Log Online

This option gives you a detailed status like Date and time of current Events and the current Faults, their current status, their sequence number etc; in the CIU.

Further options in this Window are:

Printing Online Event log reports and Printing Online Fault log reports.

Setting Date and Time of MT (PC).

Clearing data in both the lists

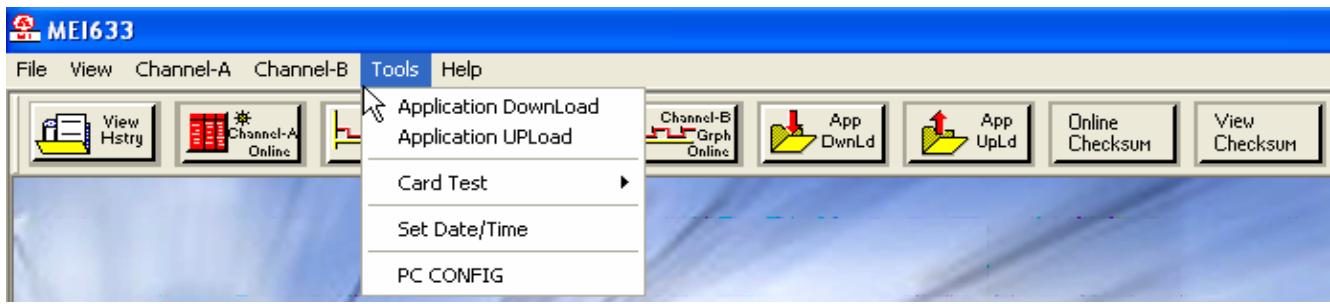
Freezing display from the CIU but communicating in background.

2.4.2. View Event Graph Online

This option allows you to view the status of the current Events in Graphical view.

You can view the current status of the desired Events through a selection dialog, where you can select the desired Events and then View the Graphical representation of Up and Down Status in Graph.

2.5. Tools Menu

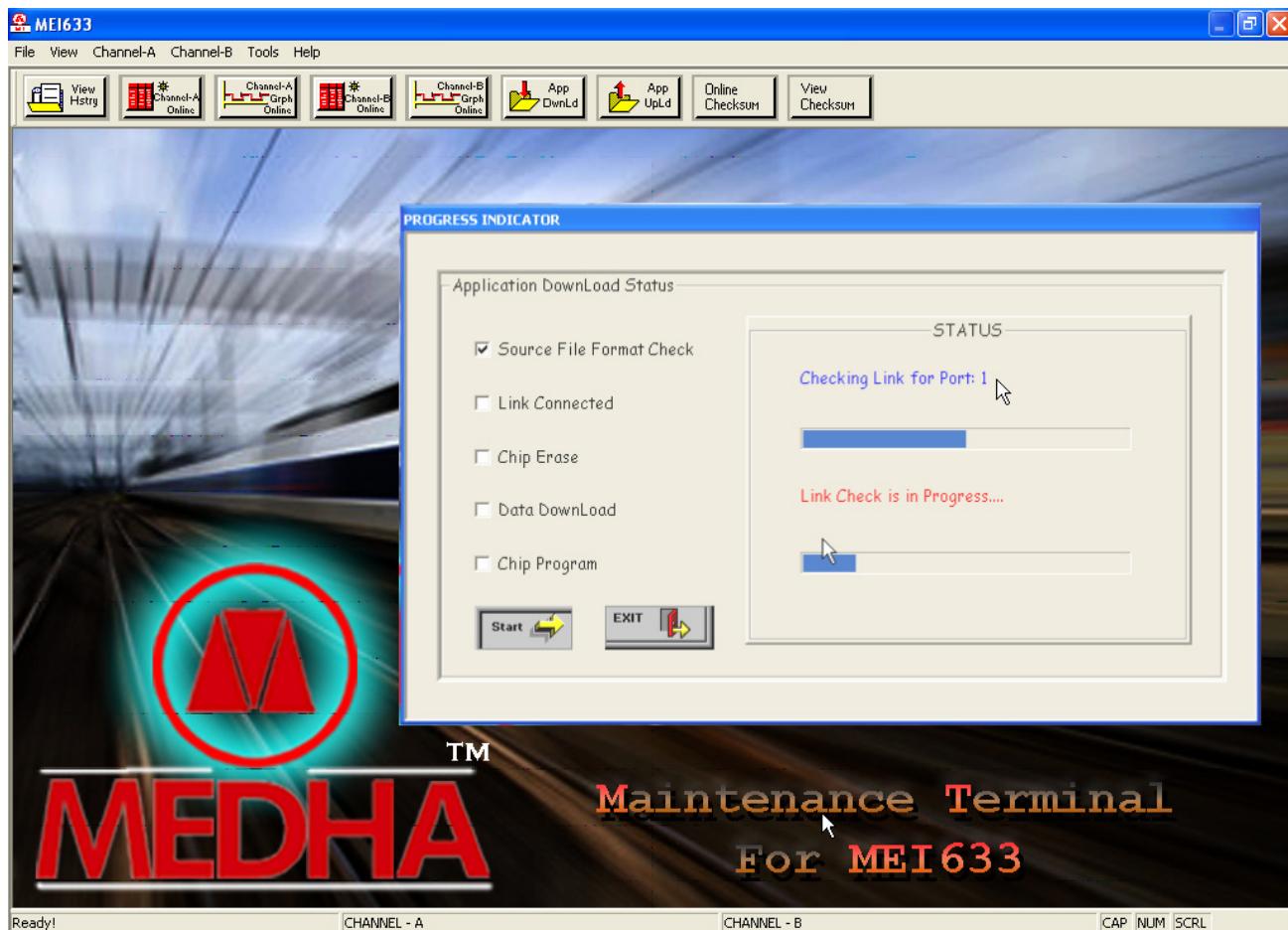


This Menu has the following options:

- Application Download
- Application Upload
- Set Date / Time
- PC Config

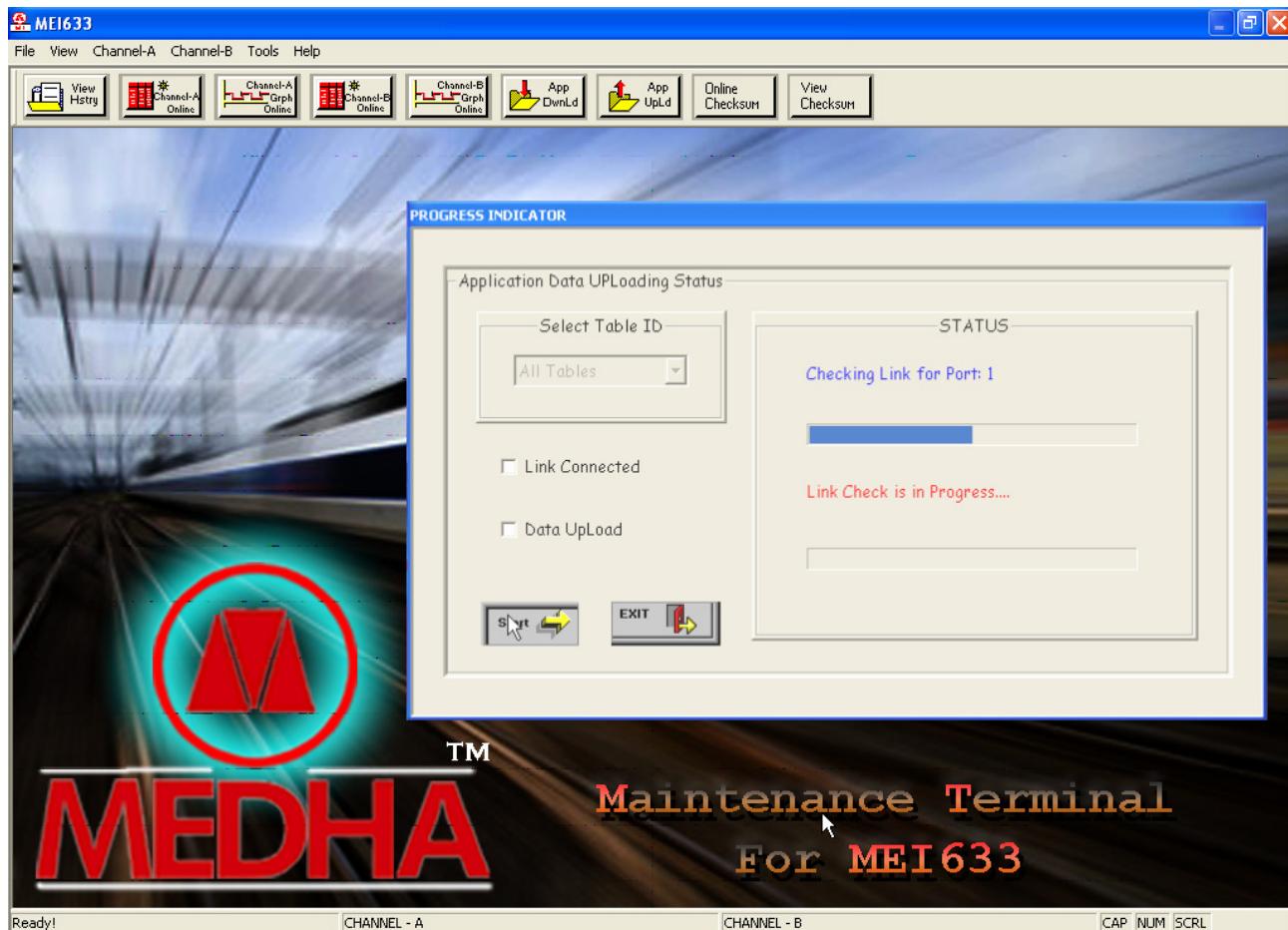
2.5.1. Application Download

Application Download operation is performed through this menu option. Data is downloaded from MT to CIU. The Screen used for this operation is as shown below:



2.5.2. Application Upload

Application Upload operation is performed through this menu option. Data is uploaded from System to MT. The Screen used for this operation is as shown below:



2.5.3. Set Date/Time

Setting the Date and Time of PC can be done through this option.
Below is the Screen used to perform this operation.



2.5.4. PC Config

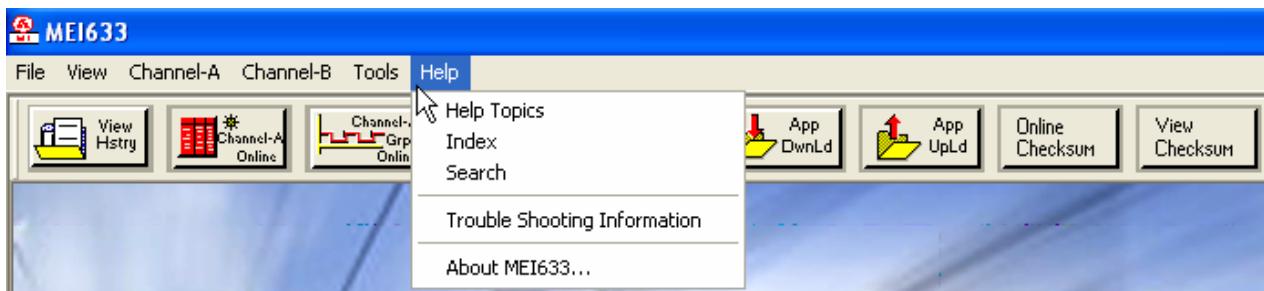
Configuring PC for communication is done through this option provided in MT. You can Change the Port Numbers used for Serial communication between CIU and MT.

Below is the Screen used to perform this operation.



2.6. Help Menu

The following is the Menu option for Maintenance Terminal's Help and Trouble Shooting Information.

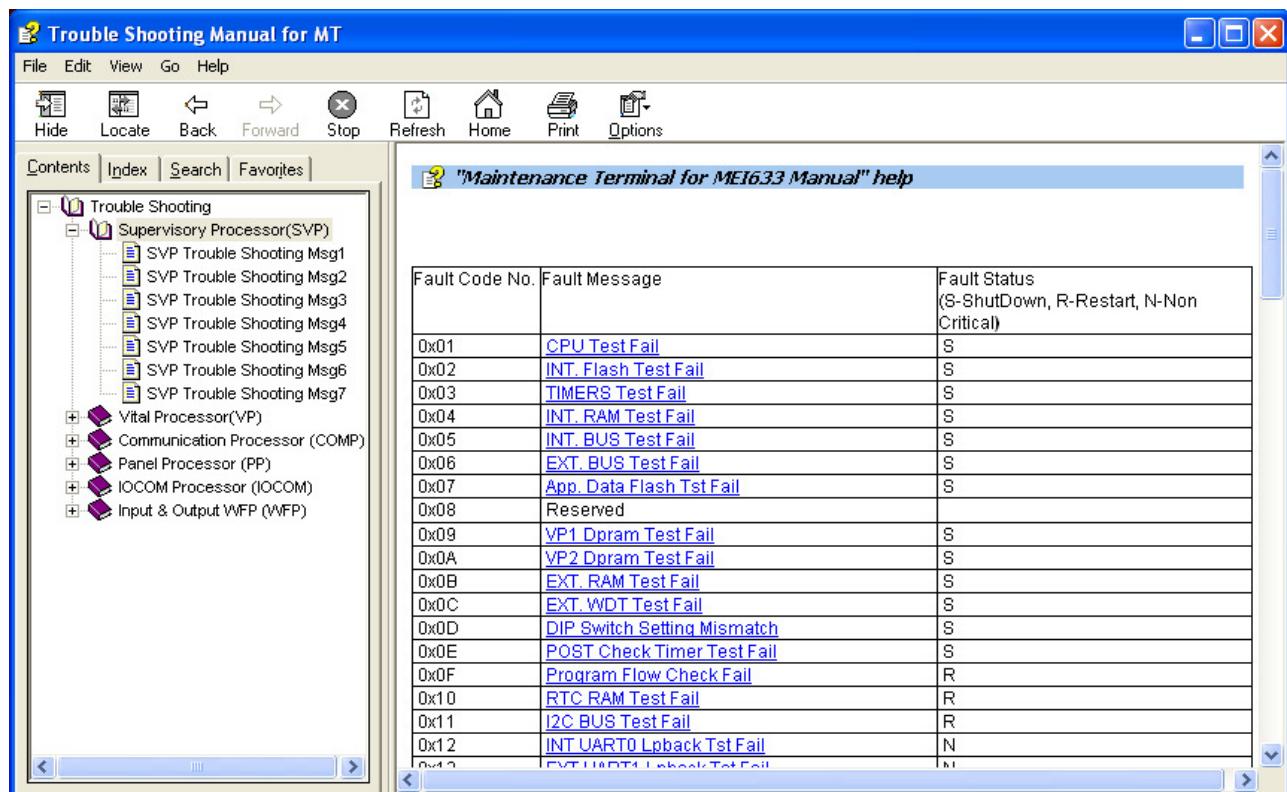


Help Menu provides you a classified and detailed Help, which allows you to use Maintenance Terminal, all its features and all options easily.

Help Topics Menu option is used to open the help Manual's Contents, Index Menu option is used to open the help Manual's Index, and through Search Menu option you can open the Help Manual's

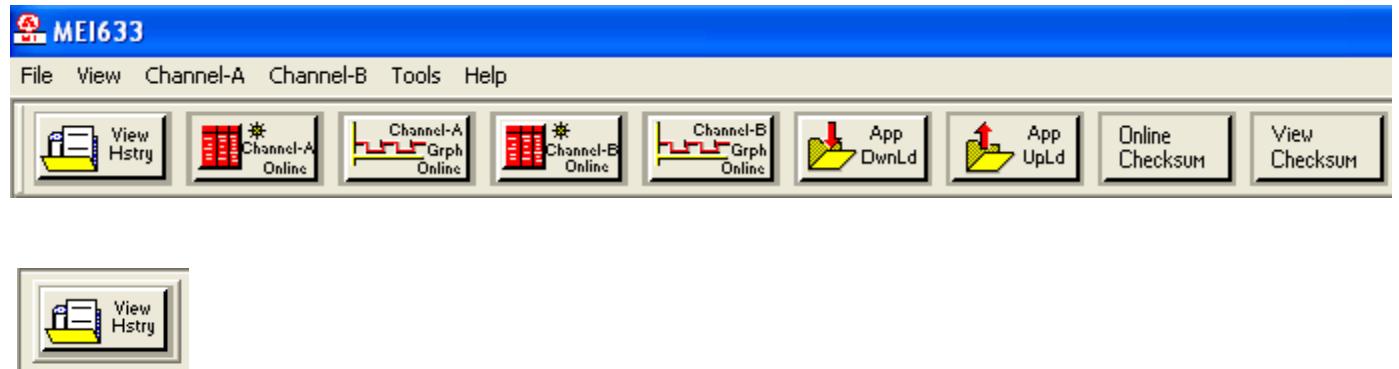
Search tab directly, these are shortcuts provided with MT. You can also navigate in the Help Manual directly.

Maintenance Terminal provides a complete Trouble Shooting Manual, where you can find necessary action to be performed when a Fault or a Critical Fault occurs. You can open the Trouble Shooting Manual using the "**Trouble Shooting Information**" option in "Help" menu. Below is a screen of Trouble Shooting Manual.



2.7. Tool Buttons

The shortcut Tool Bar provided by MT is as shown below:



View Hstry: This tool button is a shortcut for viewing History Data. When you click this tool button a selection window is displayed, where you can select the log you want to view. This window allows you to view the history data of the system, data of Channel-A's Event log, Fault log, Event log graphical view, Channel-B's Event log, Fault log, Event log graphical view.



Channel-A Online: This button opens the online window of Channel-A.



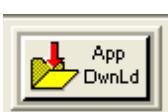
Channel-A Graph Online: This button opens the online graph window of Channel-A



Channel-B Online: This button opens the online window of Channel-B.



Channel-B Graph Online: This button opens the online graph window of Channel-B



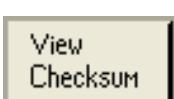
App DwnLd: This button opens the Application Download Window, initially LOGIN window is opened. After logging in, Application Download window opens.



App UpLd: This button opens the Application Upload Window.



Online Checksum: This button used for shows the Checksum report of the cards in online mode.



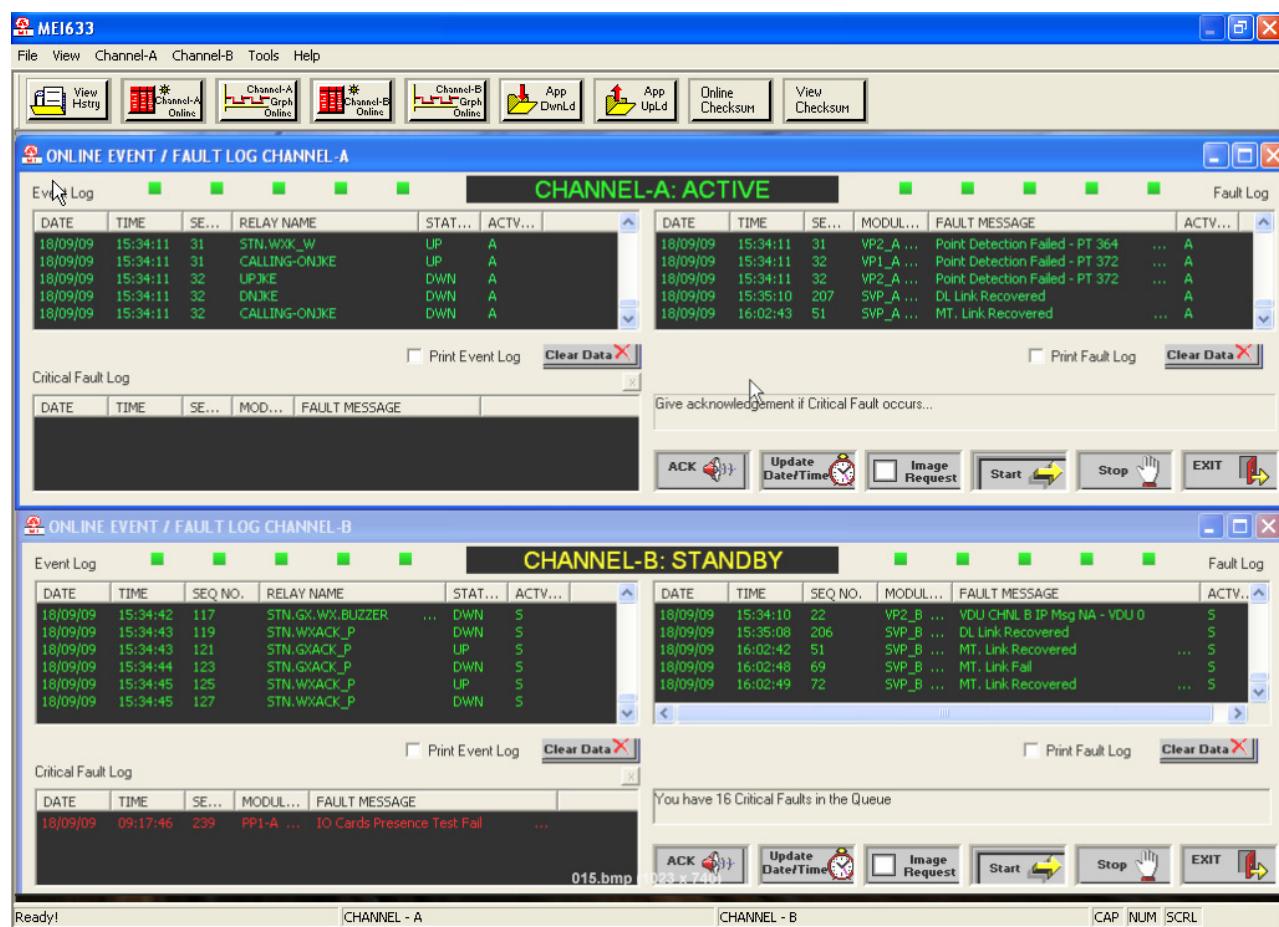
Offline Checksum: This button used for opens the previous Checksum report of the cards.

3. Online Mode Event and Fault Display

In Online Mode MT establishes communication between the system and receives the data, this received data is shown in Online window.

Online window for Channel-A and Channel-B are same, therefore any description of this window is applicable for both Channel-A and Channel-B.

Online windows for Channel-A and Channel-B are Identical as shown below:

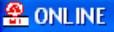


In MT online, provision for copying the selected events and faults on to the clipboard is provided.

DATE	TIME	SE...	RELAY NAME	STAT...	ACTV...	
09/08/10	16:27:25	56	372BWN_P	DWN	S	
09/08/10	16:27:25	57	EUYN_P	DWN	S	
09/08/10	16:27:25	58	180GN_P	DWN	S	
09/08/10	16:27:25	59	230GN_P	DWN	S	
09/08/10	16:27:25	60	EGGN2_P	DWN	S	
09/08/10	16:27:25	61	225LXN_P	DWN		Copy
09/08/10	16:27:25	62	264GN_P	DWN		
09/08/10	16:27:25	63	262GN_P	DWN	S	
09/08/10	16:27:25	64	261GN_P	DWN	S	
09/08/10	16:27:25	9	T2.420UN_P	DWN	A	
09/08/10	16:27:25	242	132ALK	DWN	S	
09/08/10	16:27:22	49	AGGN_P	DWN	S	
09/08/10	16:27:22	82	161GN_P	DWN	A	

3.1. Title Bar Description

Top pane indicates the Title Bar of the window, Information about the Window is shown in the Title Bar.

-  MEI633 Application's Title Bar
-  ONLINE EVENT / FAULT LOG CHANNEL-A Online Window of Channel-A
-  -CHANNEL-A DISPLAY FREEZED- Online Window of Channel-A when Display is Freezed
-  EVENT LOG GRAPH CHANNEL-A ONLINE Online Event Log Graphical View
-  ONLINE EVENT / FAULT LOG CHANNEL-B Online Window of Channel-B
-  -CHANNEL-B DISPLAY FREEZED- Online Window of Channel-B with Freezed Display
-  EVENT LOG GRAPH CHANNEL-B ONLINE Online Event log Graphical
-  Select Relays Here. Events Selection box
-  LOGIN Security
-  PROGRESS INDICATOR Application Upload Download
-  PC CONFIG PC configuration

3.2. State Description

State of Channels

like Active / Stand

By are also shown on
the top center pane of
the window.



Indicates Channel-A is Active



Indicates Channel-A Stand By



Indicates Channel-A Link Break



Indicates Channel-B Active



Indicates Channel-B Stand By



Indicates Channel-B Link Break.

There are some Indicators at the top Left and Top Right pane of the window, as shown below;



Indicates Channel-A/Channel-B's Status are shown in the list controls and all data is being received from the System



Indicates Channel-A/Channel-B display is Freezed from data. And no data is being shown, but System and MT are both communicating in the Background.

3.3. Event Log /Fault log

Event Log

DATE	TIME	SE...	RELAY NAME	STAT...	ACTV...	CHANNEL
18/09/09	15:34:11	30	DNJK	DWN	A	
18/09/09	15:34:11	30	CALLING-ONJKE	DWN	A	
18/09/09	15:34:11	31	STN.WX_BUZZER	UP	A	
18/09/09	15:34:11	31	STN.WXNJPR	UP	A	
18/09/09	15:34:11	31	STN.GX.WX.BUZZER	...	UP	A
18/09/09	15:34:11	31	UPJKE	UP	A	
18/09/09	15:34:11	31	DNJK	UP	A	
18/09/09	15:34:11	31	STN.WXK_W	UP	A	
18/09/09	15:34:11	31	CALLING-ONJKE	UP	A	
18/09/09	15:34:11	32	UPJKE	DWN	A	
18/09/09	15:34:11	32	DNJK	DWN	A	
18/09/09	15:34:11	32	CALLING-ONJKE	DWN	A	

Print Event Log **Clear Data X**

Left Pane shows all the Events logged in the system,

-A: ACTIVE

Fault Log

DATE	TIME	SE...	MODULE N...	FAULT MESSAGE	ACTV...	CHANNEL
18/09/09	15:34:11	31	VP1_A	... Point Detection Failed - PT 330	...	A
18/09/09	15:34:11	31	VP2_A	... Point Detection Failed - PT 330	...	A
18/09/09	15:34:11	31	VP1_A	... Point Detection Failed - PT 333	...	A
18/09/09	15:34:11	31	VP2_A	... Point Detection Failed - PT 333	...	A
18/09/09	15:34:11	31	VP1_A	... Point Detection Failed - PT 361	...	A
18/09/09	15:34:11	31	VP2_A	... Point Detection Failed - PT 361	...	A
18/09/09	15:34:11	31	VP1_A	... Point Detection Failed - PT 364	...	A
18/09/09	15:34:11	31	VP2_A	... Point Detection Failed - PT 364	...	A
18/09/09	15:34:11	32	VP1_A	... Point Detection Failed - PT 372	...	A
18/09/09	15:34:11	32	VP2_A	... Point Detection Failed - PT 372	...	A
18/09/09	15:35:10	207	SVP_A	... DL Link Recovered	A	

Print Fault Log **Clear Data X**

Right pane shows all faults logged in the system.

All Events and Faults are logged with very detailed information like Date and Time of the Events, Sequence number of the Events, Events/Faults name, Status of Events and Module of Faults etc;

Print Event Log This is the option used to print the Event Log in the Online, this option prints all the Events in the Online List Control, and after the List contains a buffer of 28 Events a full page is printed.

Similarly for Printing Fault log the same kind of option is provided by MT, where you can check the option and can receive online prints.



This button allows you to clear the List control data that is clearing the Event log or Fault log for Channel-A and Channel-B, and starts afresh.

Below is the Critical Faults Window.

Critical Fault Log				
DATE	TIME	SE...	MOD...	FAULT MESSAGE
20/08/08	16:13:55	198	WFP...	Timer2 fail
...				

Critical Faults Window consists of the following.

A Header, which is similar to the Fault log, MT provides you with detailed information on Critical Faults. A Date, Time, Sequence Number, then the Module in which the Fault occurs, and Finally the Fault Message.

In this List only one Critical Fault Message can be shown. To View all the Critical Faults you must click the Ack button so that you will be able to view all the critical Faults.

MT can store only 25 Critical Faults at a time. MT produces buzzers for Critical Faults and for Faults as well.

3.4. Online Mode Button Operations

MT Provided Online Buttons.

Ack

This button allows you to see all the critical Faults listed.

Image Request

This button sends a request for the Image to the system, Therefore MT receives Image Data Pack in the next packet.

Update Date/Time.

This button allows you to update the set Date and Time from System to MT.

Start

Start button by default is checked, this button indicates data display is being done, and you can see the green small LEDs at the top pane of the window on both the left and right sides of the window.

Stop

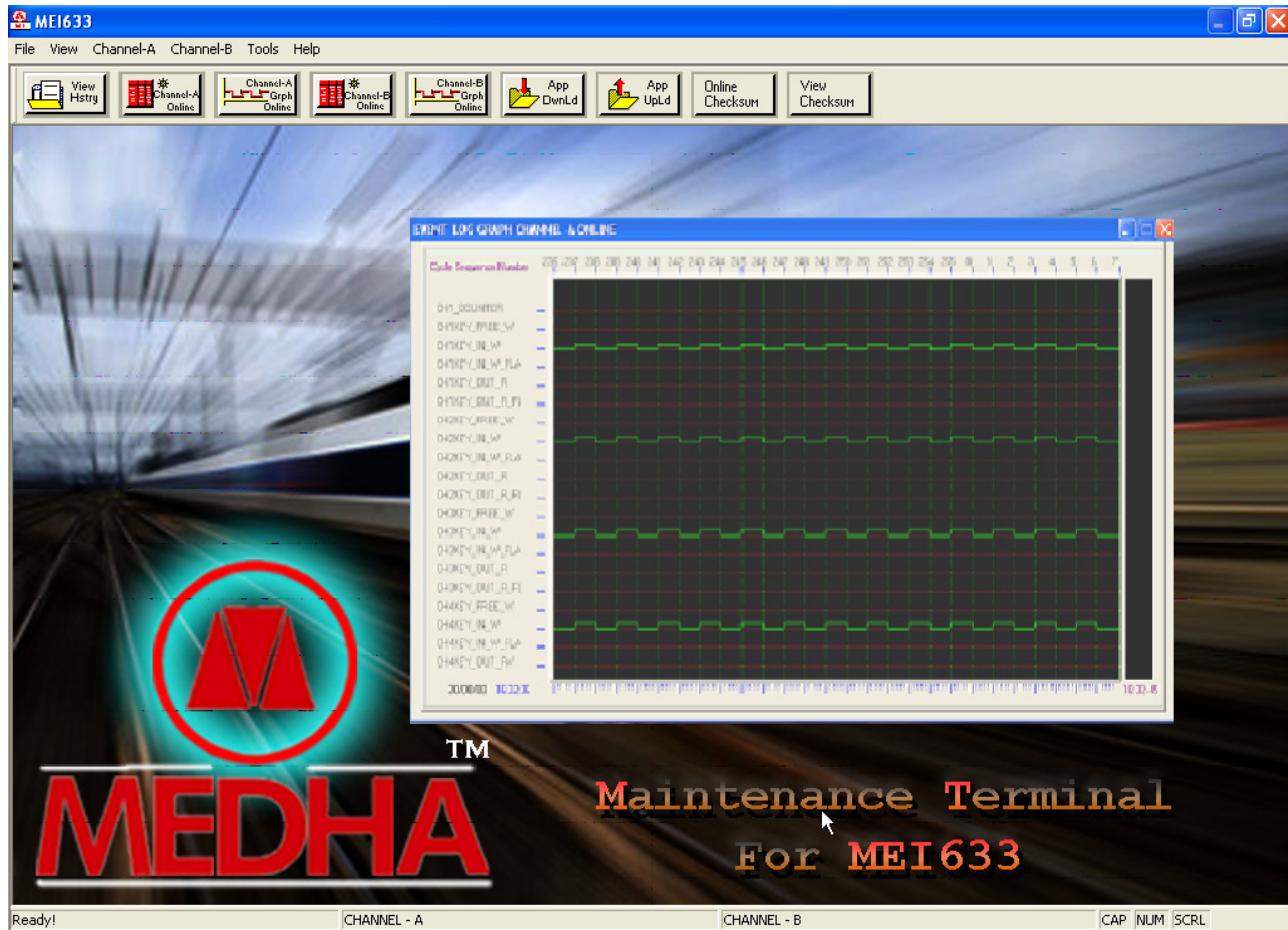
This button should be clicked when you want to Freeze the display from the received data display. When you click this button you can see blue LEDs on the top pane of the window on both the left and right panes of the window.

Exit

This button is used to close the display window. When you click this button MT asks for a confirmation "Are you sure you want to Exit? ", click "YES" if you want to close, and click "NO" if you want to restore it back.

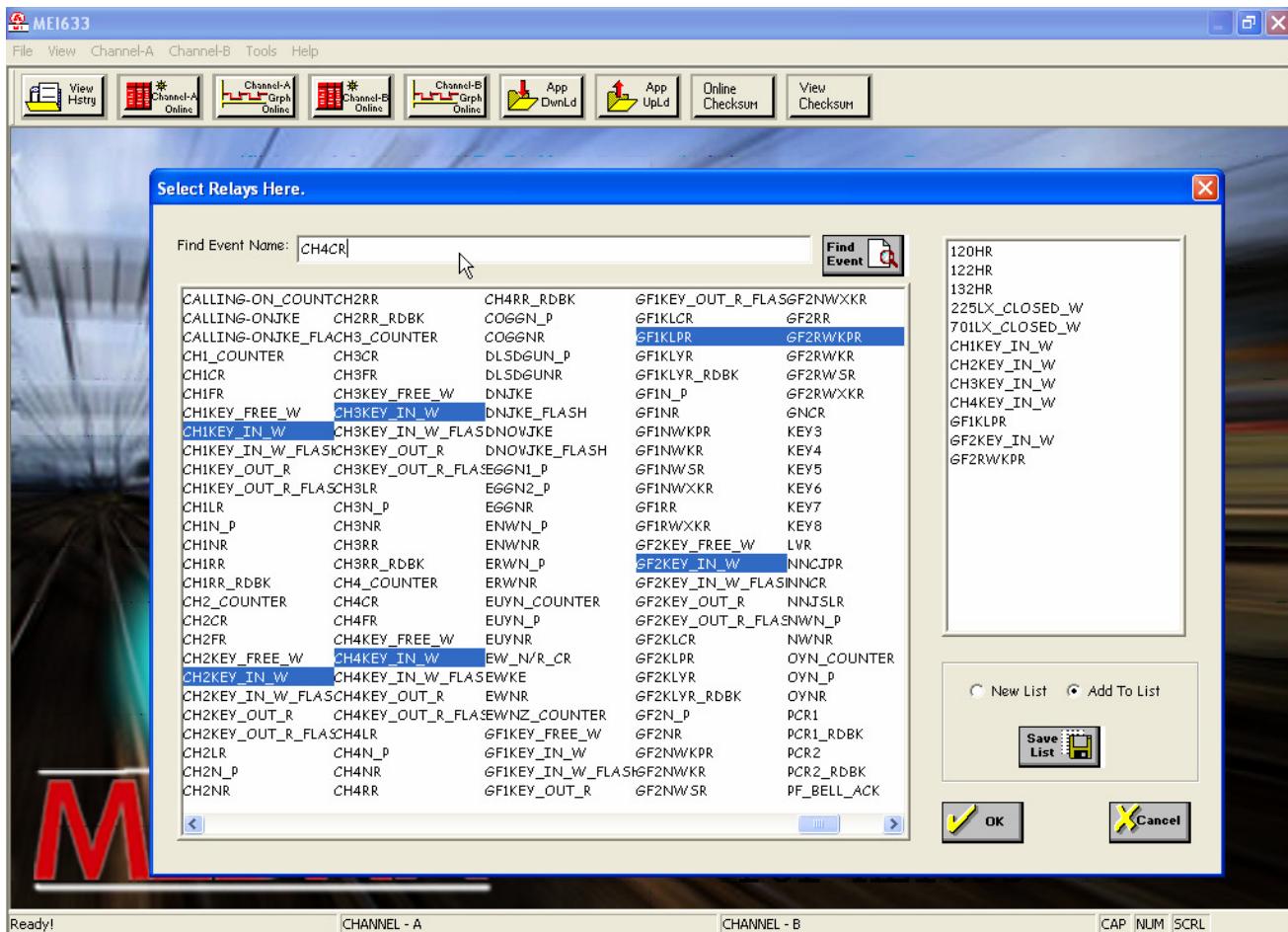
3.5. Event log Graphical View

MT also provides a Graphical view of the Events, as shown below.



Graphical views for Channel-A Event log and Channel-B are also identical therefore any description for Channel-A or Channel-B are applicable for both and vice versa.

In the Graphical view of the Event log for both the Channels the left pane has the Events name, which are result of a flexible selection. This selection can be done in the following window:



Ready!

CHANNEL - A

CHANNEL - B

CAP NUM SCRL

This window opens when you click the Graphical view option in the Main Menu or from the Tool Bar Buttons. After the selection of Events MT opens the Graphical view with these selected Events Status.

In the above window the left pane consists of a selection box where you can select the required events. When you select the Events they will be listed in the Event List Box at the right side. All the selected Events can be seen in that List Box.

This List can be saved for further use using the "Save List" button below the Event List Box.

To have a New List that is clearing the old list and destroying its content you can use the New List selection option above the Save List button.

Otherwise if you want to add up some Events with old Events then you can select the "Add to List" option.

Finally all these Events get saved. Note that the Events in the Events List Box at the right side of the pane are saved finally.

MT provides an easy way to search the Events, it provides a search option where you can type the event you want to select and click "Find" button at the top right side of the window. This will search the Event and Select it and add in the Event List Box.

4. View History Data

View history data option is used to view the log reports of Channel-A and Channel-B.

You can view Event Log in tabular form and in Graphical view. You can view a part of log with in the specified time, and also depending up on the Relay Types there are filters where you will be able to view the desired records.

You can view Fault Log in tabular view, where you can view the log between a specified time, you can view log module wise, and also you can view the critical fault log in a particular time.

View History offers you to view all the reports/Logs of Channel-A and Channel-B,

There are 6 different kinds of reports that MT can display, they are:

- Event log list view of Channel-A
- Event log Graphical view of Channel-A
- Fault log list view of Channel-A
- Event log list view of Channel-B
- Event log Graphical view of Channel-B
- Fault log list view of Channel-B



You can select any log file to view its contents.

The file name contains the date and time the File has been modified last, i.e. the last time when MT was in Offline mode or the time when MT has been closed, with "MT_" as a prefix. The extensions used for the Files are:

“.RL1” is the extension used for Event log for Channel-A

“.FL1” is the extension used for Fault log for Channel-A

“.RL2” is the extension used for Event log for Channel-B

“.FL2” is the extension used for Fault log for Channel-B

For example, in "MT_020408161446.RL1" file name:

"MT_" is the prefix.

02/04/08 is the date and 16:14:46 hrs is the last time when MT was in Offline Mode.

This file contains data from Date: 14/03/08, Time:04:09:02 to Date: 01/04/08, Time 09:57:27.

If the Date/Time is changed back in data logger, then the data will be stored in the respective files. These files will be saved with the extension as shown below:

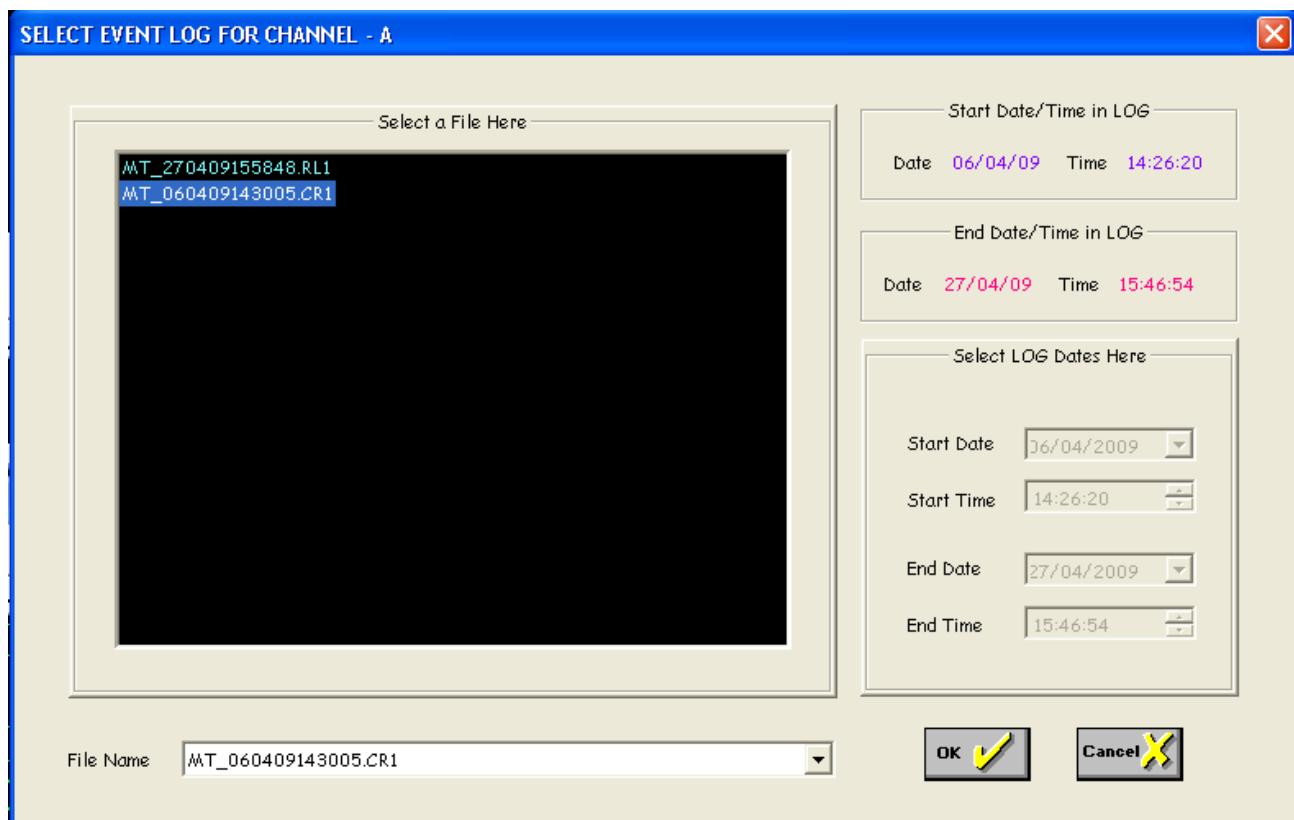
“.CR1” extension file is used for storing the Date/Time Changed back Event log of Channel-A.

“.CF1” extension file is used for storing the Date/Time Changed back Fault log of Channel-A.

“.CR2” extension file is used for storing the Date/Time Changed back Event log of Channel-B.

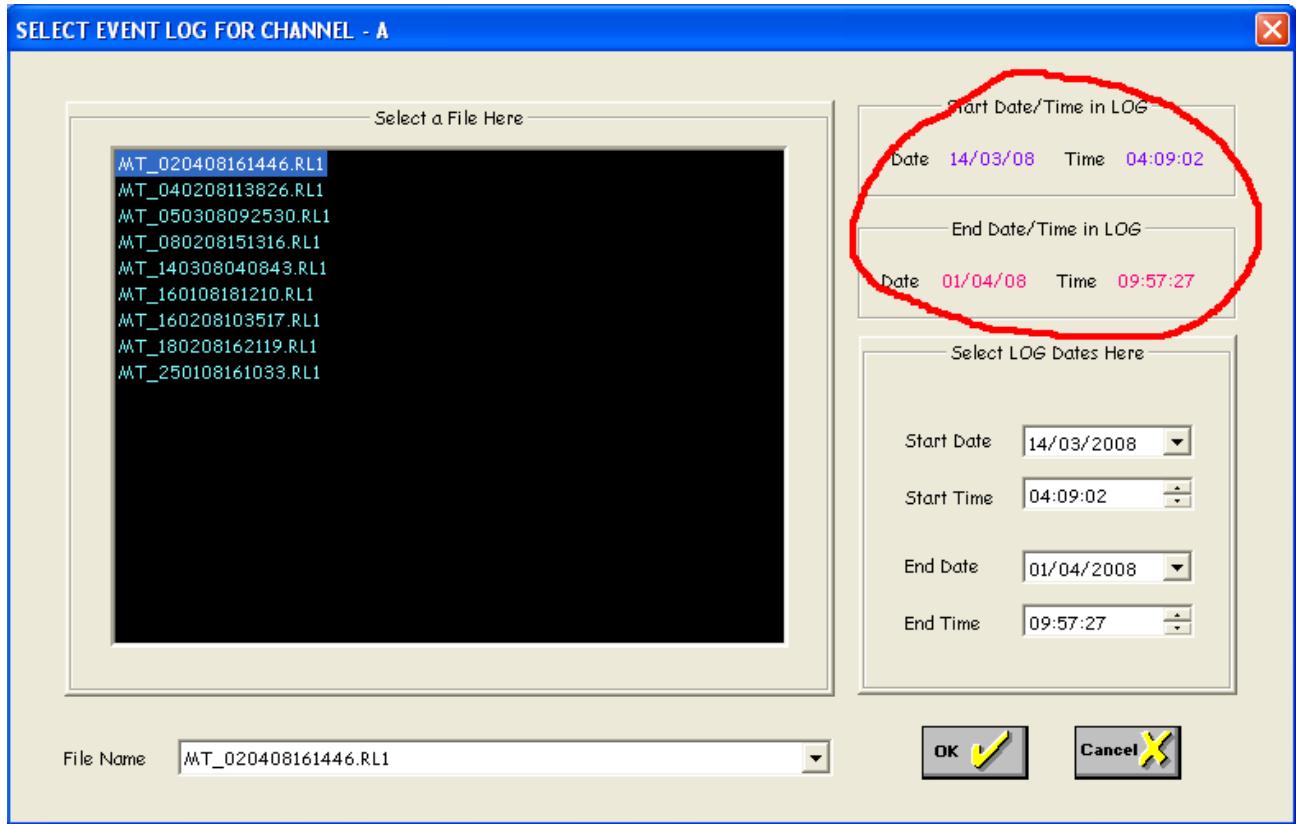
“.CF2” extension file is used for storing the Date/Time Changed back Fault log of Channel-B.

The data storing process continues till the changed back date/time reaches the last record date/time, which was stored in regular “.RL1, .RL2, .FL1, .FL2” extension files. Once it matches with the last record of the regular storing data date/time, then it continues to store the current data in regular files (“.RL1, .RL2, .FL1 and .FL2”)



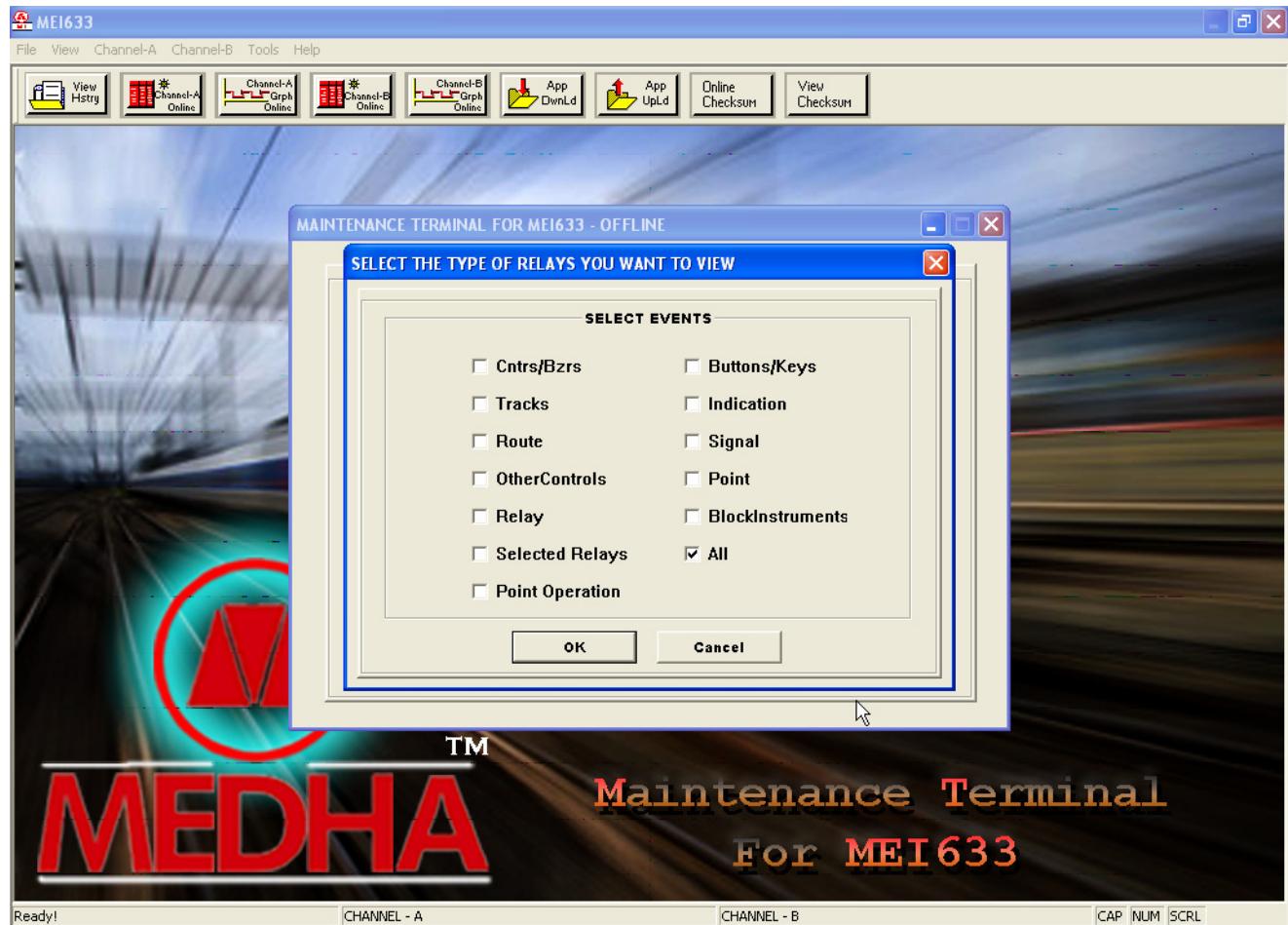
A new file is created when the number of events exceeds 10 lakh. All the available files in the current MT folder can be used to view the Event or Fault log in offline mode. These files can be deleted after taking the required back up in a Secondary storage medium, periodically. If any files have been deleted after taking necessary back-up in Secondary storage medium, and it is required to access any older event or Fault log information, you can copy the required files to the current MT folder and then view the selected Event/Fault log.

MT provides you with a flexible filters where you can select any kind of log, between selected Date and Times as shown in the screen below.

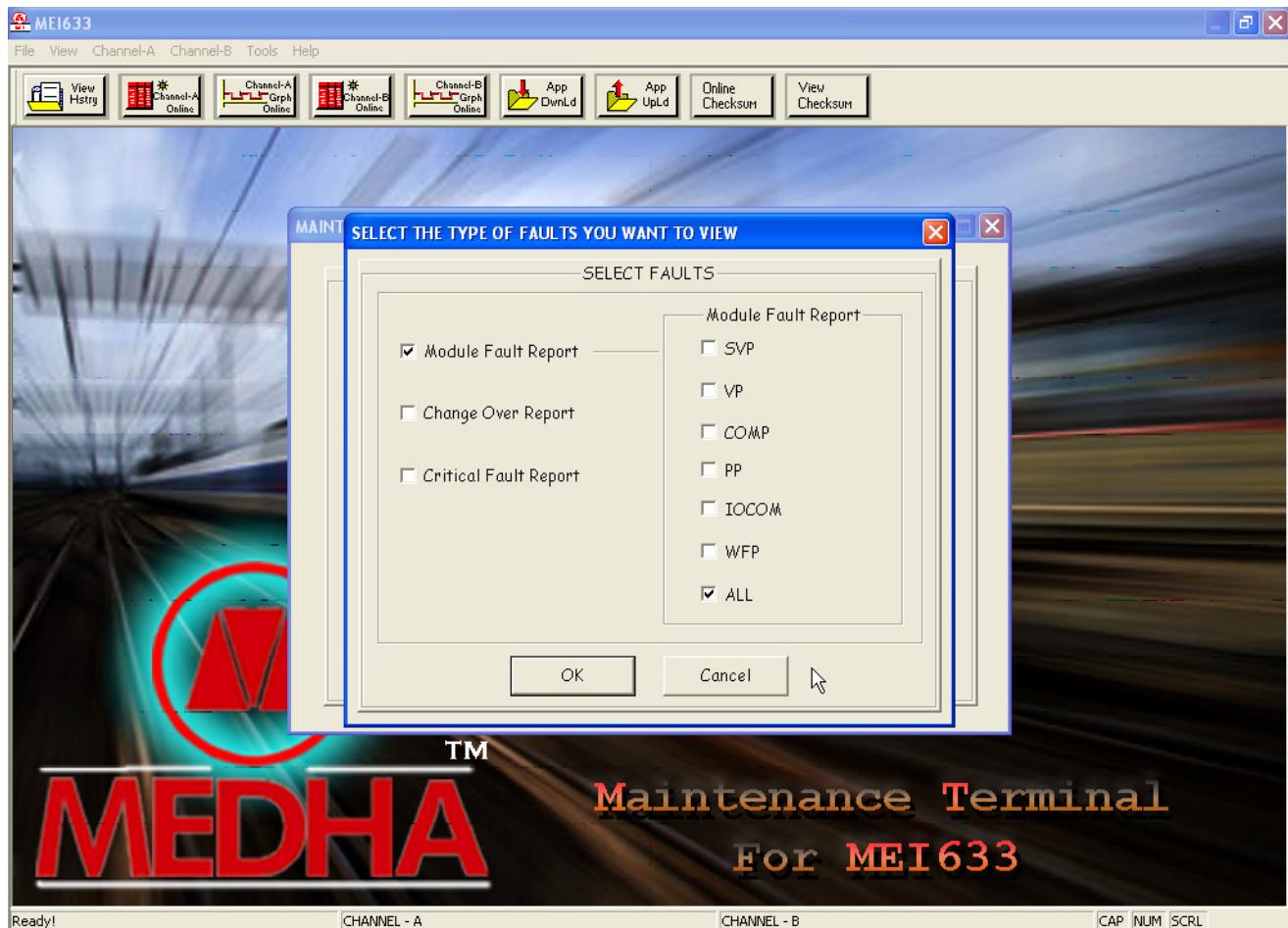


In the above window the selected file's data can be viewed between a selected intervals. This selection can be done at the bottom right block where you can enter the date time of the log you want to view.

Log of a specified Event Type, as shown below:



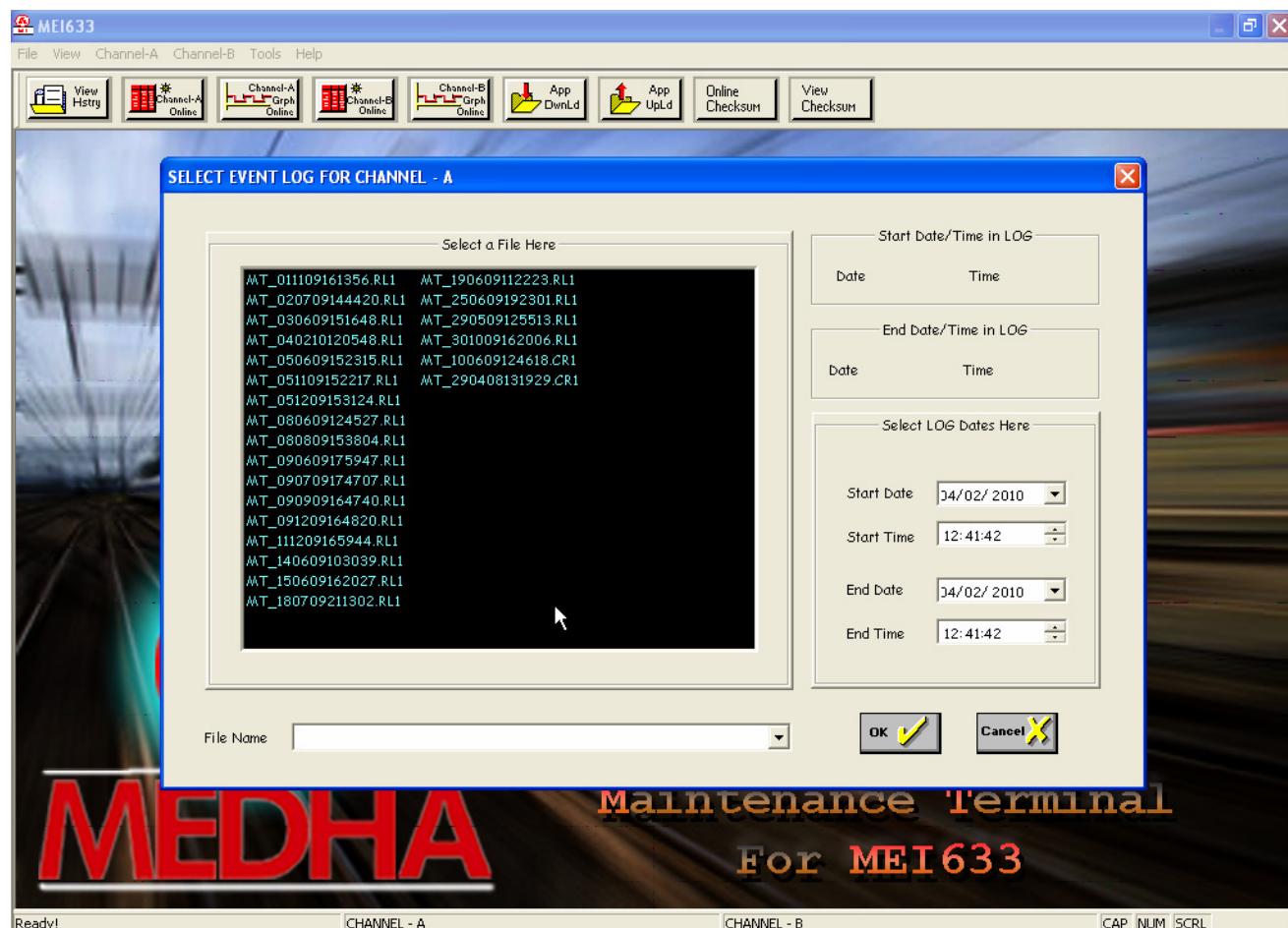
Log of a specified Fault Module, as shown below:



4.1. Event log

List View of the Event Log can be opened from the main dialog and selecting the Event log file you want to view from the selection Dialog.

Below is the selection dialog:

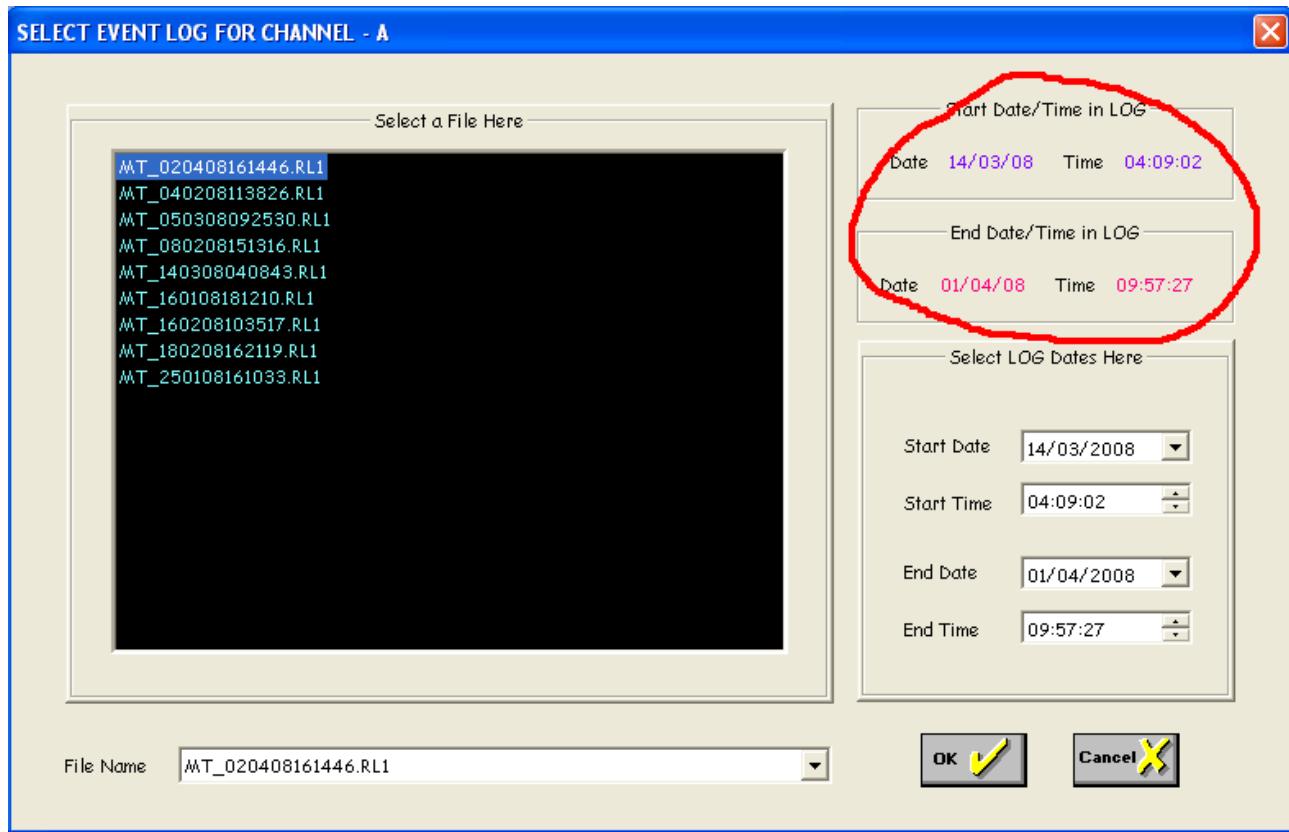


In the above dialog box you can see a pane at the left hand side of the window, which says, select a file here, in this pane you can see a file name in the window.

The above pane in the window consists of all the Event log Files stored in MT, therefore you can select the desired log by clicking on the file name.

When you click on the file MT assumes you have selected that log to view and opens the log when you select the "Ok" button at the bottom-right pane of the window.

After selecting the desired log, at the Top-right pane of the window you can see the Date and Time of the first and last records in the log.



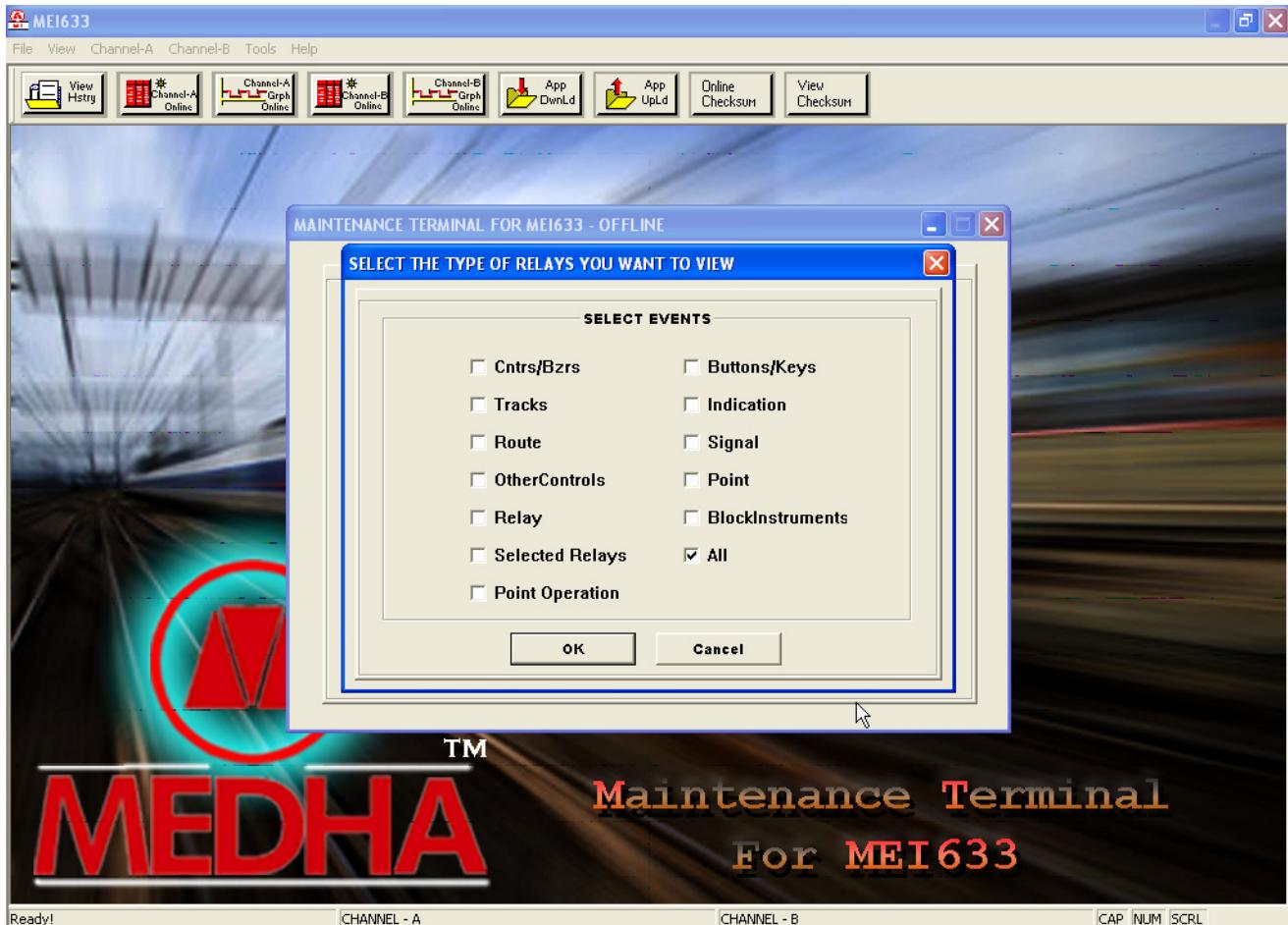
In the above window you can see the marked region, in this pane of the window you can see the "Start Date/Time in log" pane, the date and time shown here is the Date and Time of the first record in the log. In the "End Date/Time in Log" pane the date and time shown are the date and time of the last record in the log, this information implies that the file has the records from the start date and time to the end date and time specified here,

Below this pane you will find a selection pane "Select LOG Dates Here" pane, where you can select start date-time and end date-time you want to view in the log.

Note: User can able to select the data in between start date/time and end date/time only.

After you have selected a file click on the "OK" button to view the log else click on the "Cancel" button to close without viewing. Now you can have a further filtered log where MT filters the Relay types in the given Log. You can select more than one Relay Types.

Below is the dialog used for filtering the Relay Types:



In this selection you can select any of the relay types, multiple Relays Types can be selected at a time. For "Selected Relays" option you will be provided with Relay selection dialog where you can select any Relays you want to view for a maximum of 25.

And for "All" option you can view all the Events in that specified time. Below are the Event logs of Channel-A and Channel-B with in a specified Time and Date.

MEI633

File View Channel-A Channel-B Tools Help

View Hstry Channel-A Online Channel-A Gph Online Channel-B Online Channel-B Gph Online App DwnLd App UpLd Online Checksum View Checksum

REPORT OF CHANNEL-A EVENT LOG: MT_091209164820.RL1

SERIAL NO	DATE	TIME	SEQ	RELAY NAME	STATUS	MESSAGE	A/S/P
1	05/11/09	13:49:01	6	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
2	05/11/09	13:49:01	6	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
3	05/11/09	13:49:01	6	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
4	05/11/09	13:49:01	7	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A
5	05/11/09	13:49:01	7	CH2KEY_IN_W	UP	CH2KEY_IN_W is Picked-up	A
6	05/11/09	13:49:01	7	CH3KEY_IN_W	UP	CH3KEY_IN_W is Picked-up	A
7	05/11/09	13:49:01	7	CH4KEY_IN_W	UP	CH4KEY_IN_W is Picked-up	A
8	05/11/09	13:49:02	8	CH1KEY_IN_W	DWN	CH1KEY_IN_W is Dropped	A
9	05/11/09	13:49:02	8	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
10	05/11/09	13:49:02	8	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
11	05/11/09	13:49:02	8	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
12	05/11/09	13:49:02	9	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A
13	05/11/09	13:49:02	9	CH2KEY_IN_W	UP	CH2KEY_IN_W is Picked-up	A
14	05/11/09	13:49:02	9	CH3KEY_IN_W	UP	CH3KEY_IN_W is Picked-up	A
15	05/11/09	13:49:02	9	CH4KEY_IN_W	UP	CH4KEY_IN_W is Picked-up	A
16	05/11/09	13:49:02	10	CH1KEY_IN_W	DWN	CH1KEY_IN_W is Dropped	A
17	05/11/09	13:49:02	10	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
18	05/11/09	13:49:02	10	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
19	05/11/09	13:49:02	10	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
20	05/11/09	13:49:03	11	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A
21	05/11/09	13:49:03	11	CH2KEY_IN_W	UP	CH2KEY_IN_W is Picked-up	A
22	05/11/09	13:49:03	11	CH3KEY_IN_W	UP	CH3KEY_IN_W is Picked-up	A
23	05/11/09	13:49:03	11	CH4KEY_IN_W	UP	CH4KEY_IN_W is Picked-up	A
24	05/11/09	13:49:03	12	CH1KEY_IN_W	DWN	CH1KEY_IN_W is Dropped	A
25	05/11/09	13:49:03	12	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
26	05/11/09	13:49:03	12	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
27	05/11/09	13:49:03	12	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
28	05/11/09	13:49:03	13	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A

Print Save Data Close

Ready! CHANNEL - A CHANNEL - B CAP NUM SCRL

In the above windows, the top region consists of the following description about the log.

Start Date and Time of the Log,

End Date and Time of the Log,

Number of Events,

And Total number of pages.

On the right side you can find a scroll bar, which can be used to scroll the data, also using navigation keys you can navigate the log after selecting the scroll bar.

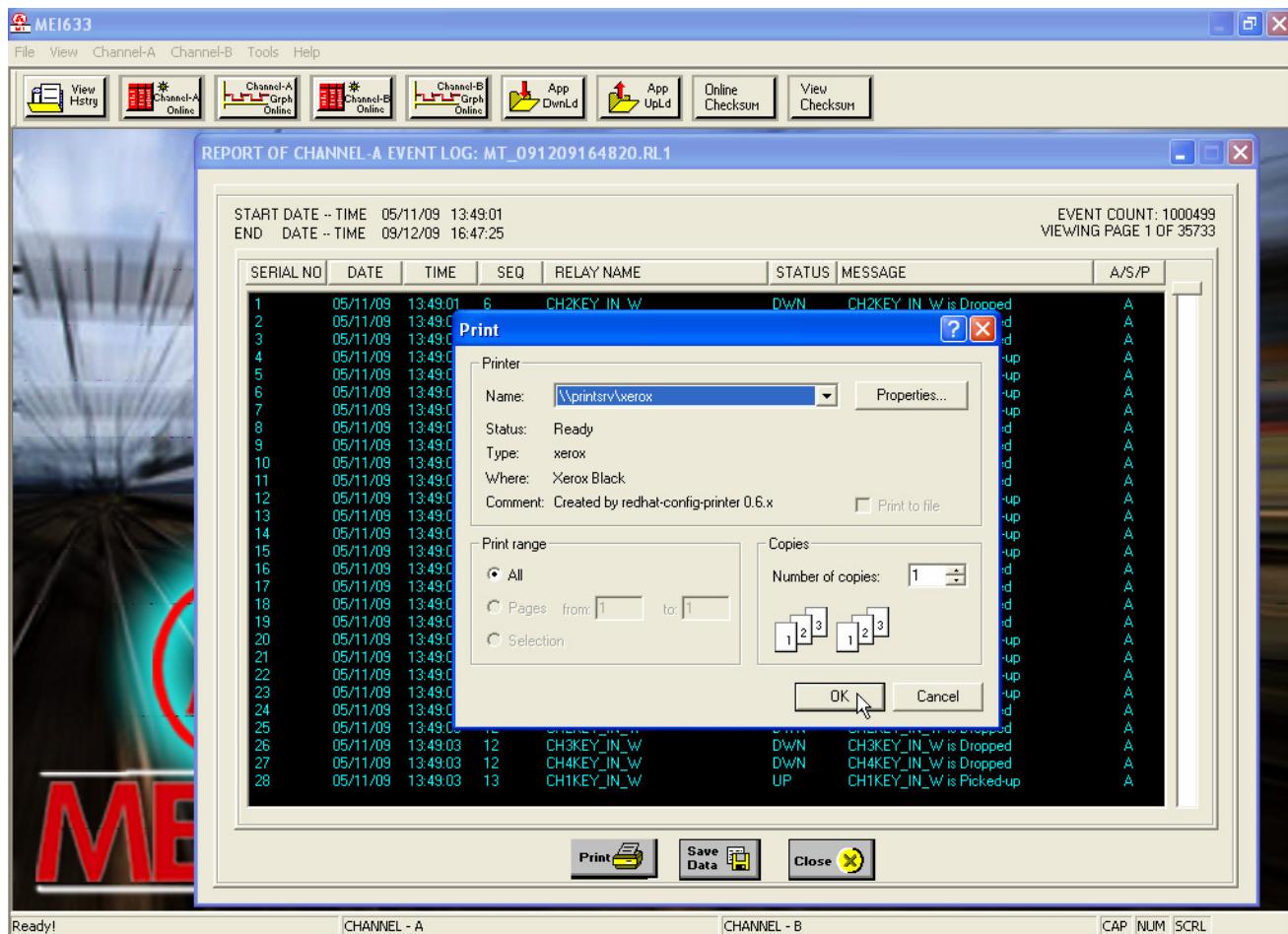
Event log records can be seen in the window with details like Serial No., Date, Time, Sequence number, Relay Name, Status, Message, Active /Standby/Power On status of Channel at that point of time.

NOTE: All the description in Channel-A and Channel-B are exactly the same, therefore any description for Channel-A is applicable for Channel-B and Vice versa.

There are three buttons at the bottom of the window.

Print, Save and Close

Print option prints the Event log page wise, MT prompts you if you want to continue printing further pages. If you want to print all pages you can select "Yes" every time you are prompted. If you want to stop printing then you can select "No". The Screen where you will be prompted is shown below.



MEI633

File View Channel-A Channel-B Tools Help

View Hstry Channel-A Online Channel-B Online App DwnLd App UpLd Online Checksum View Checksum

REPORT OF CHANNEL-A EVENT LOG: MT_091209164820.RL1

START DATE -- TIME 05/11/09 13:49:01
END DATE -- TIME 09/12/09 16:47:25

EVENT COUNT: 1000499
VIEWING PAGE 1 OF 35733

SERIAL NO	DATE	TIME	SEQ	RELAY NAME	STATUS	MESSAGE	A/S/P
1	05/11/09	13:49:01	6	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
2	05/11/09	13:49:01	6	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
3	05/11/09	13:49:01	6	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
4	05/11/09	13:49:01	7	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A
5	05/11/09	13:49:01	7	CH2KEY_IN_W	UP	CH2KEY_IN_W is Picked-up	A
6	05/11/09	13:49:01	7	CH3KEY_IN_W	UP	CH3KEY_IN_W is Picked-up	A
7	05/11/09	13:49:01	7	CH4KEY_IN_W	UP	CH4KEY_IN_W is Picked-up	A
8	05/11/09	13:49:02	8	CH1KEY_IN_W	DWN	CH1KEY_IN_W is Dropped	A
9	05/11/09	13:49:02	8	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
10	05/11/09	13:49:02	8	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
11	05/11/09	13:49:02	8	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
12	05/11/09	13:49:02	9	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A
13	05/11/09	13:49:02	9	CH2KEY_IN_W	UP	CH2KEY_IN_W is Picked-up	A
14	05/11/09	13:49:02	9	CH3KEY_IN_W	UP	CH3KEY_IN_W is Picked-up	A
15	05/11/09	13:49:02	9	CH4KEY_IN_W	UP	CH4KEY_IN_W is Picked-up	A
16	05/11/09	13:49:02	10	CH1KEY_IN_W	DWN	CH1KEY_IN_W is Dropped	A
17	05/11/09	13:49:02	10	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
18	05/11/09	13:49:02	10	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
19	05/11/09	13:49:02	10	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
20	05/11/09	13:49:03	11	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A
21	05/11/09	13:49:03	11	CH2KEY_IN_W	UP	CH2KEY_IN_W is Picked-up	A
22	05/11/09	13:49:03	11	CH3KEY_IN_W	UP	CH3KEY_IN_W is Picked-up	A
23	05/11/09	13:49:03	11	CH4KEY_IN_W	UP	CH4KEY_IN_W is Picked-up	A
24	05/11/09	13:49:03	12	CH1KEY_IN_W	DWN	CH1KEY_IN_W is Dropped	A
25	05/11/09	13:49:03	12	CH2KEY_IN_W	DWN	CH2KEY_IN_W is Dropped	A
26	05/11/09	13:49:03	12	CH3KEY_IN_W	DWN	CH3KEY_IN_W is Dropped	A
27	05/11/09	13:49:03	12	CH4KEY_IN_W	DWN	CH4KEY_IN_W is Dropped	A
28	05/11/09	13:49:03	13	CH1KEY_IN_W	UP	CH1KEY_IN_W is Picked-up	A

Print Save Data Close

Ready! CHANNEL - A CHANNEL - B CAP NUM SCRL

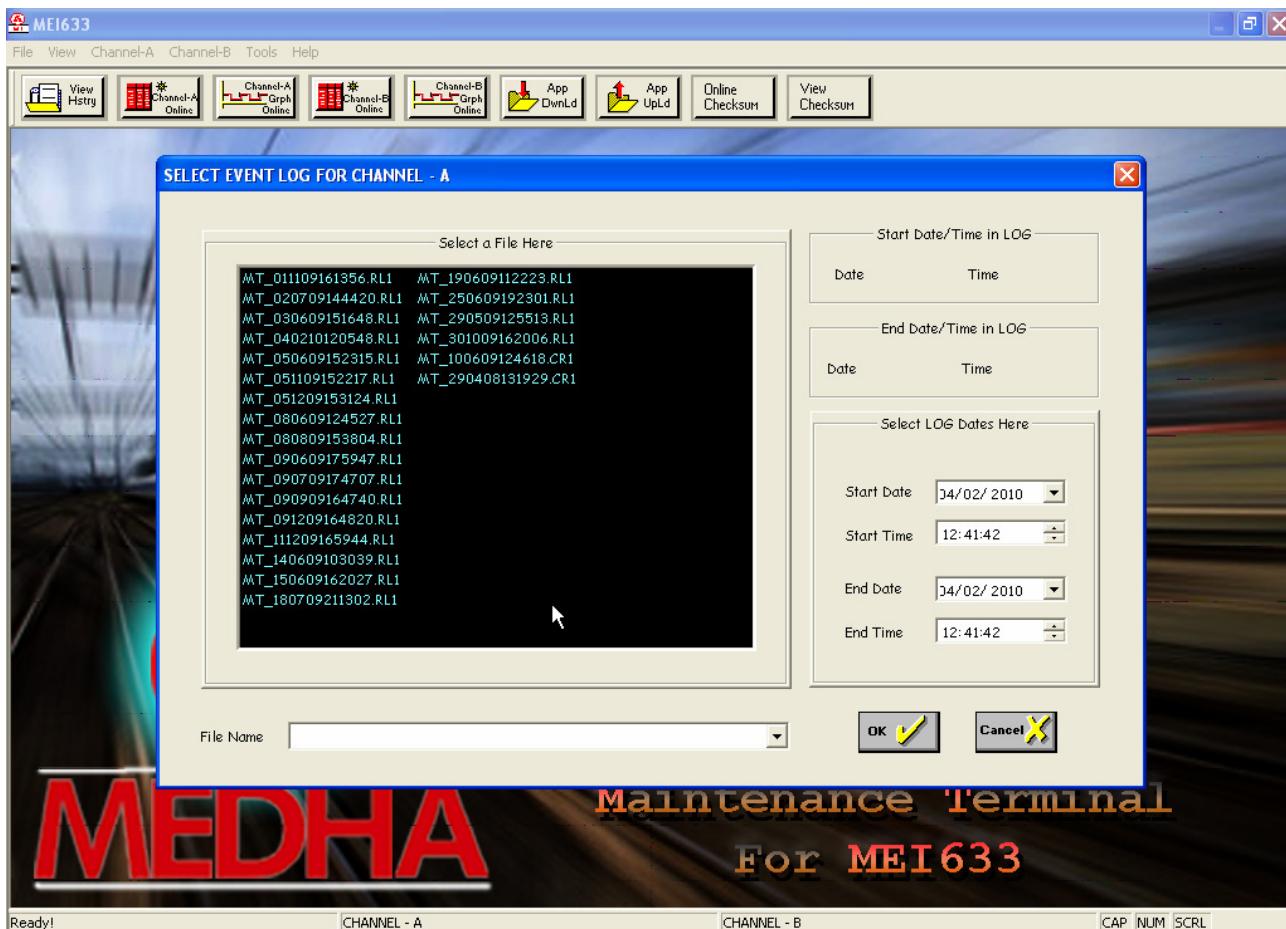
Second button is "Save Data" button. This option allows you to save the log into a text file. When you select the save option you will be prompted to give a name for the File and select a location where you want to save that file into.

Finally, "Close" option allows you to safely close the log window.

4.2. Event Log Graphical view

Event Log Graphical view can be opened from the main dialog and selecting the Event log file you want to view from the selection Dialog.

Below is the selection dialog:



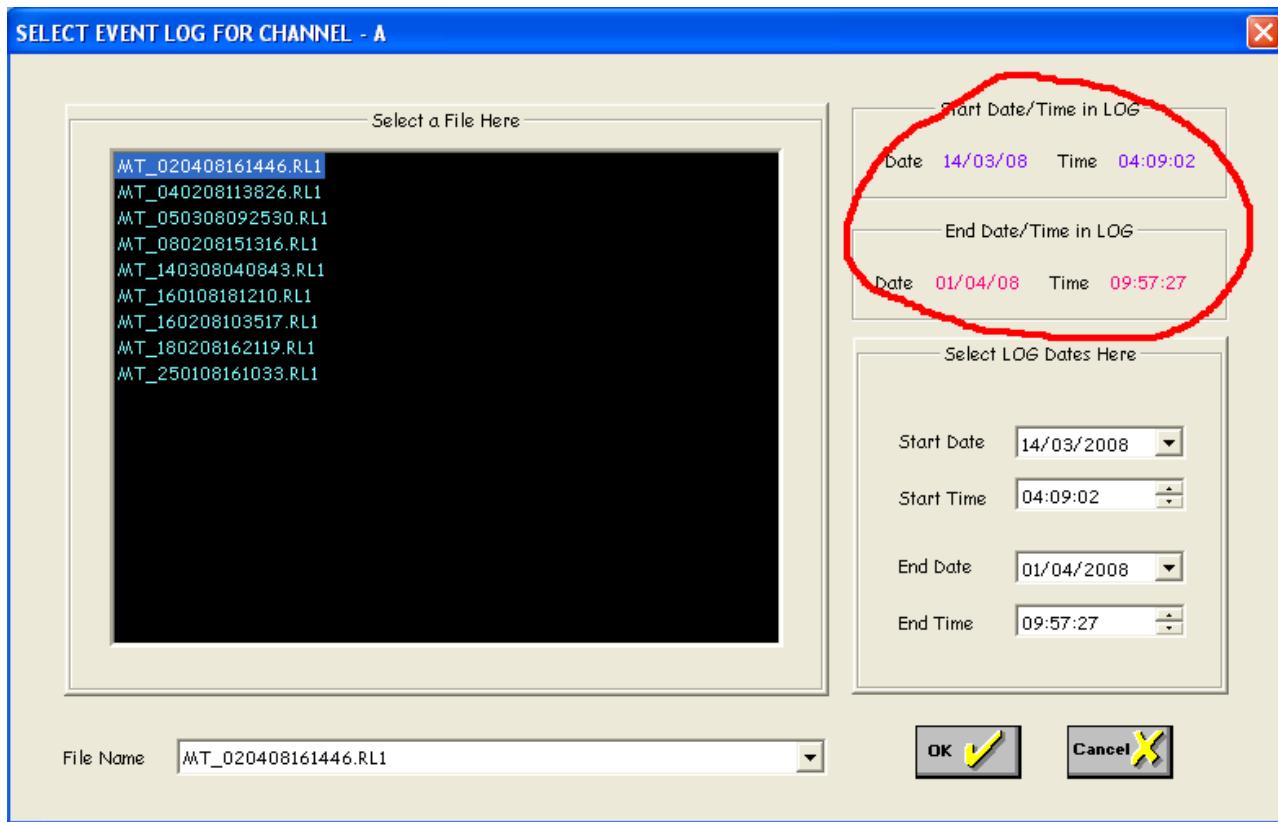
In the above dialog box you can see a pane at the left hand side of the window, which says, select a file here, in this pane you can see a file name in the window.

The above pane in the window consists of all the Event log files stored in MT, therefore you can select the desired log by clicking on the file name.

When you click on the file MT assumes you have selected that log to view and opens the log when you select the "Ok" button at the bottom-right pane of the window.

After selecting the desired log, at the Top-right pane of the window you can see the Date and Time of

the first and last records in the log.

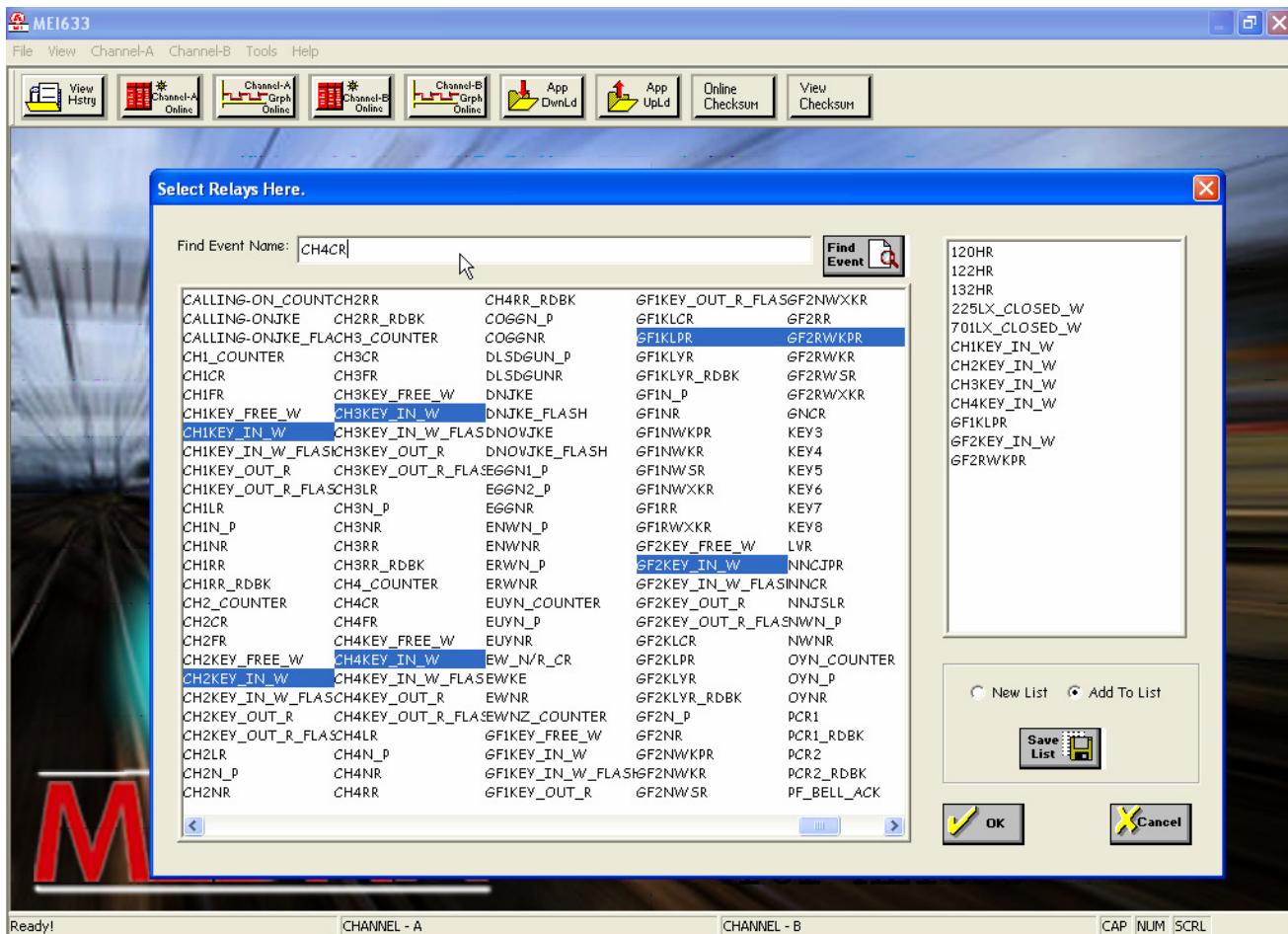


In the above window you can see the marked region, in this pane of the window you can see the "Start Date/Time in log" pane, the date and time shown here is the Date and Time of the first record in the log. In the "End Date/Time in Log" pane the date and time shown are the date and time of the last record in the log, this information implies that the file has the records from the start date and time to the end date and time specified here.

Below this pane you will find a selection pane "Select Log Dates Here" pane, where you can select start date-time and end date-time you want to view in the log.

After you have selected a file click on the "Ok" button to view the log else click on the "Cancel" button to close without viewing.

In the Graphical view of the Event log MT provides a flexible selection of Events. Below is the Selection window.



After the selection of Events in the above window, MT opens the Graphical view with these selected Events Status.

In the above window the left pane consists of a selection box where you can select the required events. When you select the Events they will be listed in the Event List Box at the right side. All the selected Events can be seen in that List Box.

This List can be saved for further use using the "Save List" button below the Event List Box.

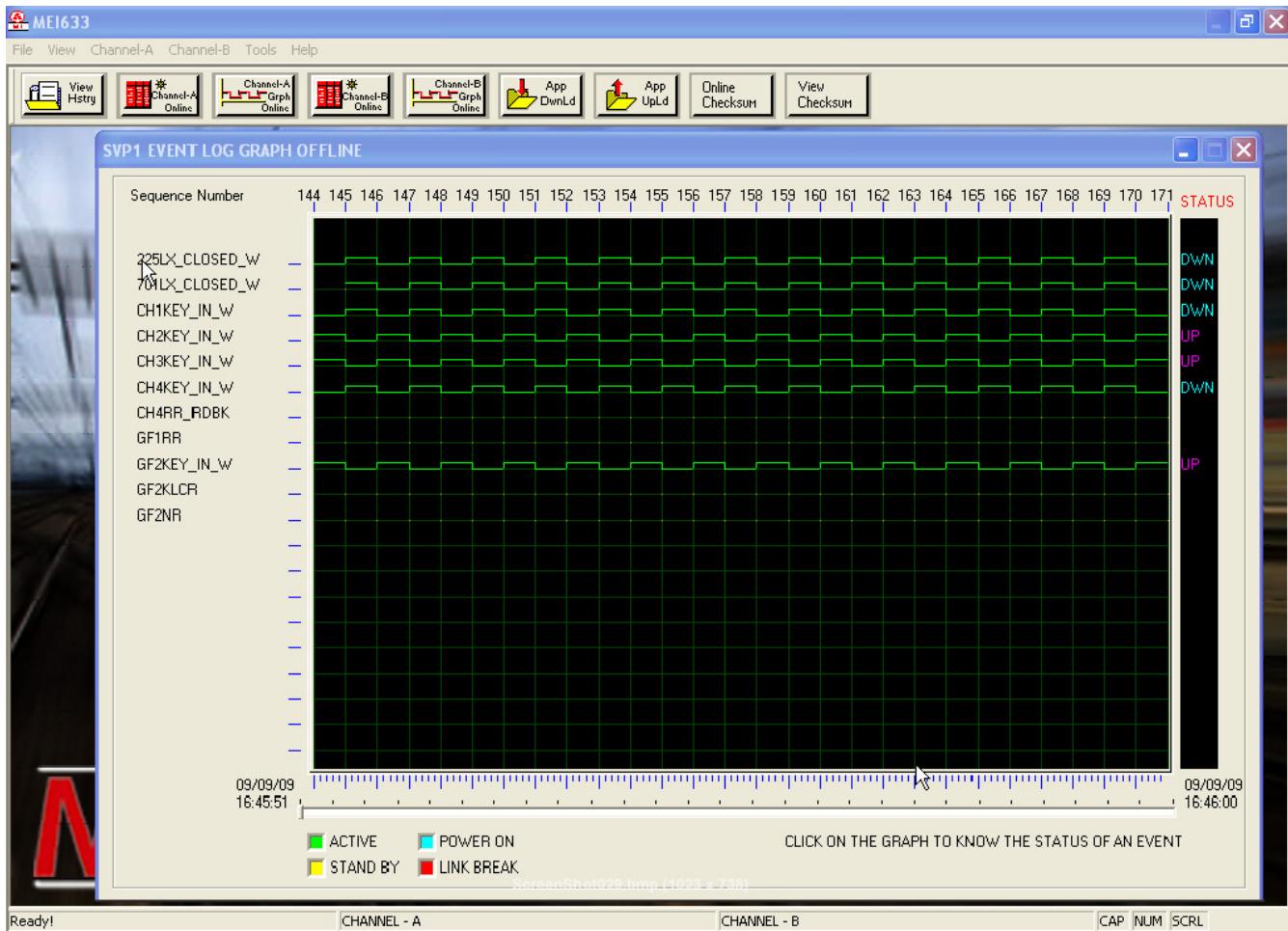
To have a New List that is clearing the old list and destroying its content you can use the New List selection option above the Save List button.

Otherwise if you want to add up some Events with old Events then you can select the "Add to List" option.

Finally all these Events get saved. Note that the Events in the Events List Box at the right side of the pane are saved finally.

MT provides an easy way to search the Events, it provides a search option where you can type the event you want to select and click "Find" button at the top right side of the window. This will search the Event and Select it and add in the Event List Box.

After your list is prepared select "Ok" button to proceed, now you will be able to see the graphical view of the Events logged. Below is the Graphical View of the Events.



In the above window the left pane has the Events name, the top pane contains the sequence numbers of the Events. This Graph is plotted taking the sequence numbers as base. The left pane shows the status of the Event at the current sequence number. At the bottom left of the Window you will find Date and Time followed by a Scrollbar, and again Date and Time.

This indicates the Start Date and Time of the Log, and 28th Event's the Date and time are shown on the bottom right of the window.

You will find a scroll bar between these Date and Times, which is used to scroll through the records.

Green color in the Graph indicates Active State

Yellow color in the Graph indicates Stand By State

Cyan color in the Graph indicates Power On

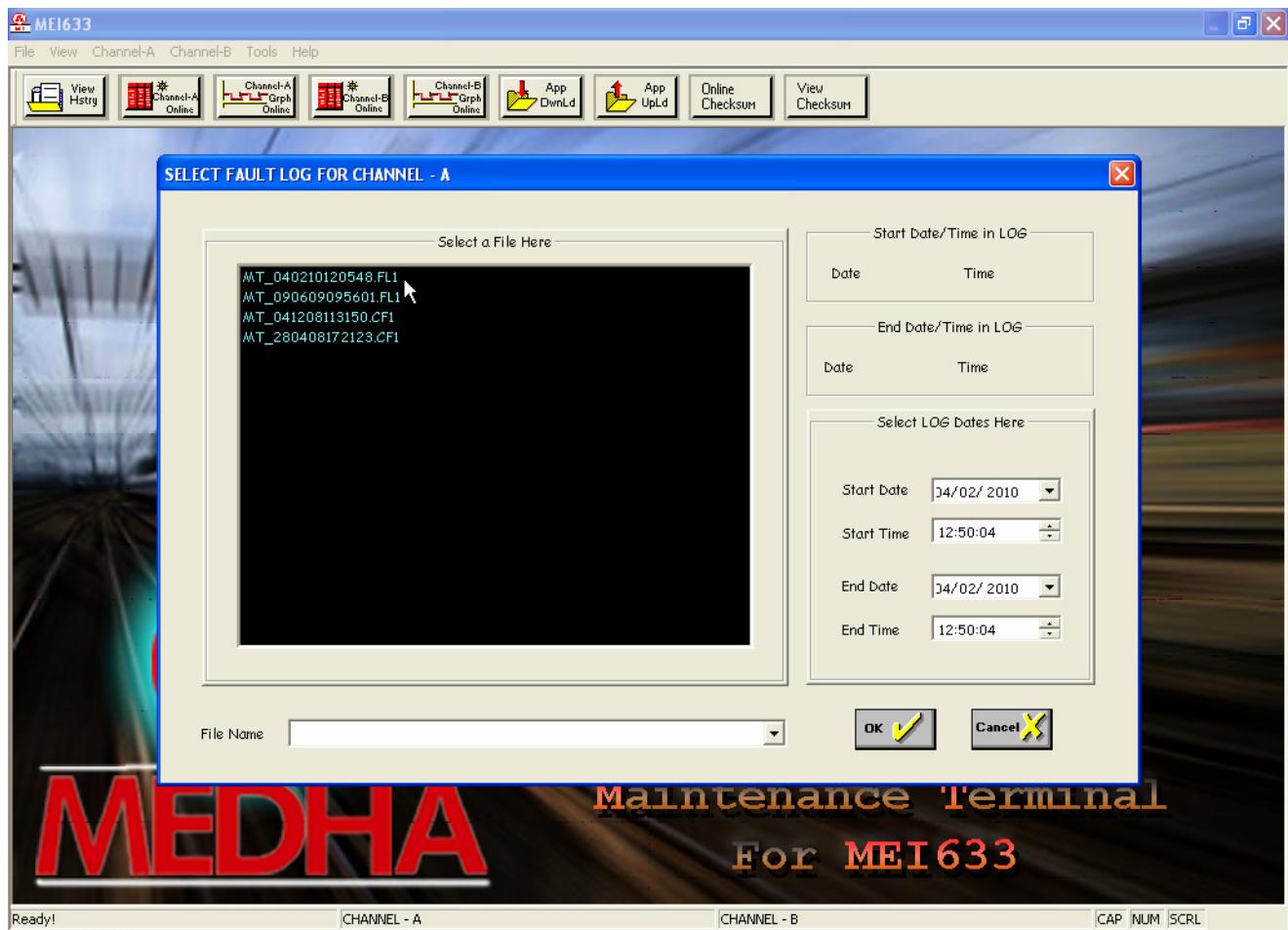
Red color in the Graph indicates Link Break.

MT provides you with an option where you can view all the Details like Date and Time, Sequence Number, Status, Active/Stand By Status etc of any Event by Clicking on the Graph. This information is shown on the Bottom right pane of the window.

4.3. Fault Log:

List View of the Fault Log can be opened from the main dialog and then selecting the Fault Log file you want to view from the selection Dialog.

Below is the selection dialog:



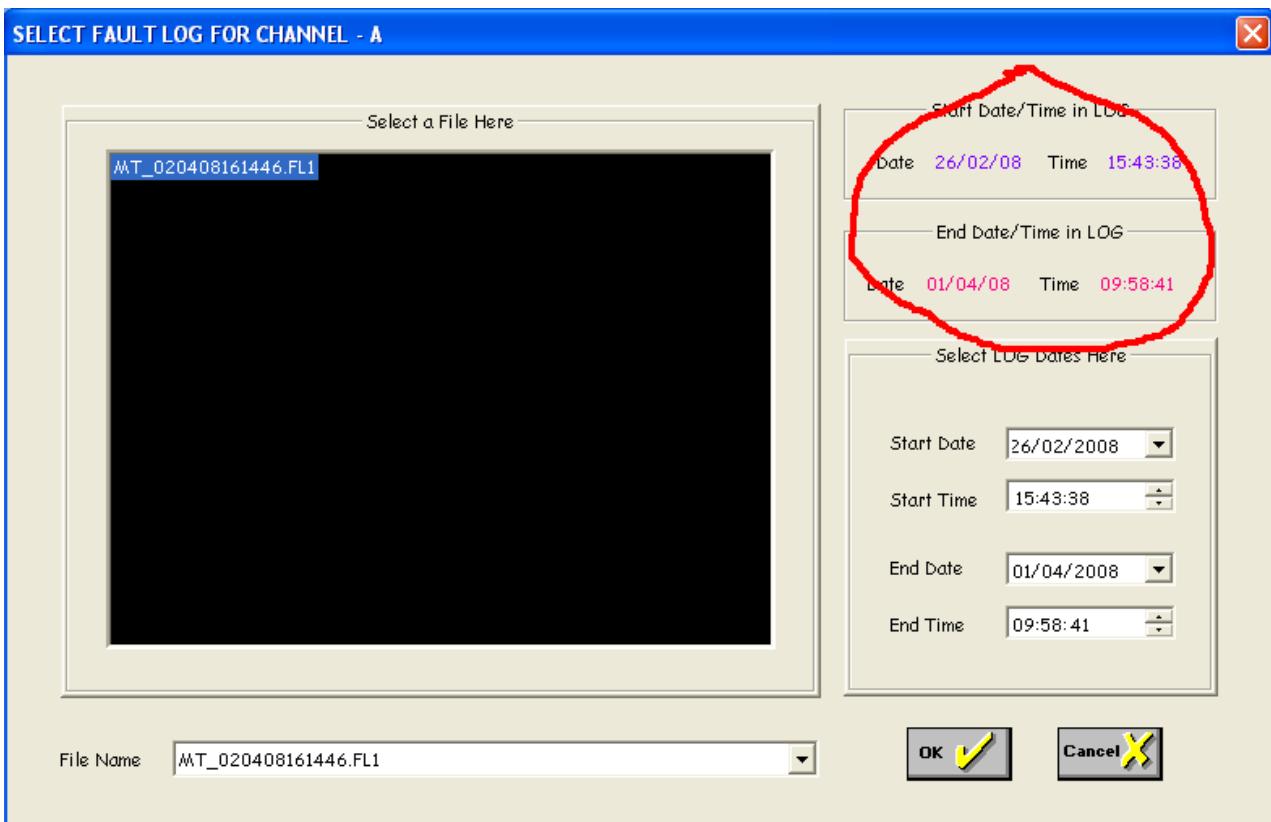
In the above dialog box you can see a pane at the left hand side of the window, which says, select a file here, in this pane you can see a file name in the window.

The above pane in the window consists of all the Fault logs stored in MT, therefore you can select the desired log by clicking on the file name.

When you click on the file MT assumes you have selected that log to view and opens the log when

you select "Ok" button at the bottom-right pane of the window.

After selecting the desired log, at the Top-right pane of the window you can see the Date and Time of the first and last records in the log.



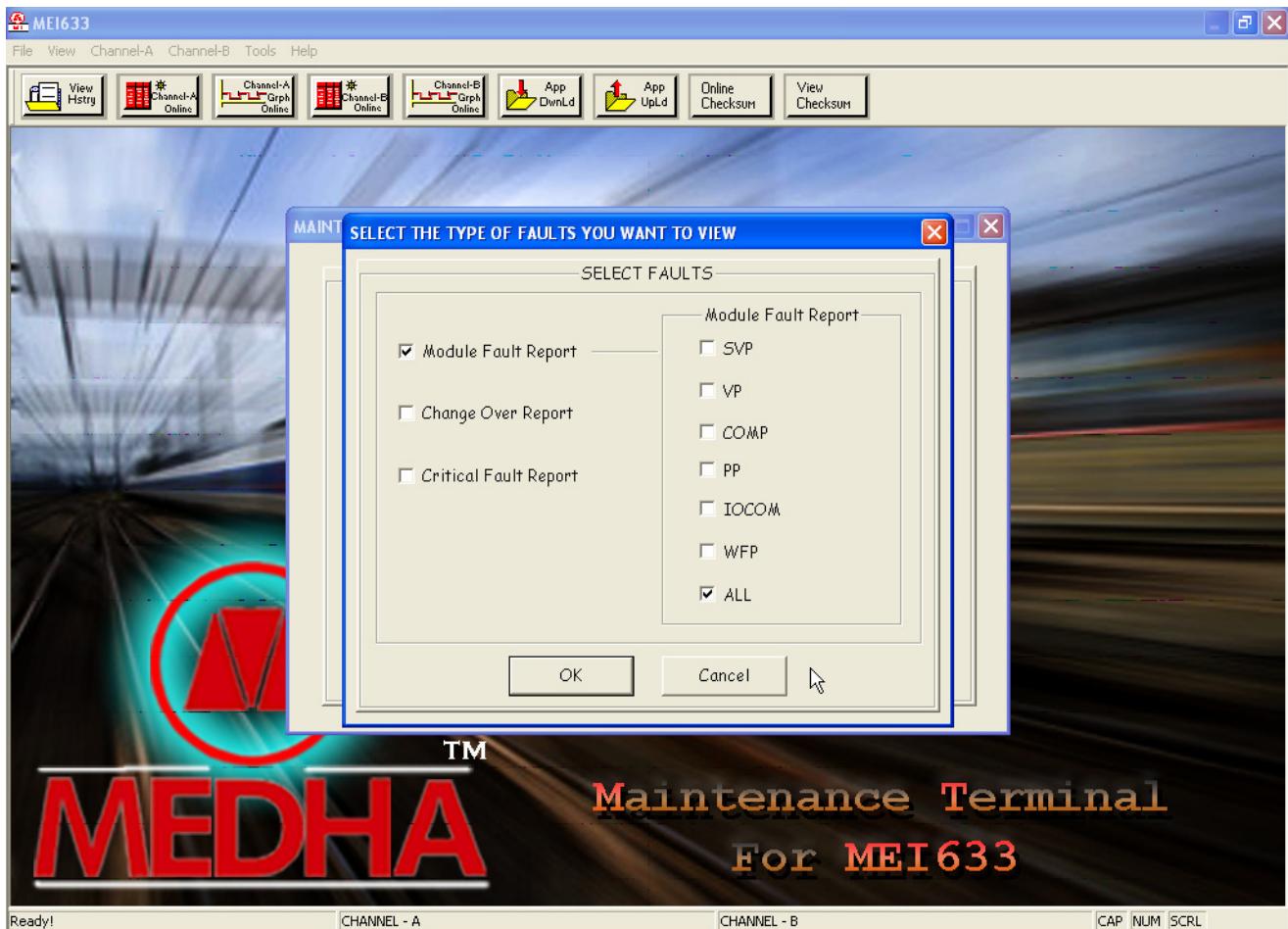
In the above window you can see the marked region, in this pane of the window you can see the "Start Date/Time in log" pane, the date and time shown here is the Date and Time of the first record in the log. In the "End Date/Time in Log" pane the date and time shown are the date and time of the last record in the log, this information implies that the file has the records from the start date and time to the end date and time specified here.

Below this pane you will find a selection pane "Select LOG Dates Here" pane, where you can select start date-time and end date-time you want to view in the log.

After you have selected a File click on the "OK" button to view the log else click on the "Cancel" button to close without viewing.

Now you can have a further filtered log where MT filters the Fault types in the given Log i.e.; Module wise faults, Critical Faults, and Change over report.

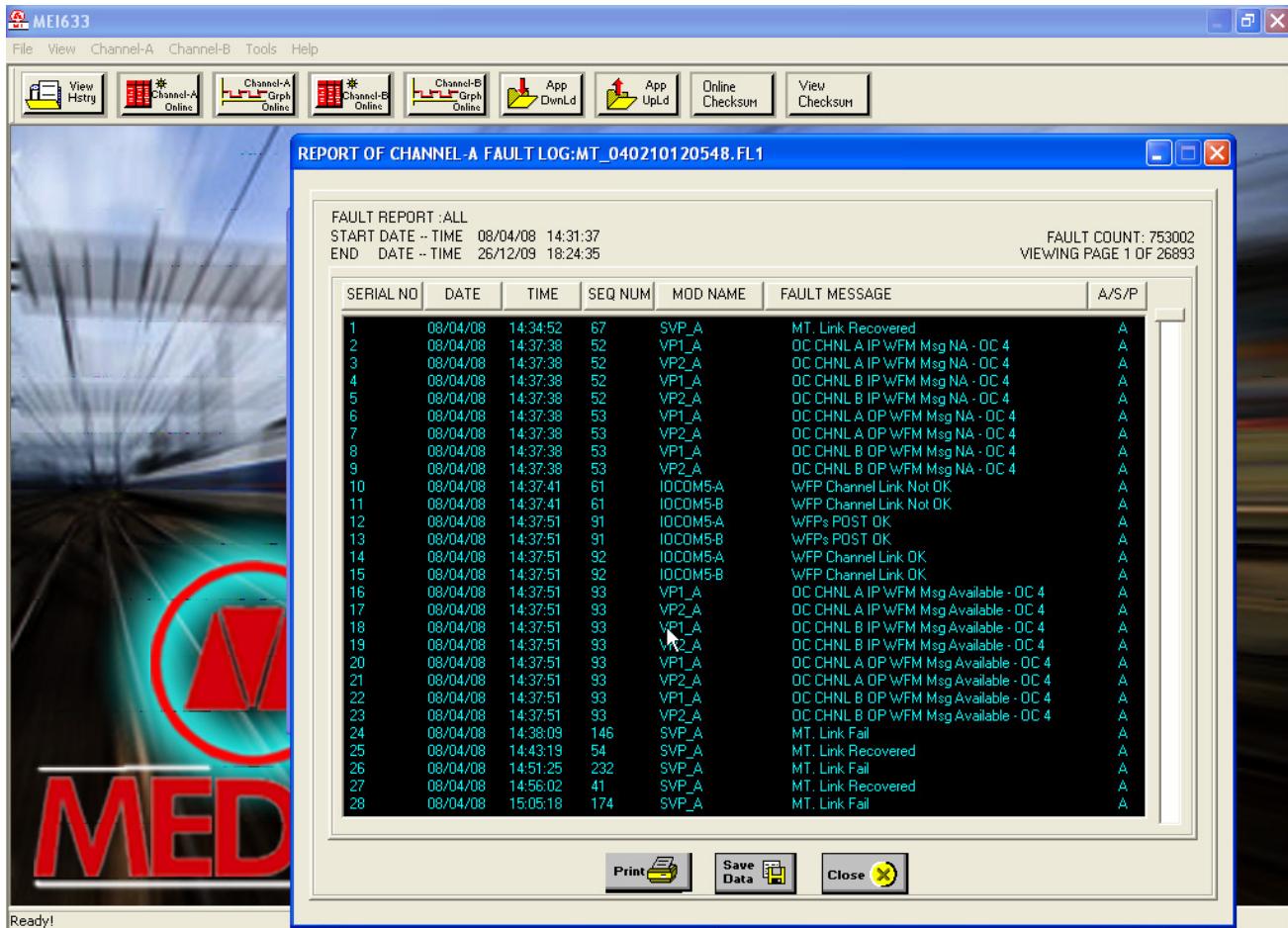
Below is the dialog used for filtering the Fault Types:



In this selection you can select any of the type of Fault report you want to see, when you select Module wise Fault report you can see the Module names at the right side of the window, here you can select the Modules you want to see.

In the Change Over Report, you can see the "Change Over" information as to when the corresponding Channel has changed from Standby to Active State.

In the Critical Faults option you can view all the Critical Faults occurred during that time.



In the above windows, the top region consists of some description about the log.

Start Date and Time of the Log,

End Date and Time of the Log,

Number of Faults,

And Total number of pages.

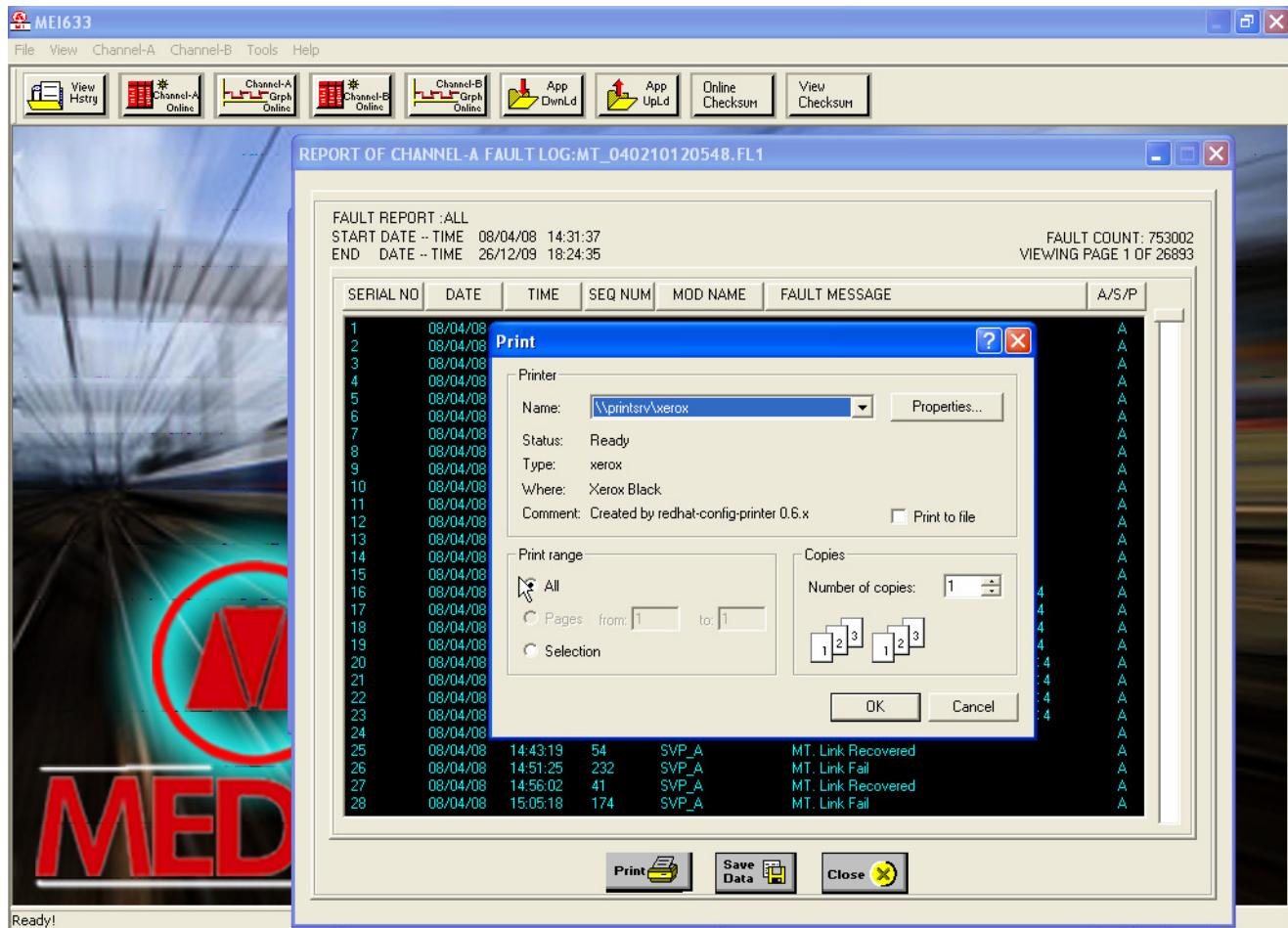
On the right side you can find a scroll bar, which can be used to scroll the data, also using Navigating keys you can navigate the log after selecting the scroll bar.

Fault log records can be seen in the window with details like Serial No., Date, Time, Sequence number, Module Name, Fault Message, Active /Standby/Power On status of Channel at that point of time.

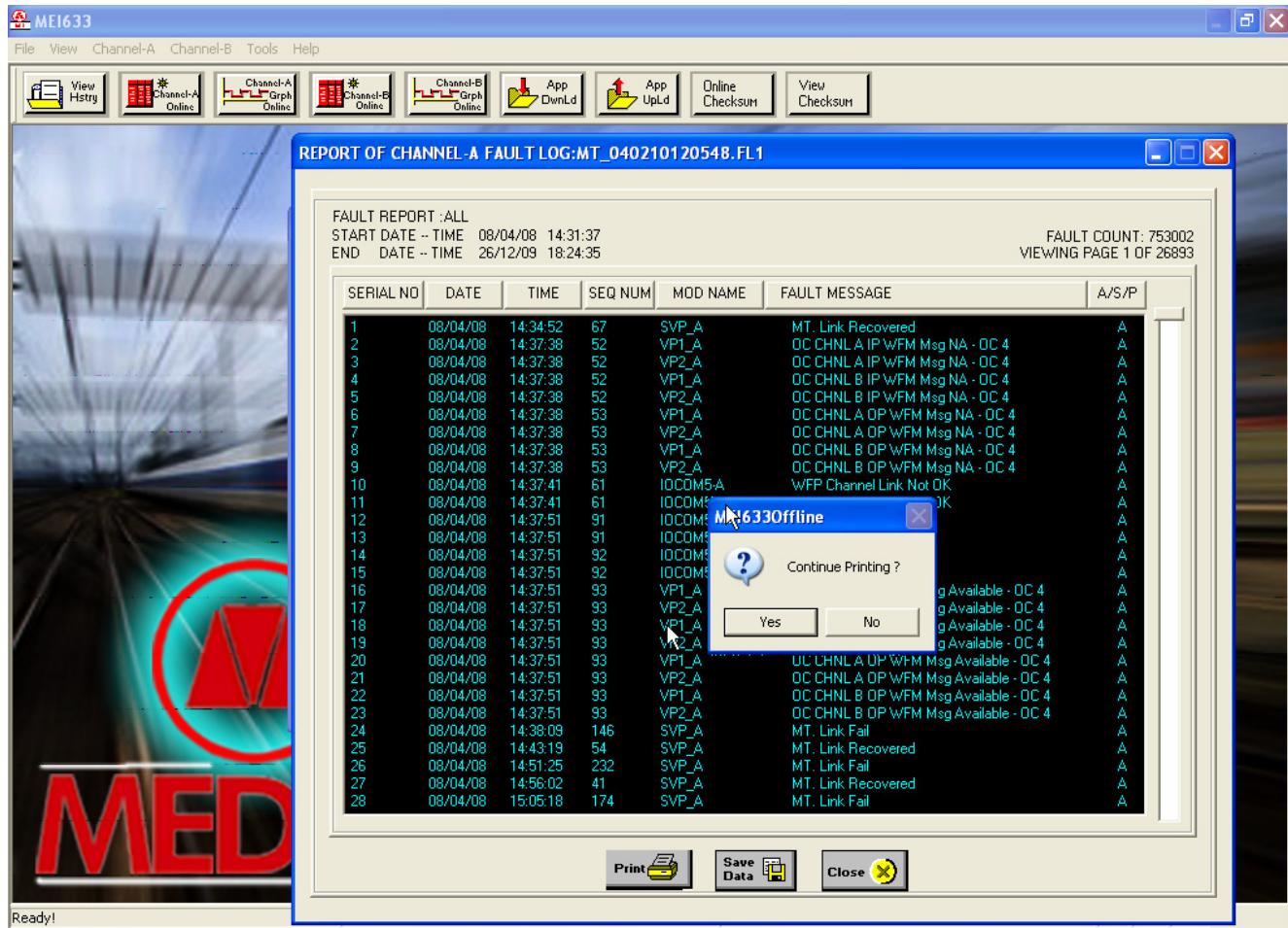
There are three buttons at the bottom of the window.

Print, Save and Close

Print option prints the Fault log page wise, MT prompts you if you want to continue printing further pages. If you want to print all pages you can select "Yes" every time you are prompted. If you want to stop printing then you can select "No". The Screen where you will be prompted is shown below.



Ready!



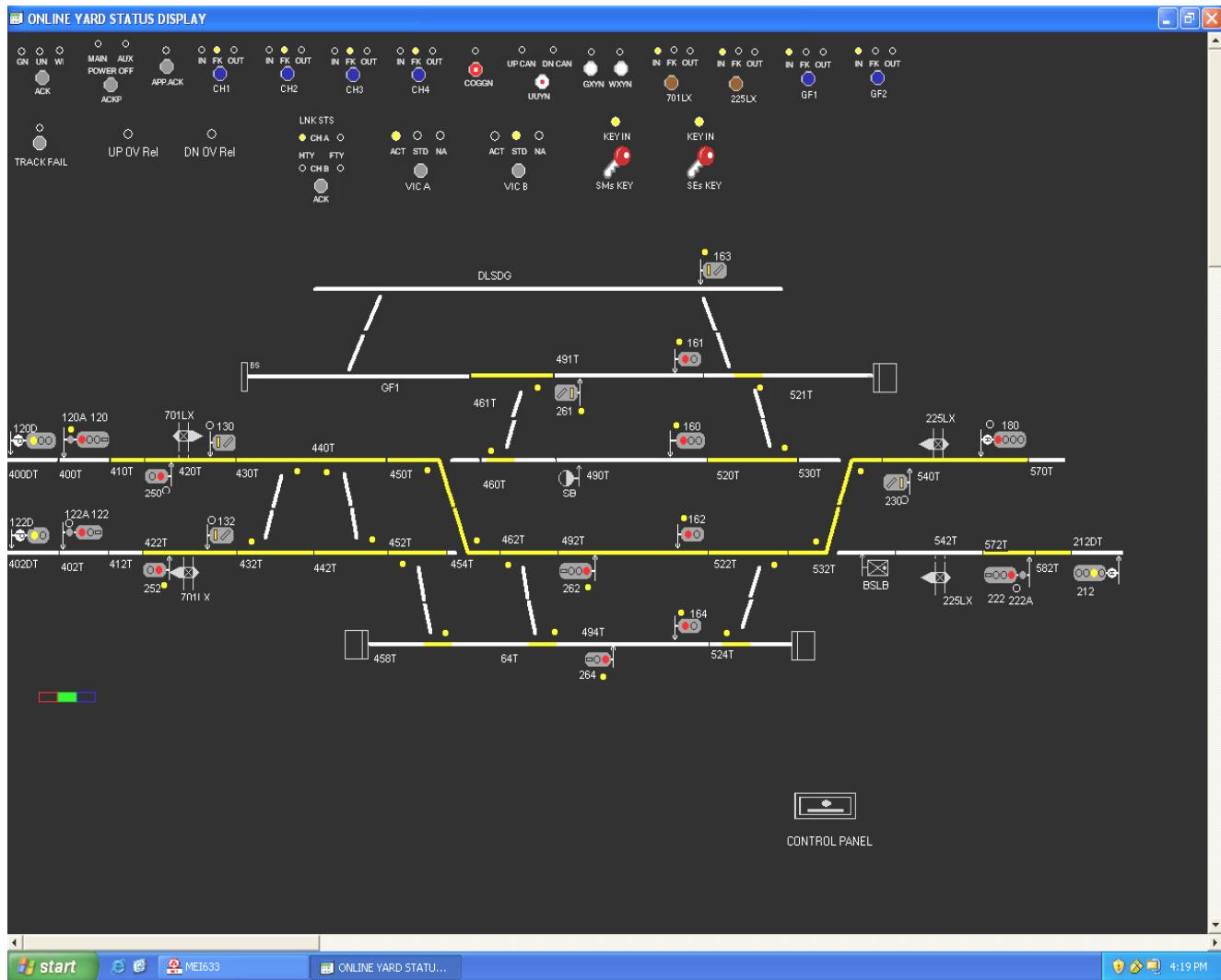
Second button is "Save Data" button. This option allows you to save the log into a text file. When you select the save option you will be prompted to give a name for the File and select a location where you want to save that file into.

Finally, "Close" option allows you to safely close the log window.

5. Yard Status Display

5.1. VDU Yard Status Display - Online

VDU Yard Status Online option allows you to view the online yard status in a separate window.



You can use the Scrollbars to view the Entire Yard. An RGB Flash Indication to the bottom left corner shows Application Active Status.

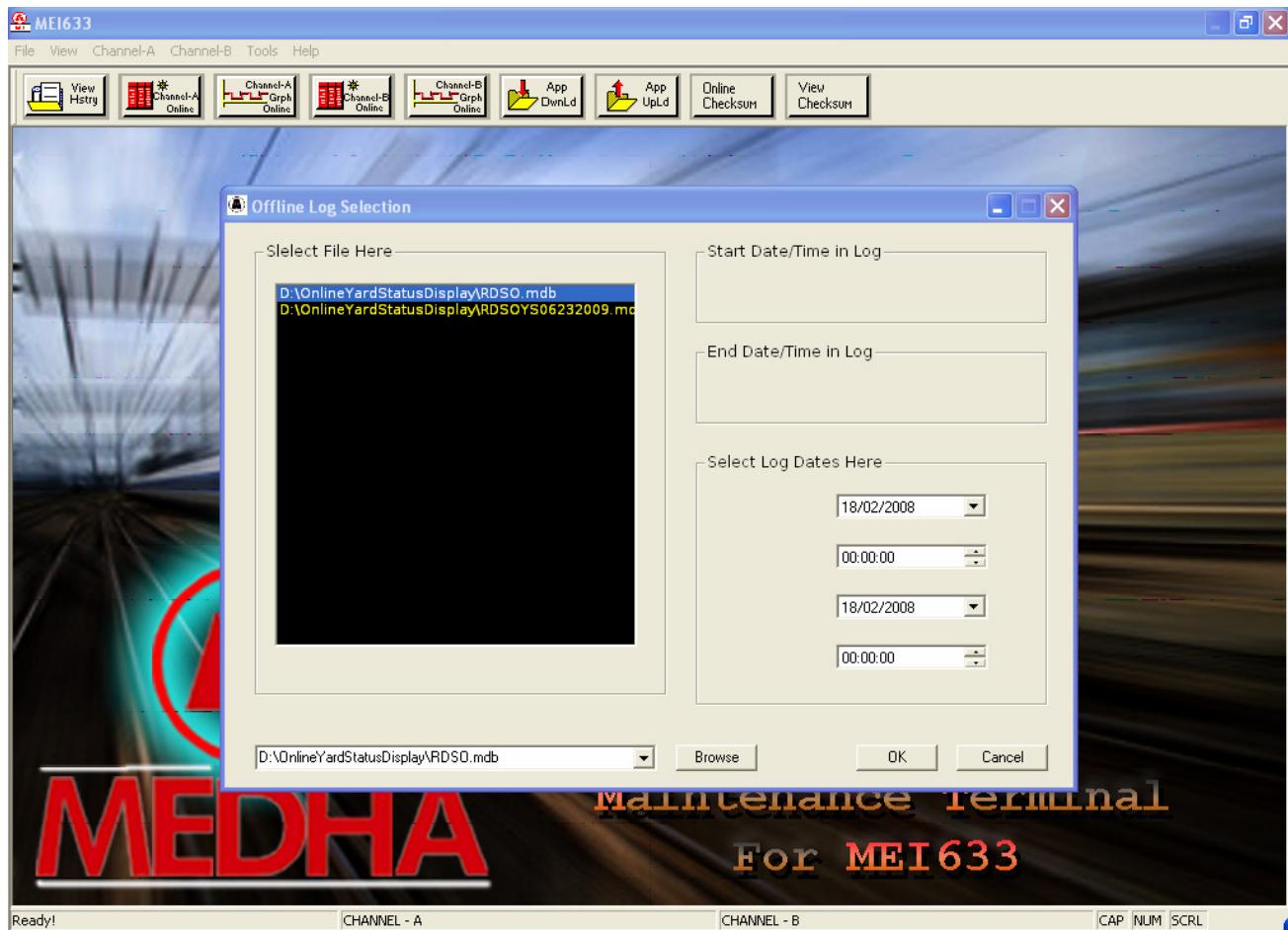
Yard Status is saved as .MDB files in the “D:\OnlineYardStatusDisplay” folder.

The Format for the .MDB Files is Current Yard Name. mdb

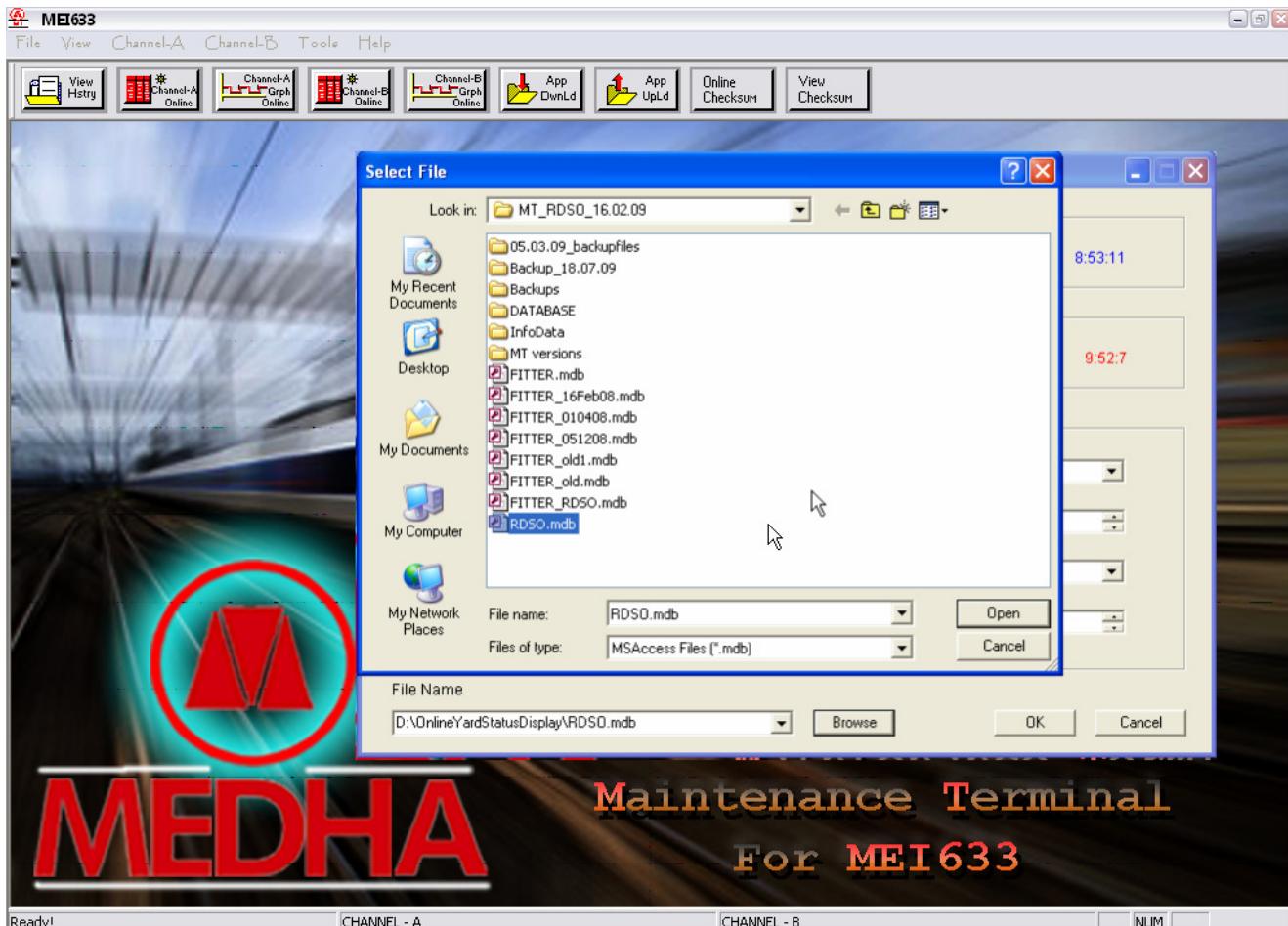
If the current MDB file exceeds 15 lakh events, a new MDB with the file “Current Yard Name + Date + YS .mdb” is created.

5.2. VDU Yard Status Display - Offline

"VDU Yard Status Offline" option allows you to view the offline yard status, you can view the status of the yard at a defined period of time in this option.
This Option opens the following Dialog box:



In the above dialog box, Use Browse button for selecting the Offline .MDB file. Click required .MDB file and Press Open button in Select File dialog. Selected Offline log file will be shown in top-left pane.



Select Start Date

- Start Date in Selected Log File will be shown in Start Date/Time in Log to the top-right pane.
- Start Date Combo box shows Available Start Date in Selected Log file. This can be modified for viewing required Days Log.
- Start Date can be selected from Start Date Calendar or it can be typed. Start Date Format: MM / DD / YYYY
- If Start Date Entered is not Available in Selected Log file, a Message will be displayed showing “Next Available Date from the Entered Start Date” and a Confirmation will be asked from the you to Continue for Start Date. Press OK to Continue or Press Cancel to select another Start Date.

Select Start Time

- Start Time in Selected file will be shown in Start Date/Time in Log to the top-right pane.
- Start Time text box shows Available Start Time in Selected Log file. This can be modified for viewing required Time Log.
- Start Time can be typed or Up/Down arrows can be used for Selecting Start Time. Start Time Format: hh / mm / ss
- If Start Time Entered is not Available in Selected Log file for Selected Start Date, a Message will be displayed showing “Next Available Time from the Entered Start Time in Selected Start Date” and a Confirmation will be asked from you to Continue for Start Time. Press OK to Continue or Press Cancel to select another Start Time.

Select End Date

- End Date in Selected file will be shown in End Date/Time in Log to the Right side.
- End Date Combo box shows Available End Date in Selected Log file. This can be modified for viewing required Days log.
- End Date can be selected from End Date Calendar or it can be typed. End Date Format: MM / DD / YYYY
- If End Date Entered is not Available in Selected Log file, a Message will be displayed showing “Previous Available Date from the entered End Date” and a Confirmation will be asked from you to Continue for End Date. Press OK to Continue or Press Cancel to select another End Date.

Select End Time

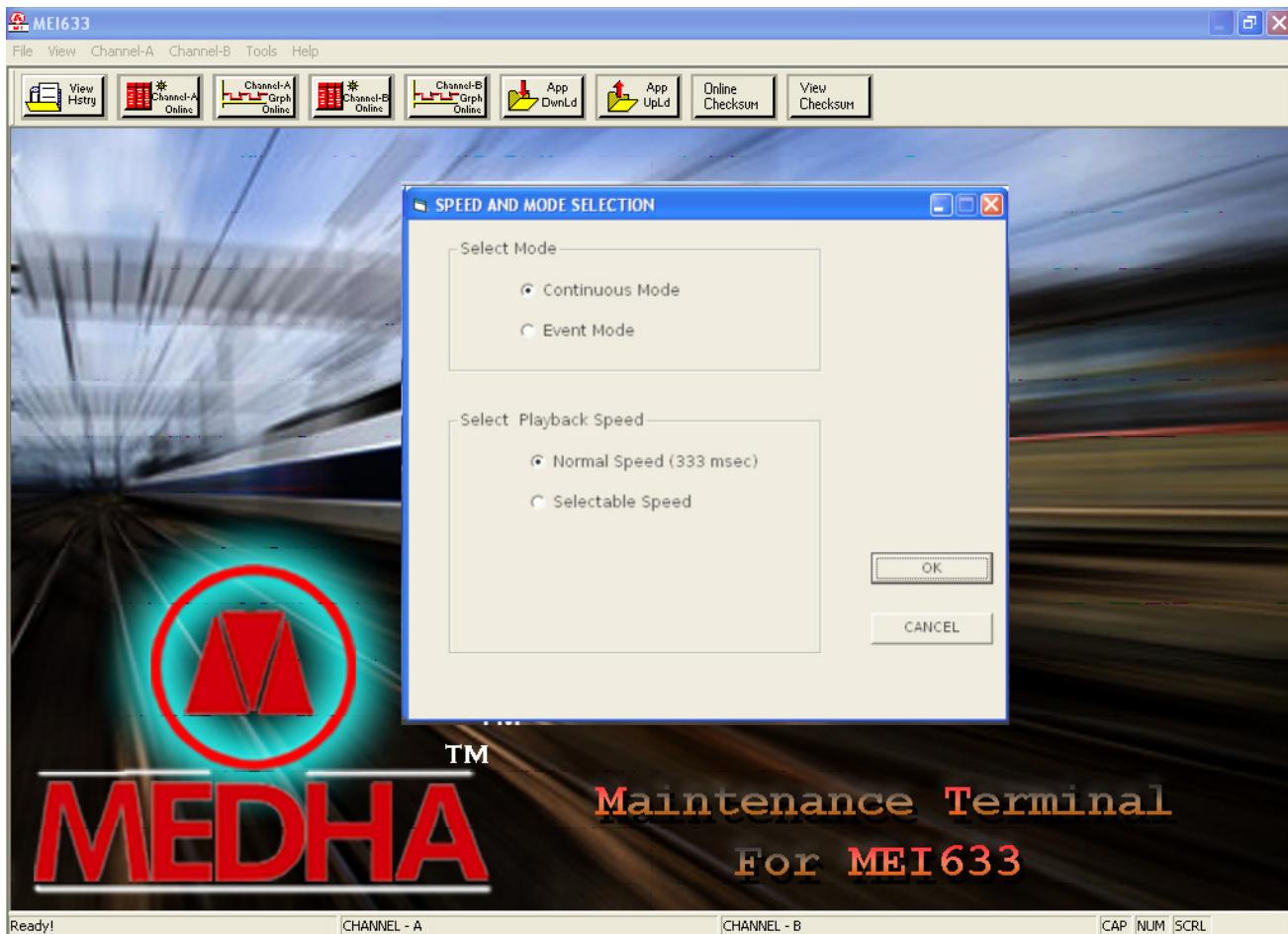
- End Time in Selected file will be shown in End Date/Time in Log to the Right side.
- End Time text box shows Available End Time in Selected Log file. This can be modified for viewing required Time Log.
- End Time can be typed or Up/Down arrows can be used for Selecting End Time. End Time Format: hh / mm / ss
- If End Time Entered is not Available in Selected Log file for Selected End Date, a Message Will be displayed showing “Previous Available Time from the Entered End Time in Selected End Date” and a Confirmation will be asked from you to Continue from the End Time. Press OK to Continue or Press Cancel to select another End Time.

You can see a Shorter Time Interval. If Entered Interval is More than its takes a Long Time to Load then a Message will be Displayed saying “It is Recommended that you Enter Shorter Interval”. Click OK Button to Continue or Click Cancel Button to Close the Selection Window. If OK button is clicked, another Window for Speed and Mode Selection will be opened.

Speed Selection

Speed is the Rate at which Indications will be displayed. Any of the Following Speeds can be selected.

Normal Speed (333 m sec): Normal Speed is default Speed. This Option opens the following Dialog box:



Selectable Speed: You can select any of the following speeds. 1 sec, 2 sec, 3 sec, 4 sec and 5 sec this window is shown below



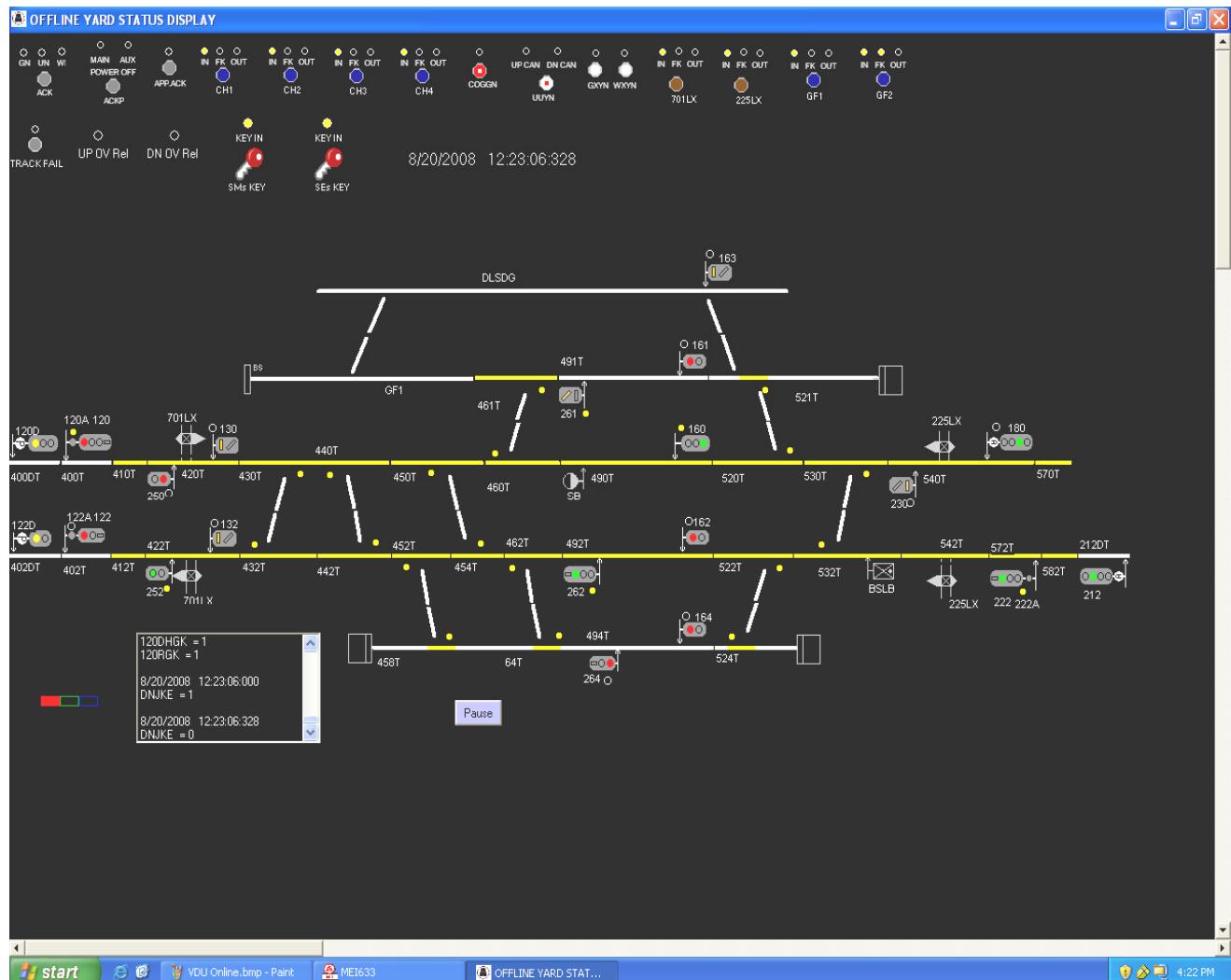
Speed Selection

You can select any of the Following Modes

Continuous Mode: Displays Indications continuously Event by Event.

Event Mode: Displays one Event at a time. You have to Press Continue to Proceed to next Event.

After Selecting Speed and Mode, Press OK button to Proceed or Press Cancel button to Exit the Application. This Option opens the following Dialog box:



Date and Time with Milliseconds will be shown for Every Event. A List Displays all the Relays Changed for Every Event. Both Relay Name and Relay Value will be shown. During Offline yard Status Display is running, you can Press Pause to Stop and after that Resume to start again. Click Continue to play button in Event Mode to Display Next Even. An RGB Flash Indication to the bottom left corner shows Application Active Status.

6. Application Data Operation

6.1. Application Download

Application Download operation is performed through this menu option. Data is downloaded from MT to System.

Application Download Option is used to download the Application Data from the system.

This is a protected/secured operation, to perform this operation you will have to enter the User ID and Password, which only an Administrator can do.

You have to enter the User ID and the Password to perform Application operation.

You have an option to change the password, clicking the Change Password button can do this.

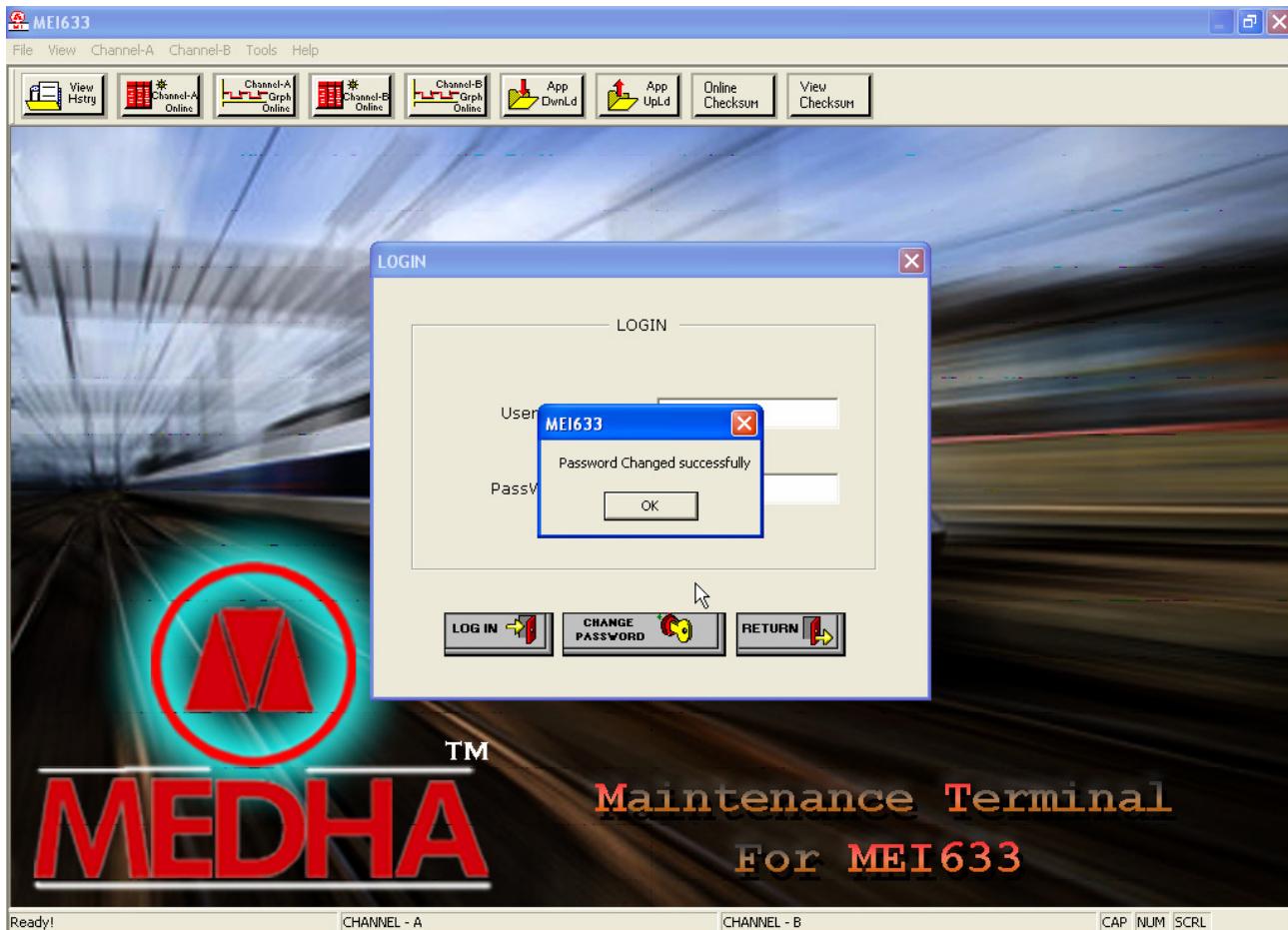
The following is the screen for changing the Password.



Here you will have to enter your User ID and Old Password, New Password and reenter the new password for Verification and click the Save Password option.

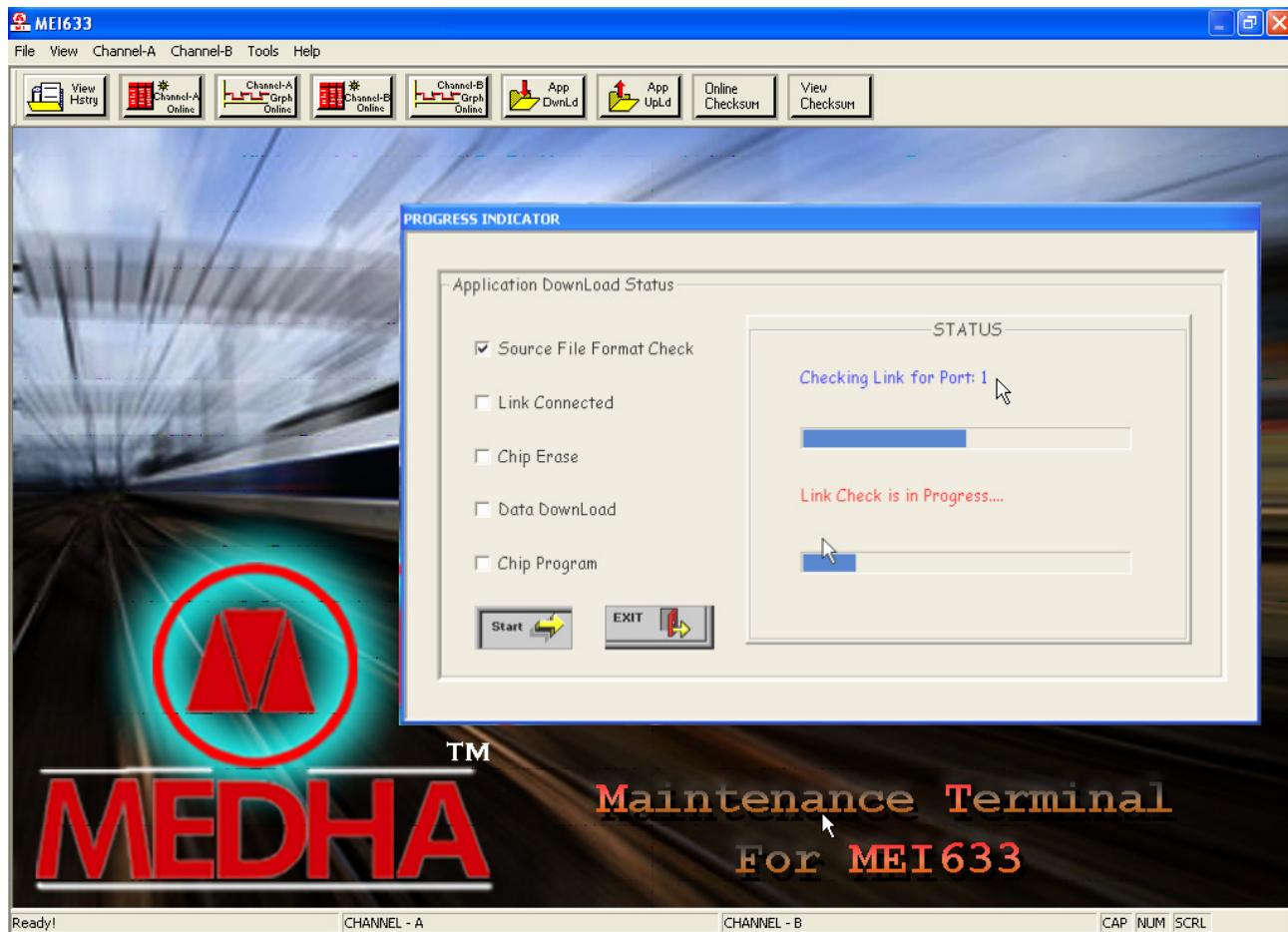
This new changed Password is saved in the database and when saved you will get a confirmation that your Password has been successfully changed.

The following is the screen that confirms Password change is successful.



Now you will have to Login with your new User ID and Password.

After Logging in you will be shown the following screen where Application Download operation is performed.



Here, there are a few parameters to understand, these are segments in the Application Download operation.

- Start
- Status Block.
- Source File Format check,
- Link Connected,
- Chip Erase,
- Data Download,
- Chip Program,
- Exit

Start

Start button initializes the process of Application Download.

The Port with which Channel-A is communicating Application Download and Upload operations sets it as their default port.

Status Block

This Block shows the status of the Application Download Operation.

Each Segments status is shown in this block. The first Progress indicator indicates the Sub-Status of the Segment, and the second Progress indicator indicates the Status of each Segment. Initially the operation begins with "**Source File Format check**".

Source File Format check

This option indicates the "**Source File Format Check**" segment, the existing File in the Database is checked for the File Format, i.e.; the data in the File should be in a specified format, and if data in the File is not in that format then the operation breaks. If the File is not in the specified format then the sub-status indicator gives a message saying "Invalid Source File Format" and the operation breaks. If the Source File Format is found to be correct then the option gets checked and the process proceeds to the Link Connected Segment.

Link Connected

This segment indicates the status of the Link between the system and MT. If the Link is established the option is checked and proceeds further for the Chip Erase option.

Chip Erase

Chip Erase segment erases the existing Application data on the system frame wise. After erasing the Application data successfully, the option is automatically checked and the Application Download Starts.

Data Download

After the erase operation is successful MT sends a data download request to the system. Then Data Download segment begins, and downloads the application data to the system, this is done frame wise and table wise. If any error occurs the relevant information is shown in the status block. After the Data Download operation is successfully completed the Chip Programming starts.

Chip Program

MT sends a program query message to program the chip. In this segment Chip is programmed with the downloaded data. If the Chip is programmed successfully the Application Data Download operation is successfully completed. If any error occurs during the communication the Data Download operation breaks and can be exited or restarted.

During the communication, if the link breaks or of any reason the system is unable to communicate with MT then MT sets a retry count, where MT restarts the operation from Link Connected segment, this is done for a maximum of 2 retries. If still System is not responding then MT terminates the operation.

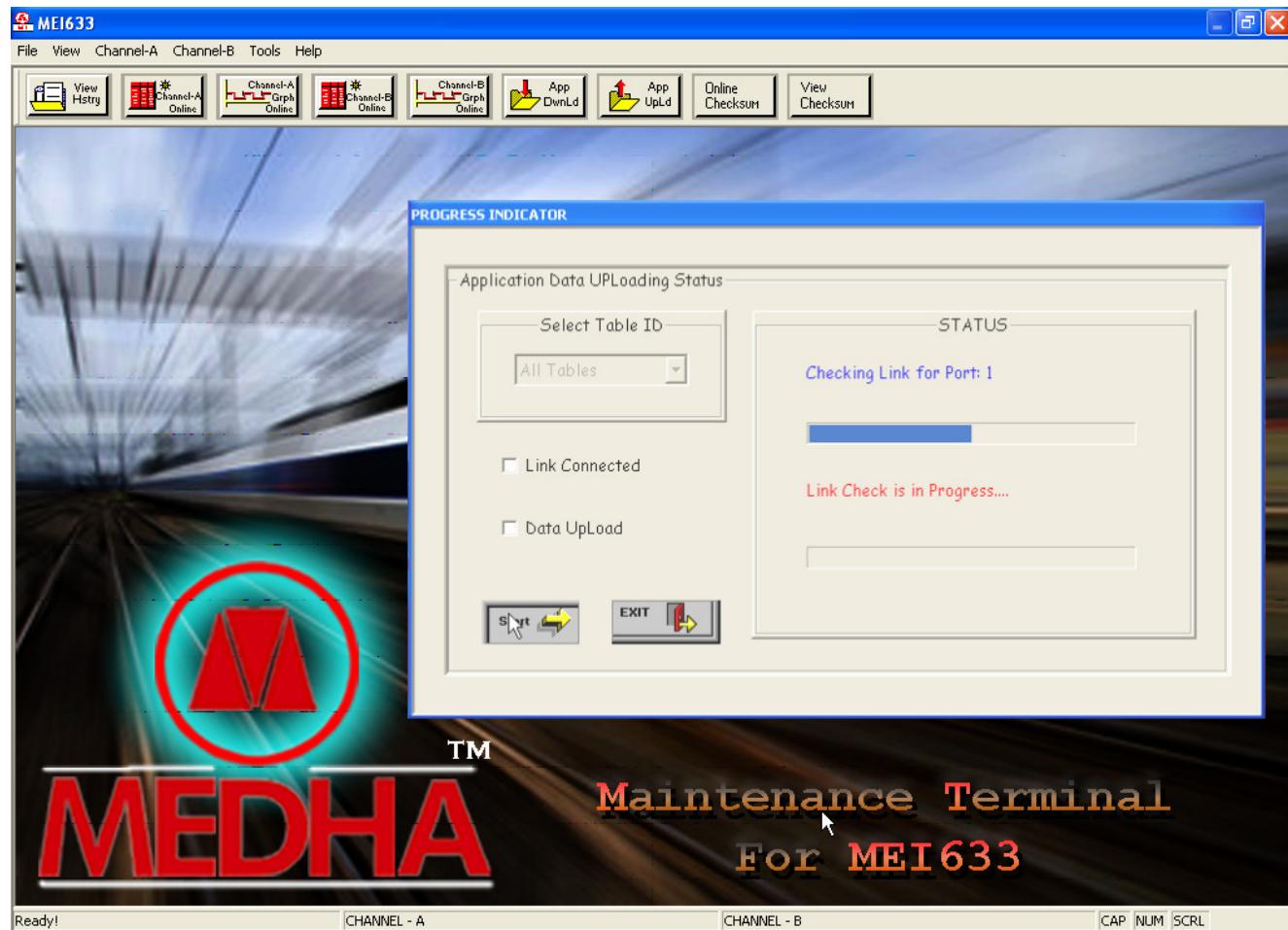
Exit

This option exits or terminates the Application Download operation and closes the Application Download window.

6.2. Application Upload

Application Upload operation is performed through this menu option. Data is uploaded from System to MT.

The following is the screen for Application Upload operation.



Here, like Application Download operation, Application Upload operation has two segments.

- Link Connected
- Data Upload

Link Connected

This segment indicates the status of the Link between the system and MT. If the Link is established the option is checked this indicates that the link has been successfully established.

After the link is connected the data Upload operation starts. Status can be seen in status block.

Data Upload

Here unlike Application download operation, Application Upload operation is performed depending on your selection.

In Application Download operation the system continuously requests and receives all tables and its frames in sequence one after the other, but in Application Upload option you have an opportunity to select the table data you want to download and perform the operation. If the operation is successful a status message is shown in the status block. If any error occurs during communication, MT starts to re communicate, MT sets a count for a maximum of 2 retries. If during this process also if system is unable to respond then, MT breaks the operation and clicking the Exit button can terminate this.

7. Checksum Report Display

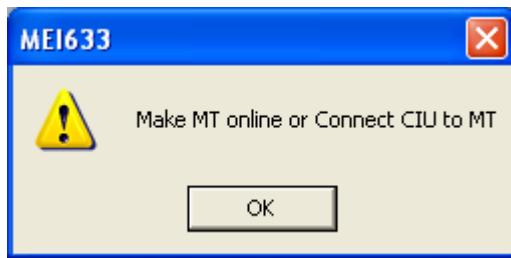
A feature is provided in MT to view the Checksum Report.

Once the user clicks on the Online Checksum button provided on the toolbar of MT home page, then the Checksum Report will be displayed within few seconds. The Online Checksum button will be disabled until the report is displayed. Checksum Report will be displayed in the prescribed format.

When ever the user clicks on the Online Checksum button, the displayed Check sum Report will be saved in the background. If there is any previously saved Checksum Report then it will be overwritten by the current Checksum report.

Whenever there is a data communication between MT and CIU, if the user clicks on the Online Checksum button, then the Checksum Report will be displayed.

If there no data communication between MT and CIU, if the user clicks on the Online Checksum button then a message box will be displayed as shown below:



Another feature is provided to view the last viewed Checksum Report by clicking on the View Checksum button provided adjacent to the Online Checksum button. Last saved Checksum Report will be displayed with or without data communication between MT and CIU.

The Checksum Report format will be as shown below: