Control Room Logbook (CRL)
Quick Reference Card for NuMI/MINOS

Getting Started with CRL

Get started with the NuMI/MINOS-customized CRL application interface and Web interface.

CRL runs on minos-crl.minos-soudan.org. This machine requires Kerberos authentication to the FNAL.GOV realm.

CRL runs under the account *crluser.* Any user who invokes CRL must be authorized to use this account. To request authorization, send mail to *minoscrl-admin@fnal.gov.*

To log in to minos-crl.minos-soudan.org and invoke CRL:

- Console login: Login with local password (Password attached to machine.) Type: crl &.
- Cryptocard network login: Login as yourself on minos-offline using Cryptocard, then run “ssh crluser@minos-crl”. Make sure that the DISPLAY is set to your local machine. Type: crl &.
- WRQ network login: Create a **Host-Unix and Digital** connection setup for minos-crl.minos-soudan.org. Set the User ID to *crluser.* Authenticate under your principal, then log in using your principal as user *crluser.* Start Reflection X, and minimize. On VT window, type: crl &.

To use CRL, obtain a CRL account. To request one, send mail to *minoscrl-admin@fnal.gov.*

Log in to CRL at start of shift, and log out at end. See **Log In/Log Out** under **The CRL Toolbar**, below.

Change your CRL password when you log in the first time. See **Change Password** under **The CRL Toolbar**, below.

To access Web interface:	URL is http://minos-crl.minos-soudan.org/ 1. Enter NuMI/MINOS username and password. 2. Click *Link to MINOS CRL web interface.*

The CRL Toolbar

The column of buttons on left side of CRL window.	
Log In/Log Out	Log in (CRL username and password required), and log out self or other user(s).
Entry Signers	Add/remove logged in users to/from list of logbook entry signers.
Administrator	Add/activate/delete users (admin password required).
Change Password	Change your CRL password (4-8 characters).
Search	Query database of archived logbook entries.
Thread Explorer	Bring up the **Thread Explorer** window to access entry threads.
Scheduler	Bring up the **Scheduler** window to change or terminate autoscheduled entry jobs.
Current Situation	Enter “current situation” global message.
Preferences	Select entry header lines to display/hide in container windows.
Checkpoint Recovery	If you suspect loss of unarchived entries, recover them here.
About LogBook	View information about the CRL application.
Exit LogBook	Exit the CRL application.

Create Logbook Entries in CRL

Select an appropriate category and topic to open the corresponding input container window. Create entry. Entry header appears in RED.

1. Select a desktop page from the page tabs at top of CRL window.
2. Open an input container:
   - If one or more are open by default, click on one to select it.
   - Otherwise, select container category and topic from drop-down menus.
3. Select entry type and create entry in one of three ways:
   - Select target container then double-click button on Logbook Entry Toolbar (at right-hand side of desktop). See **Logbook Entry Toolbars**.
   - Drag Logbook Entry toolbutton into target container.
   - Create a TEXT entry by double-clicking inside target container.
4. Add information to entry.
5. Archive entry when complete.

Note: Any logbook entry that remains unarchived longer than 2 hrs will generate a prompt to archive or delete. Prompt repeats every 25 min.

Logbook Entry Toolbars

Logbook entry toolbars run down right-hand side of desktop pages. See “Create Logbook Entries in CRL” for instructions on creating an entry using one of these toolbar buttons.

Toolbuttons common to all* NuMI/MINOS CRL pages:	
• **Text**	Type in text at cursor and/or insert date&time, image, or text from file.
• **ROOT Data**	In dialog box, enter name of ROOT output file, or browse for it. File is dropped into container.
• **Attach File**	In dialog box, enter name of an application output file of any type, or browse for it. File is dropped into container.
• **Execute**	In dialog box, enter an OS command. Command output is dropped into the container.
Toolbuttons on **Far Detector INSTALLATION** *page only:*	
• **Start of Shift**	Fill out this form at the start of shift. (You must archive it before creating **End of Shift** form.)
• **End of Day Shift**	Fill out this form at end of day shift. Some info from **Start of Shift** form is filled in automatically.
• **End of Night Shift**	Fill out this form at end of night shift. Some info from **Start of Shift** form is filled in automatically.
Toolbuttons on **Far Detector OPERATION** *page only:*	
• **Start of Shift**	Fill out this form at the start of DAQ shift. (You must archive it before creating **End of Shift** form.)
• **End of Shift**	Fill out this form at the end of DAQ shift. Some info from **Start of Shift** form is filled in automatically.

Logbook entry toolbars run down right-hand side of desktop pages. See “Create Logbook Entries in CRL” for instructions on creating an entry using one of these toolbar buttons.

Toolbuttons on MODULE MAPPER *page only:*

• START OF SHIFT	Fill out this form at the start of module mapper shift.
• SUMMARY	Fill out this form at the end of module mapper shift.

VETO SHIELD INSTALLATION *and* NETWORK *pages have no extra toolbuttons (** NETWORK *has no* ROOT DATA toolbutton*).*

Create Image File from Screenprint

Capture image of window for subsequent inclusion into CRL entry. Save image file as gif or jpg. (UNIX prompt shown below as %)

To capture a window on CRL “home” machine:

% cd /path/to/CRLfiles
% import -delay <n> <filename>.<ext>
Within <n> seconds, click twice on desired window.
To view image: % xv [&]
Create entry using ATTACH FILE toolbutton to insert <filename>.<ext>.

To capture a window on remote machine:

Log into remote machine using ssh:
(If no ssh, run “xhost <CRL home machine>” on remote host.)
(on CRL home machine) % cd /path/to/CRLfiles
(on CRL home machine) % import -display <remoteHost>:0.0 <file>.<ext>
(on remote machine) Click twice on desired window.
Image file saved in directory from which “import” command is issued.
To view image: % xv [&]
Create entry using ATTACH FILE toolbutton.

Attach Same Message to All Upcoming Entries

The Current Situation button is used to turn a global message on and off. Once set, the message is included with all future entries of all types in local CRL installation.

To set a message	Click CURRENT SITUATION button. Type in message, then click **OK**.
To change the message	Click CURRENT SITUATION button and edit the message. Click **OK**.
To turn off the message	Click CURRENT SITUATION button. Choose TERMINATE CURRENT SITUATION.

Far Detector Installation Page Menus

This page is for entries relating to INSTALLATION of the Far Detector.

Entry Input Menu Items:	*Entry types to insert:*
• INSTALLATION SHIFT > GENERAL INSTALLATION LOG	Entries related to installation of detector including shift leader summary, and START OF SHIFT and END OF ... SHIFT forms.
• INSTALLATION SHIFT > PROBLEMS WITH MOUNTED MODULES	Entries related to module problems such as light leaks, etc. (No forms go here)

This page is for entries relating to INSTALLATION of the Far Detector.

Other Menu Items:	*Actions to perform:*
• THREADS > THREAD CONTAINER	Click THREAD EXPLORER; drag thread from that window to thread container in order to view and manipulate entries in thread
• REPORT > DAILY REPORT	Click SEARCH, query database, and drag resulting entries to daily report container
• REPORT > WEEKLY REPORT	Click SEARCH, query database, and drag resulting entries to weekly report container
• REPORT > MONTHLY REPORT	Click SEARCH, query database, and drag resulting entries to monthly report container

Far Detector Operation Page Menus

This page is for entries relating to OPERATION of the Far Detector.

Entry Input Menu Items:	*Entry types to insert:*
DAQ ENTRY> GENERAL DAQ LOG	Entries related to DAQ operations including START RUN and END RUN forms.
FD DAQ DEVELOPMENT > DAQ DEVELOPMENT LOG	Entries related to DAQ upgrades.

Other Menu Items (See Other Menu Items *under* FAR DETECTOR INSTALLATION PAGE MENUS*)*

Module Mapper Page Menus

This page is for entries relating to Module Mapping.

Entry Input Menu Items:	*Entry types to insert:*
MODULE MAPPER ENTRY> GENERAL MODULE MAPPER LOG	Entries related to module mapping including the START OF SHIFT and SUMMARY forms.

Other Menu Items (See Other Menu Items *under* FAR DETECTOR INSTALLATION PAGE MENUS*)*

Veto Shield Installation Page Menus

This page is for entries relating to Veto Shield Installation.

Entry Input Menu Items:	*Entry types to insert:*
VETO SHIELD INSTALLATION ENTRY> GENERAL VETO SHIELD LOG	Entries related to veto shield installation.

Other Menu Items (See Other Menu Items *under* FAR DETECTOR INSTALLATION PAGE MENUS*)*

Network Page Menus

This page is for logging network problems.

Entry Input Menu Items:	*Entry types to insert:*
NETWORK ENTRY> GENERAL NETWORK LOG	Entries related to network problems.

Other Menu Items (See Other Menu Items *under* FAR DETECTOR INSTALLATION PAGE MENUS*)*

Select Logbook Entry(ies) in Container Window

You can select one or more entries in a container.
Selected entry header background turns gray.

select an entry	Click	Click once in the entry's header.
deselect single entry (only one entry selected)	Click	Click once in the entry's header.
deselect single entry (only one entry selected) and select different entry simultaneously		Click once in the header of the new entry.
select multiple entries	<Ctrl>-click	Select the first entry as described above, then press the <Ctrl> key and click once in the header of another entry. Continue for additional entries
deselect one of multiple selected entries	<Ctrl>-click	Press the <Ctrl> key and click once in the header of entry to deselect.
select all entries in container		**Entries** menu > **Select ALL Entries** This selects non-archived and archived entries.
deselect all selected entries		**Entries** menu > **Un-select ALL Entries** Or 2 single clicks in selected header.

Edit and Archive Logbook Entries from CRL

LOG ON BEFORE YOU ARCHIVE ANY ENTRIES!!
Entry header appears in BLACK after entry is archived.
Unarchived entries: Edit, Delete, Archive
Archived entries: Thread, Annotate

Any logbook entry that remains unarchived longer than 2 hrs will generate a prompt to archive or delete. Prompt repeats every 25 min.

select text/image in an entry		Position cursor and drag over text.
select all text/ images in an entry	Ctrl-a	Position cursor in body of desired entry. Select all manually, or click **Edit** menu **> Select-All**
cut text/image	Ctrl-x	Select item,click **Edit** menu **> Cut-to-Clipboard**
copy text/image	Ctrl-c	Select item, click **Edit menu > Copy-to-Clipboard**
paste text/image	Ctrl-v	Position cursor, click **Edit menu > Paste-from-Clipboard**
change font family		**Font** menu > **Family**
change font style	Ctrl-i *italic* Ctrl-b **bold** Ctrl-u underline	**Font** menu > **Style** (Click the style again to toggle back to normal font.)
change font size		**Font** menu > **Size**
change font color		**Font** menu > **Color**
insert image from file	F9	Place cursor in entry. **Insert** menu > **Image** > **From a File**
insert image from URL	F8	Place cursor in entry. **Insert** menu > **Image** > **From a URL**. Type full URL.

LOG ON BEFORE YOU ARCHIVE ANY ENTRIES!!
Entry header appears in BLACK after entry is archived.
Unarchived entries: Edit, Delete, Archive
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insert text from file	Ctrl-o	Place cursor in entry. **Insert** menu **> Text > From a File**.
insert text from program	Ctrl-e	Place cursor in entry. **Insert** menu **> Text > From a Program**.
replace text with program output	Ctrl+Alt-A	Place cursor in entry. **Insert** menu **> Text > Replace ALL TEXT with Output from a Program**.
undo previous operation	Ctrl-z	**Edit** menu **> Undo <operation>** Repeat n times to undo last n operations in stack.
redo "undone" operation	Ctrl-y	**Edit** menu **> Redo <operation>** Repeat n times to redo last n "undo" operations in stack.
add keyword(s) to entry		Click on . Select from the left-hand list of attachable keywords and click **Add=>**. You can add multiple keywords at a time.
add global keyword(s) to entry		Click on ; click **Global Keywords**. Select from the left-hand list of keywords and click **Add=>**. You can add multiple keywords at a time.
remove keyword(s) from entry		Click on ; select from the right-hand list of attached keywords and click **<=Remove**. You can remove multiple keywords at a time.
archive selected entry(ies)		**Entries** menu **> Archive Selected Entries**
archive all entries in container	Ctrl-s	**Entries** menu **> Archive All non-archived Entries in this Topic**
remove selected entry(ies)		**Entries** menu **> Remove Selected Entries** (Archived entries are removed only from view, they remain in the database. Non-archived entries are deleted.)
remove all entries from container		**Entries** menu **> Remove All Entries in this Topic** (See note above.)
send selected entries	F8	**Entries** menu **> Send Selected Entries to Mail Recipient**
send all entries	Ctrl+Shift-s	**Entries** menu **> Send ALL Entries to Mail Recipient**
view container category		**Check Category**

Thread Entries

Logbook entries pertaining to a particular issue can be linked via a “thread”. Manipulate threads in THREAD CONTAINERS and INPUT CONTAINERS, as noted below.

create new thread	**Thread Explorer > New Thread** (or from input or thread container: **Add Selected Entries to a Thread**)
view a thread	**Thread Explorer**: select thread and drag it to thread container
sort entry(ies) in a thread	thread container: **Sort** menu
add entry(ies) to a thread	input or thread container: **Entries** menu **> Add Selected Entries to a Thread**
select entry(ies) in a thread	thread container: Ctrl-click individual entries, or **Entries** menu **> Select ALL Entries**
send entries in a thread	thread container: **Entries** menu **> Send ... Entries to Mail Recipient**
delete existing thread	**Thread Explorer**: select thread and click **Delete Thread**

Recover Checkpointed Entries

Logbook entries are periodically checkpointed to protect against data loss. Once CRL is back up after a disruptive event, you can recover the lost entries.

Click the **Search** button (on the CRL toolbar) to bring up **Checkpoint** window.

Open a checkpoint container or input container for which category/topic matches that for entry(ies).

On **Checkpoint** window, select desired entry(ies) and drag them to target container. Then edit and archive as desired.

Search, View, Annotate Entries from CRL

Query database to retrieve archived entries. Use a REPORT CONTAINER to view and annotate them (if INPUT CONTAINER used, it filters on its category/topic).
Note: Printing is not enabled in CRL; print entries from Web interface.

Search and view archived entries:

Click the **Search** button (on the CRL toolbar at left). This brings up a window with two tabs:

• **Inquiries**	Set one or more filters for searching the database. You can configure your inquiry, execute it, save results, save the inquiry for future use, restore and edit inquiry. To view results, drag the **Found** <n> button to a report container.

Query database to retrieve archived entries. Use a REPORT CONTAINER to view and annotate them (if INPUT CONTAINER used, it filters on its category/topic).
Note: Printing is not enabled in CRL; print entries from Web interface.

• **LogEntry Explorer**	Search the database by year, month, day, or hour and by category/topic. Within the selected time window, optionally confine the search to a particular data input category and/or topic. Drag entry(ies) to a report container to view them.
Annotate an entry	Add a note to an archived entry. Scroll to entry and click **Annotate** button on entry. Enter text, and click **Commit Annotation**.
View annotation	Click **Refresh** button on entry (all annotations made on entry appear).

Retrieve Run_Summary Entries from CRL

Follow instructions for “Search, View, Annotate Entries from CRL”. Use search criteria given here.

Search on any of:

- Category **FD Data Collection**
- Topic **FD Data Collection Log**
- Keyword **FD_Data_Collection** (and optionally **Daily_report**, **Weekly_report**, and **Monthly_report**)

Create and Archive Logbook Entries from Web

Only text entries can be made from the Web interface.

1. Access web interface:
   - URL is http://minos-crl.minos-soudan.org/
   - Enter NuMI/MINOS username and password.
   - Choose *Link to MINOS CRL web interface.*
2. Select and click a category/topic from "**CREATE AN ENTRY...**" buttons under search header.
3. Enter your CRL username and password at prompt.
4. Entry page appears. To add content to entry:
   - Select one or more keywords from list at top-right.
   - Enter text in box.
5. Archive entry. If you plan to add multiple entries, click **ARCHIVE ENTRY**. Else, click **ARCHIVE ENTRY AND LOG OFF**.

Search and Retrieve Archived Logbook Entries from Web

Select and edit the search criteria as desired.

1. Access web interface (see **CREATE AND ARCHIVE LOGBOOK ENTRIES FROM WEB**).
2. At top of search page, enter a search time window (absolute or relative time).
3. Choose operator. You can filter on manual versus Run Summary program entries.

4.Choose header information to display.

5. Select keyword(s) to filter on.

5. Type in word(s) for word search.

6. Click one of the search buttons to retrieve entries:
   - **SEARCH FROM-TO**
   - **TO_PRESENT_TIME**
   - **PREVIOUS**
   - **NEXT**

7. Scroll down to see retrieved entries.

8. To print entries, select print on your browser to print the page.

Annotate Archived Logbook Entries from Web

Add a note to any archived entry.

1. Search and retrieve entries as described in **SEARCH ARCHIVED LOGBOOK ENTRIES FROM WEB**.
2. Once entry is retrieved, click **ANNOTATE THIS ENTRY**.
3. Enter your CRL username and password.
4. Enter annotation text in box.
5. Click **SAVE ANNOTATION**.