

HOWTO

RUN RPG WITH THE WBS

0.0	PREREQUISITES.....	1
1.0	VIEW LDM LEVEL II DATA VIA THE WBS	1
2.0	VIEW ARCHIVED LEVEL II (BASE DATA) FROM NCDC VIA WBS	3
3.0	VIEW LDM SUPER-RES DATA VIA WBS.....	6

0.0 PREREQUISITES

- 0.1 The user must have access to a Linux PC set up according to ROC Software Engineering specifications.
- 0.2 The RPG software is installed and the user is logged in to one of the orpg numbered accounts.
- 0.3 The RPG has been started and the RPG HCI is running.
- 0.4 Double asterisks, “**”, indicate steps that must be performed only if you haven’t already performed them.

1.0 VIEW LDM LEVEL II DATA VIA THE WBS

- 1.1 ****** Change the RPG configuration files to use the WBS. This command will update your comms_link.conf and tcp.conf files.

```
lnxeng1 ~orpg2:/export/home/orpg2> switch_rda wbs_local [ENTER]
```

Stopping rpg load.

Re-starting rpg load.

```
10/21/09 12:50:43 mrpg: Reading task tables
12:50:43 mrpg: Start up RPG - Non-operational
12:50:43 mrpg: Reading data table
12:50:43 mrpg: Reading product table
12:50:43 mrpg: Generating system configuration file
12:50:44 mrpg: Reading comms configuration
12:50:45 mrpg: Removing all RPG operational tasks
```

```

12:50:45 mrpg: Checking/creating/clearing RPG data stores - startup
12:50:46 mrpg: Executing init commands - startup
12:50:46 mrpg: --->Initialize Adaptation Data
12:50:48 mrpg: --->Initialize the Binary Task Attribute Table
12:50:49 mrpg: --->Initialize Critical Data Stores
12:50:49 mrpg: --->Initialize RDA Alarms Table
12:50:49 mrpg: --->Initialize the ITCs
12:50:50 mrpg: --->Check HYDROMET Files.
12:50:50 mrpg: --->Initialize HYDROMET Files.
12:50:51 mrpg: --->Initialize GSM
12:50:51 mrpg: --->Initialize Binary Product Attributes Table
12:50:52 mrpg: --->Initialize Product Distribution
12:50:52 mrpg: --->Initialize Routine Request Product Generation
12:50:53 mrpg: --->Initialize Product Generation Tables
12:50:53 mrpg: --->Initialize Alert Requests/Alert Thresholds
12:50:54 mrpg: --->Initialize Loadshed Information
12:50:55 mrpg: --->Initialize Clutter
12:50:55 mrpg: --->Initialize cm_ping
12:50:56 mrpg: --->Initialize LDM
12:50:56 mrpg: --->Initialize RDA Adaptation Data
12:50:57 mrpg: Starting operational processes
12:51:13 mrpg: All operational processes started. Waiting for OP ready ...
12:51:15 mrpg: RPG State: OPERATE
12:51:15 mrpg: RPG Operability Status: ONLINE
12:51:15 mrpg: RPG System Startup Completed
12:51:15 mrpg: RPG startup completed
□
Do you want to start start_wbs automatically (Y/N)? [N]

```

N [ENTER]

start_wbs will not start automatically.

```

*****
Reference for starting start_wbs from command line:

```

```

Usage: start_wbs [options]
Start the WB simulator
Options:
-h Print usage information
-t data_tool (play_a2, lb_rep or read_ldm. Default: play_a2)
-s data_src (data source. Default: The current dir)
  For lb_rep, data_src is the file name of the source LB.
  For play_a2 and read_ldm, data_src is the source directory.
-c server port number for lb_rep (Default: 50000)
*****

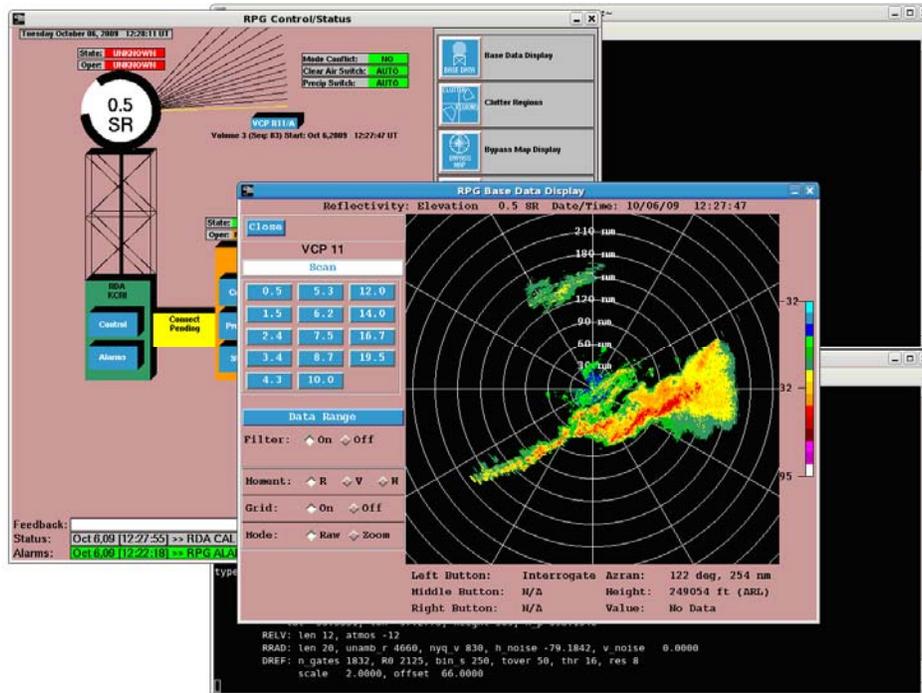
```

```
lnxeng1 ~orpg2:/export/home/orpg2>
```

- 1.2 Start the WBS with options to play NEXRAD data from the LDM server for a specific radar. NOTES: The command prompt will not return until you press **[Ctrl]+[C]** to stop the WBS. Replace ICAO with the 4-letter uppercase ICAO of a NEXRAD site that provides Level II data.

```
lnxeng1 ~orpg2:/export/home/orpg2> start_wbs -t lb_rep -s
lnxldm1:/export/home/ldm/radars/ICAO.lb [ENTER]
```

- 1.3 Clicking on the RPG HCI's Base Data Display icon will open the RPG Base Data Display window. This window will display the current data being received via the WBS.



- 1.4 To view information on products as they are read by the RPG, open another Terminal window and log in to the orpg account you've been working in. NOTE: The command prompt will not return until you press [Ctrl]+[C] to stop the command.

```
lnxeng1 ~orpg2:/export/home/orpg2> save_volume_file -p [ENTER]
```

2.0 VIEW ARCHIVED LEVEL II (BASE DATA) FROM NCDC VIA WBS

- 2.1 ** Request and download archived Level II (Base Data) from the NCDC as described in ***HOWTO: GET NEXRAD DATA FROM THE NCDC***. NOTE: In this example we will use the directory `/export/home/orpg2/level2`.
- 2.2 ** Change the RPG configuration files to use the WBS. This command will update your `comms_link.conf` and `tcp.conf` files.

```
lnxeng1 ~orpg2:/export/home/orpg2> switch_rda wbs_local [ENTER]
```

Stopping rpg load.

Re-starting rpg load.

```

10/21/09 12:50:43 mrpg: Reading task tables
12:50:43 mrpg: Start up RPG - Non-operational
12:50:43 mrpg: Reading data table
12:50:43 mrpg: Reading product table
12:50:43 mrpg: Generating system configuration file
12:50:44 mrpg: Reading comms configuration
12:50:45 mrpg: Removing all RPG operational tasks
12:50:45 mrpg: Checking/creating/clearing RPG data stores - startup
12:50:46 mrpg: Executing init commands - startup
12:50:46 mrpg: --->Initialize Adaptation Data
12:50:48 mrpg: --->Initialize the Binary Task Attribute Table
12:50:49 mrpg: --->Initialize Critical Data Stores
12:50:49 mrpg: --->Initialize RDA Alarms Table
12:50:49 mrpg: --->Initialize the ITCs
12:50:50 mrpg: --->Check HYDROMET Files.
12:50:50 mrpg: --->Initialize HYDROMET Files.
12:50:51 mrpg: --->Initialize GSM
12:50:51 mrpg: --->Initialize Binary Product Attributes Table
12:50:52 mrpg: --->Initialize Product Distribution
12:50:52 mrpg: --->Initialize Routine Request Product Generation
12:50:53 mrpg: --->Initialize Product Generation Tables
12:50:53 mrpg: --->Initialize Alert Requests/Alert Thresholds
12:50:54 mrpg: --->Initialize Loadshed Information
12:50:55 mrpg: --->Initialize Clutter
12:50:55 mrpg: --->Initialize cm_ping
12:50:56 mrpg: --->Initialize LDM
12:50:56 mrpg: --->Initialize RDA Adaptation Data
12:50:57 mrpg: Starting operational processes
12:51:13 mrpg: All operational processes started. Waiting for OP ready ...
12:51:15 mrpg: RPG State: OPERATE
12:51:15 mrpg: RPG Operability Status: ONLINE
12:51:15 mrpg: RPG System Startup Completed
12:51:15 mrpg: RPG startup completed

```

□

Do you want to start start_wbs automatically (Y/N)? [N]

N [ENTER]

start_wbs will not start automatically.

Reference for starting start_wbs from command line:

```

Usage: start_wbs [options]
Start the WB simulator
Options:
-h Print usage information
-t data_tool (play_a2, lb_rep or read_ldm. Default: play_a2)
-s data_src (data source. Default: The current dir)
  For lb_rep, data_src is the file name of the source LB.
  For play_a2 and read_ldm, data_src is the source directory.
-c server port number for lb_rep (Default: 50000)
*****

```

lnxeng1 ~orpg2:/export/home/orpg2>

2.3 Start the WBS with options to use play_a2 from a specified directory.

```

lnxeng1 ~orpg2:/export/home/orpg2> start_wbs -t play_a2 -s
/export/home/orpg2/level2 [ENTER]

```

Current dir: /export/home/orpg2/level2/

1 KICT 52 Vols from 06/07/2003 12:03:21 to 06/07/2003 16:59:35

Selected session: 1 (KICT), start vol 1 (06/07/2003 12:03:21), 52 vols

- 1: Select a session
- 2: Select starting volume and number of volumes for playback
- 3: Select a new data directory
- 4: Playback
- 5: Options
- 6: Exit

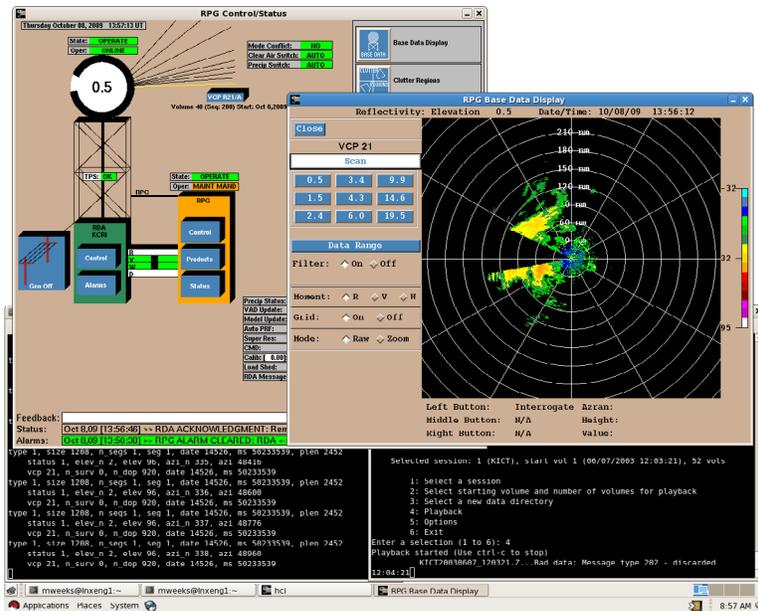
Enter a selection (1 to 6):

2.4 At the *play_a2* menu, enter 4 to begin playing data.

Enter a selection (1 to 6): **4** [ENTER]

Playback started (Use ctrl-c to stop)

KICT20030607_120321.Z...Bad data: Message type 202 - discarded
12:03:30



2.5 Press [Ctrl]+[C] to pause data playback.

12:09:18 [Ctrl]+[C]

Paused - Enter 1 to continue or 2 to abort playback:

2.6 Enter 2 to stop data playback and return to the *play_a2* menu.

Paused - Enter 1 to continue or 2 to abort playback: **2** [ENTER]

Playback aborted

Current dir: /export/home/orpg2/level2/

1 KICT 52 Vols from 06/07/2003 12:03:21 to 06/07/2003 16:59:35

Selected session: 1 (KICT), start vol 1 (06/07/2003 12:03:21), 52 vols

- 1: Select a session
- 2: Select starting volume and number of volumes for playback
- 3: Select a new data directory
- 4: Playback
- 5: Options

```

        6: Exit
Enter a selection (1 to 6):

```

2.7 Enter 6 to return to stop the WBS and return to the command line.

```

Enter a selection (1 to 6): 6 [ENTER]
/export/home/orpg2/bin/start_wbs: line 86: 23136 Killed          cm_tcp1 -l 1 -f
wbs_comms.conf -c 1 -i ${WorkDir}wbs_req -o ${WorkDir}wbs_resp 0
/export/home/orpg2/bin/start_wbs: line 86: 23137 Killed          wb_simulator -v
-q ${WorkDir}wbs_req.0 -r ${WorkDir}wbs_resp.0 -d ${WorkDir}wbs_data.lb
lnxeng1 ~orpg2:/export/home/orpg2>

```

2.8 View information on products as they are read by the RPG. NOTE: The command prompt will not return until you press [Ctrl]+[C] to stop the command.

```

lnxeng1 ~orpg2:/export/home/orpg2> save_volume_file -p [ENTER]

```

3.0 VIEW LDM SUPER-RES DATA VIA WBS

NOTE: Users wishing to view Super-Res data must first request and be granted access to the LDM server's Super-Res data feed.

3.1 ** Change the RPG configuration files to use the WBS. This command will update your comms_link.conf and tcp.conf files.

```

lnxeng1 ~orpg2:/export/home/orpg2> switch_rda wbs_local [ENTER]
lnxeng1 ~orpg2:/export/home/orpg2>

```

3.2 Start the WBS using the KOUN Super-Res data feed. NOTE: The command prompt will not return until you press [Ctrl]+[C] to stop the WBS.

```

lnxeng1 ~orpg2:/export/home/orpg2> start_wbs -c 50010 -t lb_rep -s
lnxldm1:/export/home/ldm/radars_private/KOUN.lb [ENTER]

```

3.3 View information on products as they are read by the RPG. NOTE: The command prompt will not return until you press [Ctrl]+[C] to stop the command.

```

lnxeng1 ~orpg2:/export/home/orpg2> save_volume_file -p [ENTER]

```