



U.S. Department
Of Transportation


Federal Highway
Administration

Memorandum

6300 Georgetown Pike
McLean, Virginia 22101

Subject: **ACTION:** LTPP Directive IMS-139
IMS Software Release Version 2008.02

Date: May 5, 2008

From: Jane Jiang 
Long Term Pavement Performance Team

Reply to
Attn of: HRDI-13

To: Dr. Frank Meyer, PM - LTPP North Atlantic Regional Contract
Dr. Frank Meyer, PM - LTPP North Central Regional Contract
Mr. Mark Gardner, PM - LTPP Southern Regional Contract
Mr. Kevin Senn, PM - LTPP Western Regional Contract

This directive authorizes implementation of the IMS software upgrade from version 2007.06 to 2008.02. Upgrade instructions are provided in Attachment 1. Please notify the FHWA and TSSC when the upgrade has been installed. Please ensure that all personnel involved with the IMS are aware of this amendment

Should you have any questions or would like to discuss this directive, please do not hesitate to contact me at 202-493-3149.

Attachments (3)

FHWA:HRDI-13:JJiang:mdeeney:493-3149:5/05/08

File: c:/mdeeney/directive/ims/I-139dir.doc

cc:

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LONG TERM PAVEMENT PERFORMANCE PROGRAM DIRECTIVE



For the Technical Direction of the LTPP Program

Program Area: IMS

Directive Number: I-139

Date: February 22, 2008

Supersedes: I-137

Subject: IMS Software Release Version 2008.02

This directive authorizes implementation of the IMS software upgrade from version 2007.06 to 2008.02. Upgrade instructions are provided in Attachment 1. Please notify the FHWA and TSSC when the upgrade has been installed.

Software Change Notice 100, contained in the file, SCN_100.pdf, lists all of the changes made to the IMS software since the last software release. This notice shall be filed in the Operator's Log.

This software update includes two new SMP computed parameters tables and data to populate them, in addition to scripts and data required to propagate post upload data changes to the regional databases. A new P46 entry form for data from Law Engineering recorded on paper data forms is included. Instructions for using this form are contained in Attachment 2. Other changes include data dictionary and codes table updates, CN Assignment updates and additions to QC programs.

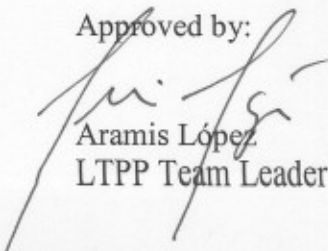
The Software Change Notice lists these and other miscellaneous changes.

The software for Version 2008.02 is distributed in a password protected master zip file. The following files are contained in this master file:

- VR2008_02.ZIP – A zip file with the batch file (VR2008_02.BAT) and scripts needed to make miscellaneous updates to the database and to run other related administrative commands. The table included in Attachment 1 contains a list and descriptions of scripts called by this batch file.
- LTPP.ZIP - A zip file with all files to go in the LTPP area (and subdirectories) on the server.
- OracleVersions.ZIP – A zip file with listings of all Oracle files and versions loaded on the server at the central site. These are included for reference only.

Prepared by: TSSC

Approved by:


Aramis López
LTPP Team Leader

Attachment 1

Instructions to Apply VR 2008.02 Release

1. Create the subdirectory RELEASES\VR2008_02 (the directory RELEASES should already exist).
2. Copy and unzip the VR2008_02.zip file into the subdirectory created in step 1.
3. Shutdown ORACLE in normal mode and backup Server.
4. Bring ORACLE up.
5. From a DOS prompt in the RELEASES\VR2008_02 directory, type

```
VR2008_02 dbusername/dbapassword@instance #
```

where # is the number of your region, to begin the software update. This batch file will export several tables that are updated by the release scripts. Review the VR2008_02AlteredTables.log file to verify that the export completed. Keep the export file, VR2008_02AlteredTables.dmp, until you are satisfied that all changes were successful. If the export is successful, the batch file will run the scripts listed alphabetically in Table 1, below.

6. The scripts create new tables and codes, update tables and import data. **Check carefully that all scripts completed successfully by reviewing the *.lis files (refer to list, below).** Ignore errors about dropping non-existent objects. In addition, compare the import log file (VR2008_02ReplacementTablesR#_imp.log) with the export log file (VR2008_02ReplacementTablesR#_exp.log) provided for your region to verify that all records were imported correctly.
7. Copy the LTPP.ZIP file into the LTPP subdirectory. Right-click on the filename and choose "Extract to Here" to unzip the file into the LTPP subdirectory. Answer "Yes to all" to overwrite existing files. Delete the LTPP.ZIP file.
8. The OracleVersions.zip file is included for reference only. Extract these files into the OracleVersions directory. It will create an OracleVersions\VR200802 subdirectory.

Table 1. Scripts run from the VR2008_02.bat file

Script and Output Filenames (.sql & .lis)	Description
CNUtilities	Updates utility to work with null CNs and to change procedure for MNT_ASPHALT_CRACK_SEAL, SPS3_CRACK, and SPS3_CHIP.
CreateTstSampleBasicInfo	Removed references to MIX_DATE in view creation.
PopulateLtpdTd	Populates the LTPPTD table with the current tables and materialized view in the database.
RemoveACSurface_MON_DROP_SE P_DIS_LINK	Script created during DR22 to remove all records from MON_DROP_SEP where the surface layer is an HMAC related material. Also removes related data from MON_DIS_LINK table.
ResetRecordStatus_0802	Resets RECORD_STATUS for records in TST_AC07_V2_SPECIMEN_INFO table.
SPR3541AddCodetypesTitles	Adds titles to Codetypes where they were missing.
SPR3724CorrectTST_L05BComment Codes	Corrects layer comments by moving comments 2 and 3 up if previous fields are null.
SPR3748CreateSMPTables	Creates the SMP tables, grants, synonyms, data dictionary entries, etc.
SPR3762LabCodes	Adds new lab code for MCS&T Division WVDOT.
SPR3763AddSurveyWidth	Adds SURVEY_WIDTH column to the distress tables.
SPR3764AddCountyCodes	Adds North Atlantic Canadian Province counties to CODES table.
SPR3766UpdateUnits	Updates units and description in the LTPPDD table.
SPR3767AddP46Form	Adds new P46 form to RIMS application.
SPR3768LabCodes	Adds new lab code for MCS&T Division WVDOT.
SPR3779RemoveMayOutputColumn	Removes MAY_OUTPUT column from the MON_PROFILE_MASTER table.
SPR3780RemoveLatitudeLongitudeC olumns	Removes all LATITUDE and LONGITUDE columns from the INV_ID and SPS_ID tables.
SPR3781CorrectLTPPDD	Corrects fields in LTPPDD table where data was written to wrong columns.
SPR3784AlterSPS5MilledSections	Changes SPS5_MILLED_SECTIONS.TIME_MILL_SURFACE_OPEN from NUMBER(3,0) to NUMBER(4,0).
SPR3789RemoveCounties	Deletes counties from CODES table.
SPR3793AddShoulderSystemType	Adds shoulder system types to CODES table.
SPR3797LTPPDD_CodesChanges	Updated Codes and Codetypes tables.
TruncateTables	Script used to truncate tables that are being distributed with this release.
update_jts_in_jpcc_rev	Update MON_DIS_JPCC_REV to set transverse joint seal number fields to null where the joints were not sealed.
Update_ToNull_Distress	Updates certain distresses (BLEEDING, RAVELING, POLISH_AGG_A) to null where currently 0 and the top layer of the pavement structure has material code in (11, 12, 71, 72, 73, 81, 83).
UpdateFrictionTime9999	Updates friction time to '9999' where friction_time in ('2400','0000').
UpdateLTPPDDDesc	Updates description for TRF_MONITOR_AXLE_DISTRIB.AX_CT_40.
UpdateTST_L05BZCommentCodes_c orrection	Removes 'Z' from comment field if comment_note is null. Adds 'Z' to appropriate comment field if comment_note is not null and there is a comment field available.

Attachment 2

Instructions for Using New P46 Form

1. The new P46 entry form should ONLY be used to enter data from the LAW laboratory from the 1992–1993 timeframe. Data should be entered in US Customary units and the form will convert the data to SI units. Data pulled into the form from the database will be displayed in US Customary units.

Warning: Due to this conversion process and the precision of the fields in the database, data values pulled up from the database will differ from the values entered on the screen. In particular, the “Standard Deviation of Mr field” (M) will show a significant difference. For example, values entered in the 0 – 50 range will all be returned as 0. The precision of this field was kept the same since it already contains data from other tests.

2. RIMS data entry forms have been programmed to use the <TAB> key to move from field to field, performing field validation as the cursor leaves the field. This progression through the forms is very important, and on this form, in particular, you cannot use the mouse to navigate to fields *or to buttons*. Notice the note in red at the bottom of the first page.
3. Enter the state_code, press <Tab>, enter shrp_id, press <Tab>, and so on, until you get to the SAMPLE_NO field. Validation is performed on the fields up to this point, with error messages displaying in the status bar at the bottom of the screen. As the user tabs out of the SAMPLE_NO field, the TST_SAMPLE_BASIC_INFO table will be checked for a matching sample. An error will display if no match is found.
4. Tab into the SPECIMEN_TYPE field. At this point, you can press T for Thinwall Tube or R for Remold. Or, you can use the mouse to click on the down arrow and select from the list.
5. Press <Tab> and if the data is already in the database, it will populate the forms for the user to edit. If this is new data, the cursor will move to the TEST_DATE field to allow entry.
6. If this data is already in the database and the TEST_DATE is not greater than 6/1/1994, the user will be allowed to continue through the forms to add new or update existing data elements. For new data, enter the TEST_DATE in MM/DD/YYYY format. The date on the submitted by line on the bottom of page 2 can be used as the test date. The date will be validated – it must be between 1/1/1992 and 6/1/1994, as indicated in blue under the date field. If it is within the valid date range, the Continue button at the bottom of the screen will become active, and the user can continue entering data. If the date is outside the valid date range, the cursor will not move off the date field and an error will be displayed in the status bar.
7. Once a valid date has been entered, continue entering LAB_CODE and MATERIAL_TYPE.

TIP: Notice that there are field entry hints in the status bar at the bottom of the screen.

8. MATERIAL_TYPE can be selected once the cursor is in the field by clicking on the down arrow and clicking on the entry of choice. Or, you can type T to cycle through the choices

and press <Enter> to select one. Press <Tab> to move to the Continue button. Press <Enter> to “press” the button or click the button with the mouse to move to the next form.

9. If the SPECIMEN_TYPE is Remold, the next form displayed will be the entry form for the TST_UG07_SS07_A table. The TOP_DIAMETER must be entered before you can move to the next form. Enter the fields that are known and then tab to the buttons at the bottom of the screen or press PageDown to get to the Next Page button.
10. If the SPECIMEN_TYPE is Thinwall Tube, the next form displayed will be the entry form for the TST_UG07_SS07_B table. The TOP_DIAMETER must be entered before you can move to the next form. Enter the fields that are known and then tab to the buttons at the bottom of the screen or press PageDown to get to the Next Page button.

TIP: Use the <PageDown> key to get to the bottom of the data entry screen.

11. When the Next Page button has focus, press <Enter> to go to the next page, or <Tab> to navigate to the next button, or <Shift-Tab> to navigate back to the previous field.

TIP: Use the <Shift-Tab> key combination to navigate backward on the form.

12. The next page will be the entry form for the TST_UG07_SS07_WKSHT_SUM table. This is a multiple record form, but entry is similar to other forms. The first two fields (A and B) must be entered as they are key fields. The <Tab> key must be used to move to the next field, and the arrow keys can be used to navigate between records. Ten records are visible on the screen, but the down arrow or <Tab> key can be used to navigate to additional records.

TIP: Use the arrow keys to navigate between records on multi-record forms.

13. To commit inserts and updates, navigate to the buttons at the bottom of the screen and “press” the commit button. This button appears at the bottom of each screen.
14. Use the Previous Page and Next Page buttons to navigate between pages. Data can be committed at any time, though a message will be displayed if less than 3 records have been entered for the TST_UG07_SS07_WKSHT_SUM table.
15. Use the Cancel button to cancel unwanted changes.
16. Use the Clear Screen button at the bottom of the last page to clear the screen (you will be asked to commit pending changes) and start again at the top of the first page.