

INSTALLATION NOTES FOR LABORATORY SERVICE PATCH 16 KIDS FORMAT

PREFIX: LR, LA, AND BLR
CURRENT VERSION: 5.2 KIDS PATCH 16 5/28/2003

*****NOTE*****NOTE*****NOTE*****NOTE*****NOTE*****NOTE*****NOTE*****
* READ THE ENTIRE NOTES FILE PRIOR TO ATTEMPTING ANY INSTALLATION! *
*****NOTE*****NOTE*****NOTE*****NOTE*****NOTE*****NOTE*****NOTE*****

1. GENERAL INFORMATION

- a). Print all notes/readme files. Users may remain on the system during the installation. The installation time should take only a few seconds while routines are being restored. One entry is added to the delta check FILE. We always recommend a complete backup before any patches are installed. Verify that you have a current backup. Laboratory Patch 15 (LR*5.2*1015) must have previously been installed to install this patch. The PCC link (BLRLINK) will NOT need to be stopped. This patch is NOT cumulative. If you receive a <CLOBR> error during the install, the patch may not have installed correctly. If so reinstall the patch.
b). It is recommended that the terminal output during installation be captured using an auxport printer attached to the terminal where you are performing the patch installation. This will ensure a printed audit trail if any problems should arise.
c.) This install fixes some compile errors which occur on a cache system when compiling the routines contained in this install.

The following routines had two tags called DOC. The first tag in the routine was removed. LABCX7E, LABCX7L, LABCX7R, LABCX7S, LABCX7U

The following routines had lines which did not have two spaces between the end of the line and a comment. LRAPOACN, LRAPOAFS, LRAPOAMR.

This install contains the necessary components to implement the GFR (Glomerular Filtration Rate). A GFR delta check will be added to the DELTA CHECK file. The code to calculate the GFR resides in the BLREXECU routine.

Instructions on how to finish the GFR setup is in the Addendum section of the install notes file lr_0520.16n

This install also contains a fix in routine LRTSTSET where an error would occur under certain circumstances.

2. CONTENTS OF DISTRIBUTION

- a). lr_0520.16n - Notes file for installation of this patch.
b). lr_0520.16k - Kids Patch routines. Note: This patch will install 10 routines and add one entry to the DELTA CHECK file.

3. REQUIREMENTS

LR*5.2*1015
FileMan 21

Kernel 8.0

NOTE: THESE INSTALL NOTES MUST BE SHARED WITH THE LABORATORY SUPERVISOR IN ORDER FOR THE GFR CALCULATION TO BE PROPERLY INSTALLED.

4. INSTALLATION INSTRUCTIONS

- a). Log in as a system manager and go to programmer mode. D ^XUP and choose for the option KERNEL INSTALLATION AND DISTRIBUTION
- b). Choose option INSTALLATION, and LOAD the kids patch lr__0520.16k
- c). Install the patch choosing LR*5.2*1016 See example process below.

 ***** Example Installation Script: *****

Log into your production UCI and enter into programmer mode. At the programmer prompt do the following:

D ^XUP

Setting up programmer environment
Terminal Type set to: C-VT100

Select OPTION NAME: XPD MAIN Kernel Installation & Distribution System

Edits and Distribution ...
 Utilities ...
 Installation ...

Select Kernel Installation & Distribution System Option: INStallation

- 1 Load a Distribution
- 2 Verify Checksums in Transport Global
- 3 Print Transport Global
- 4 Compare Transport Global to Current System
- 5 Backup a Transport Global
- 6 Install Package(s)
 Restart Install of Package(s)
 Unload a Distribution

Select Installation Option: LOad a Distribution
Enter a Host File: C:\lr__0520.16K

KIDS Distribution saved on May 28, 2003@11:56:18
Comment: CACHE FIXES

This Distribution contains Transport Globals for the following Package(s):

Build LR*5.2*1016
OK to continue with Load? NO// YES

Distribution OK!

Want to Continue with Load? YES//
Loading Distribution...

Build LR*5.2*1016 has an Environmental Check Routine
Want to RUN the Environment Check Routine? YES//
LR*5.2*1016

Will first run the Environment Check Routine, BLRPRE
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Hello, TIM FRAZIER

Checking Environment for Patch **1016** of Version 5.2 of LR.

Need at Least FileMan 21.FileMan 22.0 Present

Need at Least Kernel 8.0.Kernel 8.0 Present

Patch 1015 of version LR 5.2 Has Been Previously Installed.OK to continue

ENVIRONMENT OK.

Has a SUCCESSFUL system backup been performed??? NO// YES

BACKUPS CONFIRMED BY FRAZIER, TIM ON MAY 28, 2003 AT 12: 20
Use INSTALL NAME: LR*5.2*1016 to install this Distribution.

- 1 Load a Distribution
- 2 Verify Checksums in Transport Global
- 3 Print Transport Global
- 4 Compare Transport Global to Current System
- 5 Backup a Transport Global
- 6 Install Package(s)
Restart Install of Package(s)
Unload a Distribution

Select Installation Option: INSTAll Package(s)

Select INSTALL NAME: LR*5.2*1016 Loaded from Distribution Loaded from
Distribution 5/28/03@12: 20: 07

=> CACHE FIXES ; Created on May 28, 2003@11: 56: 18

This Distribution was Loaded on May 28, 2003@12: 20: 07 with header of
CACHE FIXES ; Created on May 28, 2003@11: 56: 18

It consisted of the following Install(s):

LR*5.2*1016

Checking Install for Package LR*5.2*1016

Will first run the Environment Check Routine, BLRPRE

Hello, TIM FRAZIER

Checking Environment for Patch **1016** of Version 5.2 of LR.

Need at Least FileMan 21.FileMan 22.0 Present

Need at Least Kernel 8.0.Kernel 8.0 Present

Patch 1015 of version LR 5.2 Has Been Previously Installed.OK to continue

ENVIRONMENT OK.

Has a SUCCESSFUL system backup been performed??? NO// YES

BACKUPS CONFIRMED BY FRAZIER, TIM ON MAY 28, 2003 AT 12: 20

Install Questions for LR*5.2*1016

Want KIDS to INHIBIT LOGONs during the install? YES// NO

Enter the Device you want to print the Install messages.
Enter a '^' to abort the install.

lr__0520_16n.txt

DEVICE: HOME// VIRTUAL

LR*5.2*1016

Install Started for LR*5.2*1016 :
May 28, 2003@12:20:38

Build Distribution Date: May 28, 2003

Installing Routines:
May 28, 2003@12:20:38

Running Post-Install Routine: ^BLRGFRP

Updating Routine file...

Updating KIDS files...

LR*5.2*1016 Installed.
May 28, 2003@12:20:38

NO Install Message sent

Install Completed

*****END EXAMPLE INSTALLATION SCRIPT*****

d). To complete the set up for the GFR calculation see Addendum A

5. If you have any questions or comments regarding this distribution, please contact the ITSC Support Desk by:

Phone: (505) 248-4371 or
(888) 830-7280
Fax: (505) 248-4199
Web: <http://www.rpms.ihs.gov/TechSupp.asp>
Email: ITSCHelp@mail.ihs.gov

Addendum A

GFR CALCULATION

A new Delta Check has been developed which will calculate an ESTIMATED GFR (Glomerular Filtration Rate) based on the patient's serum creatinine, age, sex, and race. The results of this calculation will better enable providers to evaluate a patient's renal function.

In order to utilize this delta check the following must be true:

- 1) A test exists in file #60 (LABORATORY TEST) named CREATININE.
- 2) Version 5.2 of the Laboratory Package was deployed with a Test called CREATININE, if a site has retired (ZZed) this test and created a new test not called CREATININE, then the active test will have to be renamed CREATININE.
- 3) A test exists in file #60 (LABORATORY TEST) named ESTIMATED GFR.

SETUP

ESTIMATED GFR is a new test and will have to be created by the site.

1. Create a free text DATA Name called ESTIMATED GFR with a range of 1 to 7.
2. Create a new Laboratory test called ESTIMATED GFR when finished it should resemble the screen captured inquiry to the test in file #60.

```
LABTEST IEN: 1121                NAME: ESTIMATED GFR
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
LOCATION (DATA NAME): CH; 1575152; 1  UNIQUE COLLECTION SAMPLE: YES
LAB COLLECTION SAMPLE: BLOOD        FIELD: DD(63.04, 1575152,
HIGHEST URGENCY ALLOWED: STAT      REQUIRED TEST: YES
FORCED URGENCY: ROUTINE            PRINT NAME: EST GFR
DATA NAME: ESTIMATED GFR
SITE/SPECIMEN: BLOOD              UNITS: ml /mi n
COLLECTION SAMPLE: BLOOD
INSTITUTION: <YOUR SITE>          ACCESSION AREA: CHEMI STRY
```

3. In the test CREATININE, add the delta check GFR in the Delta Check field, which is a sub-field of the Site/Specimen. Your CREATININE test should look similar to this:

```
LABTEST IEN: 173                NAME: CREATININE
TYPE: BOTH
SUBSCRIPT: CHEM, HEM, TOX, SER, RIA, ETC.
LOCATION (DATA NAME): CH; 4; 1      UNIQUE ACCESSION #: NO
LAB COLLECTION SAMPLE: BLOOD      FIELD: DD(63.04, 4,
HIGHEST URGENCY ALLOWED: STAT    REQUIRED TEST: YES
FORCED URGENCY: ROUTINE          COMBINE TEST DURING ORDER: YES
PRINT NAME: CREAT                DATA NAME: CREATININE
SITE/SPECIMEN: BLOOD             REFERENCE LOW: 0.7
REFERENCE HIGH: 1.5              CRITICAL HIGH: 7.4
UNITS: mg/dL                     TYPE OF DELTA CHECK: GFR
CPT CODE: 82565                  PANEL (CPT): 80049
LOINC CODE: 2160
COLLECTION SAMPLE: BLOOD
INSTITUTION: <YOUR SITE>        ACCESSION AREA: CHEMI STRY
```

USE

The Delta Check GFR, when added to the CREATININE, will calculate an ESTIMATED GFR whenever the CREATININE is resultted. It is not necessary to order the ESTIMATED GFR to have the calculation displayed. The calculation will be displayed during the resulting process and will be displayed on the interim reports with the CREATININE.

In order for the ESTIMATED GFR to be displayed on the Health Summary, it will be necessary to order it. If the CREATININE is ordered as a single test, the ESTIMATED GFR will have to be ordered at the same time if the results are to be displayed on the Health Summary. The Laboratory can make a CREATININE-GFR panel. When the CREATININE is part of a panel, such as the BMP, then the ESTIMATED GFR will have to be added to the panel in order to be displayed as part of the Health Summary.

In order for the ESTIMATED GFR to be displayed when verified using "EA - Enter/Verify data (autoinstrument) all panels that the ESTIMATED GFR has been added to, must have the field "BUILD NAME ONLY", in the load/worklist, set to NO.