Collaborative Terminology Tooling & Data Management (CTT&DM)
Native Domain Standardization (NDS)

Laboratory Enhancements (LR*5.2*500)

Deployment, Installation, Back-Out, and Rollback Guide

Version 1.0

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Department of Veterans Affairs

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Revision History

Date	Version	Description	Author
05/2018	1.0	Delivery to Customer	ManTech Mission Solutions and Services Group

Table of Contents

1 Introduction

This document describes how to deploy and install Labs Enhancements Native Domain Standardization (NDS) patch LR*5.2*500, as well as how to back-out the product and rollback to a previous version or data set. This document is a companion to the project charter and management plan for this effort.

1.1 Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the Labs Enhancements (NDS) patch LR*5.2*500 will be deployed and installed, as well as how it is to be backed out and rolled back, if necessary. The plan also identifies resources, communications plan, and rollout schedule. Specific instructions for installation, back-out, and rollback are included in this document.

1.2 Dependencies

The Laboratory Enhancements (NDS) patch LR*5.2*500 possesses a direct application dependency on the Laboratory Reports patch LR*5.2*468. The MASTER LABORATORY TEST File (#66.3) and LAB MLTF MANAGED ITEMS FILE (#66.4) were introduced in patch LR*5.2*468.

1.3 Constraints

Labs Enhancements (NDS) patch LR*5.2*500 possesses the following constraints:

- The updates to the VistA LABORATORY TEST File (#60) shall not affect the current functionality or conflict with applications that utilize this file.
- The fields being added to this file should only be visible on the back end and to those requesting the information, not the GUI applications used by clinicians within the VA.
- Due to the complexities of the changes to the MASTER LABORATORY TEST File (#66.3), backing out the changes to the files data definition will not be possible and is therefore out of scope for this document.

2 Roles and Responsibilities

Table 1: Deployment, Installation, Back-out, and Rollback Roles and Responsibilities

Team	Phase / Role	Tasks
OIT Regional Support	Deployment	Plan and schedule deployment (including orchestration with vendors)
CTT&DM NDS Project Team	Deployment	Determine and document the roles and responsibilities of those involved in the deployment.
OIT Regional Support	Deployment	Test for operational readiness
OIT Regional Support	Deployment	Execute deployment

Team	Phase / Role	Tasks
OIT Regional Support	Installation	Plan and schedule installation
CTT&DM NDS Project Team	Installations	Coordinate training
OIT Regional Support	Back-out	Confirm availability of back-out instructions and back-out strategy (what are the criteria that trigger a back-out)
CTT&DM NDS Project Team	Post Deployment – Warranty Period	Hardware, Software and System Support
OIT Regional Support	Post Deployment – Post Warranty	Hardware, Software and System Support

3 Deployment

The deployment is planned as a concurrent online rollout. During IOC testing and after national release, patch LR*5.2*500 will be distributed via the FORUM Patch Module, and may be deployed at any site without regard to deployment status at other sites.

3.1 Timeline

The deployment and installation is scheduled to run for a period of thirty days, as depicted in the master deployment schedule.

3.2 Site Readiness Assessment

This section discusses the locations that will receive the CTT&DM NDS patch LR*5.2*500 deployment.

The LR*5.2*500 patch must be manually installed, or manually queued for installation, at each VistA instance at which it is deployed, using the standard Kernel Installation Distribution System (KIDS) software. The LR*5.2*500 patch should be installed at all VA VistA instances running the VistA Laboratory v.5.2 application, and will update the MUMPS (Massachusetts General Hospital Utility Multi-Programming System) server software in each VistA instance's Laboratory namespace.

3.2.1 Deployment Topology (Targeted Architecture)

The deployment topology for the CTT&DM NDS patch LR*5.2*500, during IOC testing and after national release is described below:

Members of the Information Technology Operations and Services (ITOPS) Office of Information and Technology (OI&T) get the nationally released VistA patch from the VistA National Patch Module and install the patch in the VA facilities that are their responsibility.

3.2.2 Site Information (Locations, Deployment Recipients)

During IOC testing, CTT&DM NDS patch LR*5.2*500 will be deployed at the following sites:

- Boston VAMC – Station # 523
- Upstate New York – Station # 528

After national release, CTT&DM NDS patch LR*5.2*500 will be deployed at all sites running the VistA Laboratory v.5.2 application.

3.2.3　Site Preparation

No special preparation is required by the site prior to deployment.

3.3　Resources

Deployment of CTT&DM NDS patch LR*5.2*500 requires a fully patched VistA environment running the Laboratory v.5.2 application, as well as a Health Product Support (HPS) team member available to perform the patch installation.

3.3.1　Facility Specifics

There are no facility-specific deployment or installation features of CTT&DM NDS patch LR*5.2*500.

3.3.2　Hardware

CTT&DM NDS patch LR*5.2*500 requires no site hardware specifications during, or prior to, deployment.

3.3.3　Software

The following table describes software specifications required at each site prior to deployment.

Table 2: Software Specifications

Required Software	Make	Version	Configuration	Manufacturer	Other
VistA Laboratory (LR) patch LR*5.2*468		5.2	Standard	VHA	

Please see the Roles and Responsibilities table in Section 2 for details about who is responsible for preparing the site to meet these software specifications.

3.3.4　Communications

No notifications are required for deployment of CTT&DM NDS patch LR*5.2*500.

3.3.4.1　Deployment/Installation/Back-Out Checklist

The Release Management team will deploy the patch LR*5.2*500, which is tracked in the National Patch Module (NPM) in Forum, nationally to all VAMCs. Forum automatically tracks the patches as they are installed in the different VAMC production systems. One can run a report in Forum to identify when and by whom the patch was installed in the VistA production at each site. A report can also be run to identify which sites have not currently installed the patch in their

VistA production systems. Therefore, this information does not need to be manually tracked in the chart below.

Table 3: Deployment/Installation/Back-Out Checklist

Activity	Day	Time	Individual who completed task
Deploy	N/A	N/A	N/A
Install	N/A	N/A	N/A
Back-Out	N/A	N/A	N/A

4 Installation

4.1 Pre-installation and System Requirements

Pre/Post Installation Overview:

Before installing LR*.2*500, it is recommended that a Local Patch Backup is created to save routines and data dictionaries that are modified by this patch. Backing out the patch's new components must be done by installing 'back-out' KIDS build LR*5.2*00500, created specifically to back out all the software components newly installed by LR*5.2*500.

Patch Dependencies

Patch LR*5.2*468 must be installed prior to installing this patch.

Knowledge of, and experience with, the Kernel Installation and Distribution System (KIDS) software is required. For more information, see Section V, Kernel Installation and Distribution System, in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide.

Pre-Installation Instructions:

4.1.1 Creating a Local Patch Backup

Perform the following procedure to create a Local Patch Backup.

1. From the KIDS (Kernel Installation & Distribution System) Menu, select 'Edits and Distribution'.
2. Select 'Create a Build Using Namespace'.
3. Enter a local patch name and identifier, suggested name ZLR*5.2*00500.
4. When prompted 'BUILD PACKAGE FILE LINK:', press <Enter>.
5. When prompted 'BUILD TYPE: SINGLE PACKAGE//', press <Enter>.
6. When prompted 'BUILD TRACK PACKAGE NATIONALLY: YES//', enter NO.
7. When prompted 'Namespace:', press <Enter>.
8. When prompted 'Select Edits and Distribution Option', select: 'Edit a Build'.
9. Enter the local patch name from step 3 (ZLR*5.2*00500).

10. For the 'Description:' enter the following: "this is a local backup for LR*5.2*500. This patch should only be installed in the event that LR*5.2*500 needs to be backed out."

11. In the 'COMMAND:' field, enter 'Next Page'.

12. In the 'File List' dialog Enter 66.4 for LAB MLTF MANAGED ITEMS File.

13. In 'Send Full or Partial DD' field, enter FULL.

14. In the 'Update the Data Dictionary:' field, enter YES.

15. In the 'Send Security Code:' field, enter YES.

16. In the 'Data Comes With File:' field, enter NO.

17. In the DD Export Options dialog, move cursor to the COMMAND: prompt, enter 'Close'

18. In the File List dialog, move cursor to the 'COMMAND:' prompt, enter 'Next Page'.

19. In the Build Components section, move cursor to ROUTINE and press <Enter>.

20. In the first blank row in the ROUTINE dialog, enter LRMLED, and 'Send To Site'.

21. In the next blank row in the ROUTINE dialog, enter LRMLEDA, and 'Send to Site'.

22. In the next blank row in the ROUTINE dialog, enter LRMLWT, and 'Send to Site'.

23. In the next blank row in the ROUTINE dialog, enter LRMLACM, and 'Send to Site'.

24. Move cursor to the 'COMMAND:' prompt in the ROUTINE dialog, enter 'Close'.

25. Move cursor to the 'COMMAND:' prompt in the BUILD COMPONENTS dialog, enter 'Save', then enter 'Exit'.

26. When returned to the Edits and Distribution menu, select option 'Transport a Distribution'.

27. Enter the 'local package name and identifier' that was created in Step 3. (ZLR*5.2*00500).

28. At the 'Another Package Name:' press <Enter>.

29. At the 'OK to continue? Prompt, select YES//' press <Enter>.

30. If creating a Host File transport, perform the following steps:

    a. At the 'Transport through (HF) Host File or (PM) PackMan:' prompt, enter HF.

    b. At the 'Enter a Host File:' prompt, enter the system file to which the Local Patch Backup will be saved. (ZLR_5_2_00500.KID).

    c. At the 'Header Comment:' Enter 'Local Backup of LR*5.2*500'.

    d. At the Edits and Distribution Menu, press <Enter>.

    e. At the KIDS Menu press <Enter>.

31. If creating a PackMan transport, perform the following steps:

    a. At the 'Transport through (HF) Host File or (PM) PackMan:' enter PM.

    b. At the 'Header Comment:' enter 'Local Backup of LR*5.2*500'

    c. For the description of Packman Message, Enter: 'This is a saved backup for the Laboratory Enhancements patch install for LR*5.2*500. This local build will be used in the event that the above mentioned installs need to be backed out.'

    d. At 'EDIT Option:' press <Enter>.

e. At the 'Do you wish to secure this message? NO// prompt, Enter 'NO'.

f. At the 'Send mail to:' prompt, Enter your name.

g. At the 'Select basket to send to: IN//' prompt: press <Enter>.

h. At the 'And Send to:' prompt: Enter any additional persons that may need to have the local patch.

i. At The 'Select Edits and Distribution <TEST ACCOUNT> Option:' press <Enter>.

4.2 Platform Installation and Preparation

Patch LR*5.2*500 does not require any platform installation or preparation.

4.3 Download and Extract Files

VistA Laboratory patch LR*5.2*500 software is distributed by a Forum Kids distribution. Documentation is available on the SOFTWARE.DIR directory at one of the following Office of Information (OI) Field Offices. The preferred method is to retrieve the file using Secure File Transfer Protocol (SFTP) from download.vista.med.va.gov, which transmits files from the first available SFTP server.

Hines: fo-hines.med.va.gov

Salt Lake City: fo-slc.med.va.gov

File Name: CTT_DM_NDS_Laboratory_Enhancements_v1.zip

Contents: This zip file contains the following documents in both .docx and .pdf

   o Laboratory Enhancements (LR*5.2*500) Deployment, Installation, Back-Out, and Rollback Guide (lr_5_2_500_ig)
   o LIM NDS User Manual (lab_5_2_lim_nds_um)

Retrieval Format: BINARY

The VistA Documentation Library (VDL) web site will also contain the above referenced documents. This website is usually updated within 1-3 days of the patch release date. The VDL web address for Laboratory user documentation is: https://www.va.gov/vdl/application.asp?appid=71

4.4 Database Creation

No new database is required for the CTT&DM NDS patch LR*5.2*500.

4.5 Installation Scripts

No installation scripts are required for installation of CTT&DM NDS patch LR*5.2*500.

4.6 Cron Scripts

No CRON scripts are required for installation of CTT&DM NDS patch LR*5.2*500.

4.7 Access Requirements and Skills Needed for the Installation

Access to national VA network, as well as the local network of each site to receive CTT&DM NDS patch LR*5.2*500 is required to perform the installation, as well as authority to create and install patches.

Knowledge of, and experience with, the Kernel Installation and Distribution System (KIDS) software is required. For more information, see Section V, Kernel Installation and Distribution System, in the Kernel 8.0 & Kernel Toolkit 7.3 Systems Management Guide.

4.8 Installation Procedure

Installation Instructions:

1. Choose the PackMan message containing this patch.
2. Choose the INSTALL/CHECK MESSAGE PackMan option.
3. From Kernel Installation and Distribution System Menu, select the Installation Menu. From this menu, you may elect to use the following options. When prompted for the INSTALL NAME, enter the patch LR*5.2*500:
   a. Compare Transport Global to Current System - This option will allow you to view all changes that will be made when this patch is installed. It compares all components of these patch routines, DDs, templates, etc.
   b. Verify Checksums in Transport Global - This option will allow you to ensure the integrity of the routines that are in the transport global.
4. Backup a Transport Global - This option will create a backup message of any routines exported with this patch. It will not backup other changes such as DDs or templates.
5. From the Installation Menu, select the Install Package(s) option and choose the patch to install.
6. When prompted: 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//', respond NO.
7. When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//', respond NO.
8. When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//' , respond NO.
9. If prompted 'Delay Install (Minutes): (0 - 60): 0//' respond 0.

4.9 Installation Verification Procedure

Installation of routines in CTT&DM NDS patch LR*5.2*500 may be verified by running the Kernel checksum tool from the VistA server command line after installation:

```
D CHECK1^XTSUMBLD
```

The checksums produced by the checksum tool should match the numeric portion of the "After:" checksums in the CTT&DM NDS patch LR*5.2*500 patch description.

Example – Checksum for routines as displayed by Kernel checksum tool CHECK1^XTSUMBLD:

```
LR500PO    value = 5484460

LRMLACM    value = 19567721

LRMLED     value = 183395899

LRMLEDA    value = 165026309

LRMLWT     value = 43869064
```

Installation of Data Dictionaries in CTT&DM NDS patch LR*5.2*500 may be verified by running the FileMan Data Listing tool from the VistA server command line after installation. The new fields will print in the output if installation was successful.

Example – verification of fields installed with LR*5.2*500 using FileMan Data Listing:

```
D P^DI
VA FileMan 22.2
Select OPTION: DATA DICTIONARY UTILITIES
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES
 START WITH What File: MASTER LABORATORY TEST// 60   LABORATORY TEST
                                      (1799 entries)
     GO TO What File: LABORATORY TEST//   (1799 entries)
     Select SUB-FILE:
Select LISTING FORMAT: STANDARD// BRIEF
ALPHABETICALLY BY LABEL? No//   (No)
Start with field: FIRST// 134   IN HOUSE TEST
Go to field: 141   PERFORMING LAB
DEVICE: ;;9999  DEC Windows    Right Margin: 80// 80
BRIEF DATA DICTIONARY #60 -- LABORATORY TEST FILE          2/13/18    PAGE 1
SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: CHEY59,ROU               (VERSION 5.2)
------------------------------------------------------------------------------


IN HOUSE TEST                60,134    SET
                                       '1' FOR YES;
                                       '0' FOR NO;
```

```
                 Tests are performed on-site using instruments or manual methods.


POC TEST                          60,135     SET

                                             '1' FOR YES;

                                             '0' FOR NO;



                                 Yes if tests are performed using POC equipment


CALCULATION TEST                  60,136     SET

                                             '1' FOR YES;

                                             '0' FOR NO;



                                  Yes if test result produced by calculation.


SCANNED IMAGE TEST                60,137     SET

                                             '0' FOR NO;

                                             '1' FOR YES;



                     Test results scanned to VistA Imaging due to complexity.


BILLABLE                          60,138     SET

                                             '0' FOR NO;

                                             '1' FOR YES;



 Yes or No> This setting relates to Standardized Billable Tests (SBTs) for LMIP


WORKLOAD CAPTURE                  60,139     SET

                                             '0' FOR NO;

                                             '1' FOR YES;



         Yes or No. This setting relates to Managerial Cost Accounting (MCA)
...
PERFORMING LAB                    60,141     60.16  SET

   Multiple

  PERFORMING LAB                  60.16,.01    SET
```

```
                                            'IH' FOR IN-HOUSE;

                                            'CL' FOR CONTRACT REF LAB;

                                            'VAL' FOR VA REFERENCE LAB;

                                            'AL' FOR AFFILIATE REF LAB;

  ORDER CODE                   60.16,1    FREE TEXT


 Enter the order code obtained or provided by the performing lab. If performing

   lab is another VA, enter the National VA Lab Code. Needed for MLTF to assign

                                    LOINC.


Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES
 START WITH What File: MASTER LABORATORY TEST// 66.3  MASTER LABORATORY TEST
                                        (70 entries)
      GO TO What File: MASTER LABORATORY TEST//   (70 entries)
      Select SUB-FILE:
Select LISTING FORMAT: STANDARD//
Start with field: FIRST// .01  LAB TEST NAME
Go to field: 1  METHOD
DEVICE: ;;9999 DEC Windows   Right Margin: 80//
STANDARD DATA DICTIONARY #66.3 -- MASTER LABORATORY TEST FILE   2/13/18   PAGE
1
STORED IN ^LRMLTF(  (70 ENTRIES)   SITE: TEST.CHEYENNE.MED.VA.GOV   UCI: CHEY59,
ROU                                                      (VERSION 5.2)


DATA           NAME                  GLOBAL       DATA

ELEMENT        TITLE                 LOCATION     TYPE
--------------------------------------------------------------------------------


66.3,.01    LAB TEST NAME          0;1 FREE TEXT (Required) (audited)


            INPUT TRANSFORM:  K:$L(X)>230!($L(X)<1) X
            MAXIMUM LENGTH:   230
            LAST EDITED:      FEB 07, 2018
            HELP-PROMPT:      Answer must be 1-230 characters in length.
            DESCRIPTION:      This is the National Master Laboratory Test
```

```
                           file (MLTF)
                            for associating lab tests with LOINC Codes and
                           should not be edited.


            AUDIT:          YES, ALWAYS
            PRE-LOOKUP:     I $G(DIC(0))["L",'$D(XUMF) K X D EN^DDIOL("Entr
                            ies must be edited via the Master File Server (
                            MFS).","","!?5,$C(7)")
            DELETE TEST:    1,0)= D:'$D(XUMF) EN^DDIOL("Entries must be ina
                            ctivated via the Master File Server (MFS).","",
                            "!?5,$C(7)") I $D(XUMF)


            LAYGO TEST:     1,0)= D:'$D(XUMF) EN^DDIOL("Entries must be add
                            ed via the Master File Server (MFS).","","!?5,$
                            C(7)") I $D(XUMF)


            WRITE AUTHORITY: ^
```

FIELD INDEX: B (#442)   MUMPS   IR   LOOKUP & SORTING
Short Descr: New style Cross Refernce for 60 characters.
Description: The 'B' cross reference is being created here
       due to the 30 character limit in the
       traditional 'B' cross reference. This 'B'
       cross reference is for a 60 character length.
Set Logic: S ^LRMLTF("B",$E(X,1,60),DA)=""
Kill Logic: K ^LRMLTF("B",$E(X,1,60),DA)
X(1): LAB TEST NAME (66.3,.01) (Len 230)
       (forwards)


```
66.3,.02    ALTERNATE TEST NAME    1;1 FREE TEXT (audited)


            INPUT TRANSFORM: K:$L(X)>230!($L(X)<1) X
            MAXIMUM LENGTH:  230
            LAST EDITED:     FEB 08, 2018
            HELP-PROMPT:     Answer must be 1-230 characters in length.
```

```
              DESCRIPTION:        This is the 'short name' for the Master
                                  Laboratory Test file.


              AUDIT:              YES, ALWAYS
              WRITE AUTHORITY:    ^
              FIELD INDEX:        D (#1426)    REGULAR    IR   LOOKUP & SORTING
                  Short Descr:    New Style Alternate Name index for 60
                                  characters
                   Set Logic:     S ^LRMLTF("D",$E(X,1,60),DA)=""
                  Kill Logic:     K ^LRMLTF("D",$E(X,1,60),DA)
                  Whole Kill:     K ^LRMLTF("D")
                       X(1):      ALTERNATE TEST NAME  (66.3,.02)  (Subscr 1)
                                  (Len 60)  (forwards)



66.3,.04     LOINC CODE              2;2 FREE TEXT (Required) (audited)


             INPUT TRANSFORM:   K:$L(X)>20!($L(X)<1) X
             LAST EDITED:       JAN 31, 2018
             HELP-PROMPT:       Answer must be 1-20 characters in length.
             DESCRIPTION:       This is the LOINC code that will be associated
                                to the lab test name and VUID.


             AUDIT:             YES, ALWAYS
             WRITE AUTHORITY:   ^
             CROSS-REFERENCE:   66.3^C
                                1)= S ^LRMLTF("C",$E(X,1,30),DA)=""
                                2)= K ^LRMLTF("C",$E(X,1,30),DA)
                                Additional lookup field for the LIMs.




66.3,.05     COMPONENT               2;3 FREE TEXT (Required) (audited)


             INPUT TRANSFORM:   K:$L(X)>230!($L(X)<1) X
```

```
                 MAXIMUM LENGTH:    230

                 LAST EDITED:       FEB 08, 2018

                 HELP-PROMPT:       Answer must be 1-230 characters in length.

                 DESCRIPTION:       This is the Lab COMPONENT value used in

                                    matching a Lab test to a LOINC Code.


                 AUDIT:             YES, ALWAYS

                 WRITE AUTHORITY:   ^


66.3,.06    PROPERTY              2;4 FREE TEXT (Required) (audited)


                 INPUT TRANSFORM:   K:$L(X)>230!($L(X)<1) X

                 MAXIMUM LENGTH:    230

                 LAST EDITED:       FEB 07, 2018

                 HELP-PROMPT:       Answer must be 1-230 characters in length.

                 DESCRIPTION:       This is the Lab PROPERTY value used in matching

                                    a Lab test to a LOINC Code.


                 AUDIT:             YES, ALWAYS

                 WRITE AUTHORITY:   ^


66.3,.07    TIME ASPECT           3;1 FREE TEXT (Required) (audited)


                 INPUT TRANSFORM:   K:$L(X)>230!($L(X)<1) X

                 MAXIMUM LENGTH:    230

                 LAST EDITED:       FEB 07, 2018

                 HELP-PROMPT:       Answer must be 1-230 characters in length.

                 DESCRIPTION:       This is the Lab TIME ASPECT value used in

                                    matching a Lab test to a LOINC Code.


                 AUDIT:             YES, ALWAYS

                 WRITE AUTHORITY:   ^


66.3,.08    SPECIMEN              3;2 FREE TEXT (Required) (audited)
```

```
              INPUT TRANSFORM:   K:$L(X)>230!($L(X)<1) X

              MAXIMUM LENGTH:    230

              LAST EDITED:       FEB 07, 2018

              HELP-PROMPT:       Answer must be 1-230 characters in length.

              DESCRIPTION:       This is the Lab SPECIMEN (site/specimen) value

                                 used in matching a Lab test to a LOINC Code.


              AUDIT:             YES, ALWAYS

              WRITE AUTHORITY:   ^


66.3,.09      SCALE                  3;3 FREE TEXT (Required) (audited)


              INPUT TRANSFORM:   K:$L(X)>230!($L(X)<1) X

              MAXIMUM LENGTH:    230

              LAST EDITED:       FEB 07, 2018

              HELP-PROMPT:       Answer must be 1-230 characters in length.

              DESCRIPTION:       This is the Lab SCALE value used in matching a

                                 Lab test to a LOINC Code.


              AUDIT:             YES, ALWAYS

              WRITE AUTHORITY:   ^


66.3,1        METHOD                 3;4 FREE TEXT (audited)


              INPUT TRANSFORM:   K:$L(X)>230!($L(X)<1) X

              MAXIMUM LENGTH:    230

              LAST EDITED:       FEB 07, 2018

              HELP-PROMPT:       Answer must be 1-230 characters in length.

              DESCRIPTION:       This is the Lab METHOD value used in matching a

                                 Lab test to a LOINC Code.


              AUDIT:             YES, ALWAYS

              WRITE AUTHORITY:   ^
Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES

 START WITH What File: MASTER LABORATORY TEST// 66.4  LAB MLTF MANAGED ITEMS
```

```
                               (1 entry)

      GO TO What File: LAB MLTF MANAGED ITEMS//   (1 entry)

Select LISTING FORMAT: STANDARD// CONDENSED

DEVICE: ;;9999  DEC Windows    Right Margin: 80//




CONDENSED DATA DICTIONARY---LAB MLTF MANAGED ITEMS FILE (#66.4)UCI: CHEY59,ROU

 VERSION: 5.2



STORED IN: ^LAB(66.4,                                FEB 13,2018 PAGE 1
--------------------------------------------------------------------------------


                                      FILE SECURITY

                           DD SECURITY   : @     DELETE SECURITY: @

                           READ SECURITY : @     LAYGO SECURITY : @

                           WRITE SECURITY : @

CROSS REFERENCED BY:

      INSTITUTION POINTER(ANM)  INSTITUTION POINTER(B)




                            FILE STRUCTURE



FIELD     FIELD

NUMBER    NAME


.01       INSTITUTION POINTER (RP4'X), [0;1]

.02       NTRT SEND METHOD (S), [0;2]

.03       AUTO REMINDERS PARAMETER (NJ3,0), [0;3]

.04       AUDIT PURGE DAYS (NJ3,0), [0;4]

.05       CTT TOOLING ACTIVE (S), [0;5]

.06       LAB IEN (NJ8,0), [0;6]

.07       SUBSCRIPT FOR NTRT (S), [0;7]

.08       LAST AUTO TEST ID (F), [0;8]

.1        SEND NTRT MESSAGES (S), [0;10]

1         DEFAULT NTRT MAIL GROUP (F), [1;1]
```

```
2          DEFAULT SITE LAB MAIL GROUP (F), [2;1]

3          SITE LAB SERVER (F), [3;1]

4          CTT TOOLING WEB ADDRESS (FJ100), [4;1]

5          CTT TOOLING PORT NUMBER (NJ10,0), [4;2]

6          CTT TOOLING NTRT PATH (FX), [5;1]

7          CTT TOOLING SCHEMA NAME (FJ60), [6;1]

8          CTT TOOLING SCHEMA PATH (FXJ100), [6;2]
```

4.10 System Configuration

No System Configuration is required before or after deployment of CTT&DM NDS patch LR*5.2*500.

4.11 Database Tuning

No Database Tuning is required before or after deployment of CTT&DM NDS patch LR*5.2*500.

This concludes the installation process.

5 Back-Out Procedure

NOTE: Due to the complexity of this patch (because of the data dictionary changes), it is not recommended for back-out. However, in the event that a site decides to back-out of this patch, the site should contact the National Service Desk (NSD) to submit a CA SDM ticket; the development team will assist with the process.
Due to the complexities of the changes to the MASTER LABORATORY TEST File (#66.3) backing out the changes to the files data definition will not be possible and is out of scope for this document.

A manual procedure is provided.

5.1 Back-Out Strategy

The Back-out Strategy is to install the backup patch made before installation to revert modified routines and the LAB MLTF MANAGED ITEMS File (#66.4) DD, and then follow the manual steps provided to delete and change other DD changes in the LABORATORY TEST File (#60).

5.2 Back-Out Considerations

The back-out should only be done in the event that the local facility management determines that the patch LR*5.2*500 is not appropriate for that facility, and should only be done as a last resort.

5.2.1   Load Testing

No load testing is required for patch LR*5.2*500.

5.2.2   User Acceptance Testing

N/A

5.3   Back-Out Criteria

Local Facility Management would need to determine patch LR*5.2*500 is not appropriate for their facility.

5.4   Back-Out Risks

By backing out LR*5.2*500, the local facility will not be able to add the IN HOUSE TEST, POC TEST, CALCULATION TEST, SCANNED IMAGE TEST, BILLABLE, WORKLOAD CAPTURE, or PERFORMING LAB data to LABORATORY TEST (#60) file entries.

5.5   Authority for Back-Out

The Local Facility Management has the authority to back-out patch LR*5.2*500.

5.6   Back-Out Procedure

NOTE: Due to the complexity of this patch (because of the data dictionary changes), it is not recommended for back-out. However, in the event that a site decides to back-out this patch, the site should contact the National Service Desk (NSD) to submit a CA SDM ticket; the development team will assist with the process.

Perform the back-out procedure by installing the backup patch created in section 4.1.1 prior to the installation (ZLR*5.2*00500) and then manually removing routine and DD changes made in the LABORATORY TEST File (#60).

The back-out is to be performed by persons with programmer-level access and in conjunction with the STS Team. The following should be executed from the programmers prompt.

Manual Back-Out Procedure

First, load and install the back-out patch (ZLR*5.2*00500) created in step 4.1.1 before the installation of LR*5.2*500.

Delete routine LR500PO

The deletion of a routine is a potentially dangerous activity. This procedure must be performed by persons with programmer-level access, **and in conjunction with the STS team.**

   a.   From the ROUTINE MANAGEMENT MENU [XUROUTINES], select the DELETE ROUTINES [XTRDEL] option.
   IMPORTANT: When prompted for 'All Routines?', enter NO.

   b.   At the 'Routine:' prompt, enter LR500PO

   c.   At the next 'Routine:' prompt, press <Enter>

d. At the prompt '1 routines to DELETE, OK:'. enter YES.

Example – manual deletion of routine LR500PO using option DELETE ROUTINES [XTRDEL]:

```
Select OPTION NAME: ROUTINE MANAGEMENT MENU  XUROUTINES     Routine Management Menu


          Bring in Sent Routines

          Delete Routines

          First Line Routine Print

          List Routines

          Move Routines across Volume Sets


Select OPTION NAME: DELETE ROUTINES  XTRDEL     Delete Routines

Delete Routines


ROUTINE DELETE


All Routines? No => No


Routine: LR500PO

Routine:


1 routine


1 routines to DELETE, OK: NO// Y

LR500PO


Done.
```

Then proceed with the following from the FileMan menu:

Delete New Fields in the LABORATORY TEST File (#60)

```
Select OPTION: MODIFY FILE ATTRIBUTES

Do you want to use the screen-mode version? YES// NO



Modify what File: LABORATORY TEST//      (3420 entries)



Select FIELD: 134  IN HOUSE TEST
```

```
LABEL: IN HOUSE TEST// @

    SURE YOU WANT TO DELETE THE ENTIRE 'IN HOUSE TEST' FIELD? Y  (Yes)


OK TO DELETE 'IN HOUSE TEST' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes)......


Select FIELD: 135  POC TEST

LABEL: POC TEST// @

    SURE YOU WANT TO DELETE THE ENTIRE 'POC TEST' FIELD? Y  (Yes)


OK TO DELETE 'POC TEST' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes)...........


Select FIELD: 136  CALCULATION TEST

LABEL: CALCULATION TEST// @

    SURE YOU WANT TO DELETE THE ENTIRE 'CALCULATION TEST' FIELD? Y  (Yes)



OK TO DELETE 'CALCULATION TEST' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes)...


Select FIELD: 137  SCANNED IMAGE TEST

LABEL: SCANNED IMAGE TEST// @

    SURE YOU WANT TO DELETE THE ENTIRE 'SCANNED IMAGE TEST' FIELD? Y  (Yes)


OK TO DELETE 'SCANNED IMAGE TEST' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes).


Select FIELD: 138  BILLABLE

LABEL: BILLABLE// @

    SURE YOU WANT TO DELETE THE ENTIRE 'BILLABLE' FIELD? Y  (Yes)


OK TO DELETE 'BILLABLE' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes)...........


Select FIELD: 139  WORKLOAD CAPTURE

LABEL: WORKLOAD CAPTURE// @

    SURE YOU WANT TO DELETE THE ENTIRE 'WORKLOAD CAPTURE' FIELD? Y  (Yes)


OK TO DELETE 'WORKLOAD CAPTURE' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes)...
```

```
Select FIELD: 141  PERFORMING LAB  (multiple)

LABEL: PERFORMING LAB// @

   SURE YOU WANT TO DELETE THE ENTIRE 'PERFORMING LAB' FIELD? Y  (Yes)


OK TO DELETE 'PERFORMING LAB' FIELDS IN THE EXISTING ENTRIES? Yes//   (Yes).....


Select FIELD:

Select OPTION:
```

5.7 Back-out Verification Procedure

5.7.1 Routines

Successful back-out of the routines updated by the patch may be verified by running the
CHECK1^XTSUMBLD utility from the programmer prompt for LR*5.2*500. If the backout
was successful, the message "Routine not in this UCI" will display next to the LR500PO routine
and the other routine checksums should be the pre-LR*5.2*500 values.

```
D CHECK1^XTSUMBLD

New CheckSum CHECK1^XTSUMBLD:

This option determines the current checksum of selected routine(s).

The Checksum of the routine is determined as follows:


1. Any comment line with a single semi-colon is presumed to be

   followed by comments and only the line tag will be included.


2. Line 2 will be excluded from the count.


3. The total value of the routine is determined (excluding

   exceptions noted above) by multiplying the ASCII value of each

   character by its position on the line and position of the line in

   the routine being checked.


     Select one of the following:
```

```
            P          Package

            B          Build


Build from: Build


This will check the routines from a BUILD file.

Select BUILD NAME: LR*5.2*500       LAB SERVICE

LR500PO   Routine not in this UCI.

LRMLACM   value = 18901427     Missing patch number

LRMLED    value = 152483182    Missing patch number

LRMLEDA   value = 133294860    Missing patch number

LRMLWT    value = 37343726     Missing patch number

done
```

5.7.2 Data Dictionaries

After backing out Patch LR*5.2*500, successful back-out of the fields installed and modified by the patch may be verified by running a global listing from the VistA server command line after installation.

Example – global listing of backed out globals:

```
>D P^DI

VA FileMan 22.2

Select OPTION: DATA DICTIONARY UTILITIES

Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES

 START WITH What File: LABORATORY TEST//   (3412 entries)

     GO TO What File: LABORATORY TEST//   (3412 entries)

     Select SUB-FILE:

Select LISTING FORMAT: STANDARD// BRIEF

ALPHABETICALLY BY LABEL? No//   (No)

Start with field: FIRST// 134 ??


Start with field: FIRST// 135 ??


Start with field: FIRST// 136 ??


Start with field: FIRST// 137 ??
```

```
Start with field: FIRST// 138 ??


Start with field: FIRST// 139 ??


Start with field: FIRST// 141 ??


Start with field: FIRST// ^


Select DATA DICTIONARY UTILITY OPTION: LIST FILE ATTRIBUTES

 START WITH What File: LABORATORY TEST// 66.4  LAB MLTF MANAGED ITEMS

                                     (1 entry)

     GO TO What File: LAB MLTF MANAGED ITEMS//   (1 entry)

Select LISTING FORMAT: STANDARD// C

     1   CONDENSED

     2   CUSTOM-TAILORED

CHOOSE 1-2: 1  CONDENSED

DEVICE: ;;9999  secure    Right Margin: 80//




CONDENSED DATA DICTIONARY---LAB MLTF MANAGED ITEMS FILE (#66.4)UCI: STLVETSDEV,ROU
VERSION: 5.2


STORED IN: ^LAB(66.4,                           FEB 13,2018 PAGE 1
--------------------------------------------------------------------------------
                                      FILE SECURITY

                            DD SECURITY   : @     DELETE SECURITY: @

                            READ SECURITY : @     LAYGO SECURITY : @

                            WRITE SECURITY : @

CROSS REFERENCED BY:

     INSTITUTION POINTER(ANM)  INSTITUTION POINTER(B)

                            FILE STRUCTURE



FIELD     FIELD

NUMBER    NAME

.01       INSTITUTION POINTER (RP4'X), [0;1]

.02       NTRT SEND METHOD (S), [0;2]
```

```
.03      AUTO REMINDERS PARAMETER (NJ3,0), [0;3]

.04      AUDIT PURGE DAYS (NJ3,0), [0;4]

.05      ISAAC ACTIVE (S), [0;5]

.06      LAB IEN (NJ8,0), [0;6]

.07      SUBSCRIPT FOR NTRT (S), [0;7]

.08      LAST AUTO TEST ID (F), [0;8]

.1       SEND NTRT MESSAGES (S), [0;10]

1        DEFAULT NTRT MAIL GROUP (F), [1;1]

2        DEFAULT SITE LAB MAIL GROUP (F), [2;1]

3        SITE LAB SERVER (F), [3;1]

4        ISAAC WEB ADDRESS (F), [4;1]

5        ISAAC PORT NUMBER (NJ10,0), [4;2]

6        ISAAC NTRT PATH (FX), [5;1]

7        ISAAC SCHEMA NAME (F), [6;1]

8        ISAAC SCHEMA PATH (FX), [6;2]
```

6 Rollback Procedure

N/A

6.1 Rollback Considerations

N/A

6.2 Rollback Criteria

N/A

6.3 Rollback Risks

N/A

6.4 Authority for Rollback

N/A

6.5 Rollback Procedure

N/A

6.6 Rollback Verification Procedure

N/A