VistA Lab Enhancements – Microbiology

Release: Lab Micro Interface Release 1.0

(combined build for LA\*5.2\*90 and LR\*5.2\*474)

Deployment, Installation, Back-out, and Rollback Guide



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**Artifact Rationale**

This document describes the Deployment, Installation, Back-out, and Rollback Plan for new products going into the VA Enterprise. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities involved in all those activities. Its purpose is to provide clients, stakeholders, and support personnel with a smooth transition to the new product or software, and should be structured appropriately, to reflect particulars of these procedures at a single or at multiple locations.

Per the Veteran-focused Integrated Process (VIP) Guide, the Deployment, Installation, Back-out, and Rollback Plan is required to be completed prior to Critical Decision Point #2 (CD #2), with the expectation that it will be updated throughout the lifecycle of the project for each build, as needed.

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# Introduction

The Installation, Back-out, Rollback Guide defines the ordered, technical steps required to install the product, and if necessary, to back-out the installation, and to roll back to the previously installed version of the product. It provides installation instructions for the VistA Lab Enhancements (VLE) Microbiology project, release Lab Micro Interface Release 1.0.

The releases shall be distributed as follows:

* Lab Micro Interface Release 1.0, Kernel Information and Distribution System (KIDS) build available via Secure File Transfer Protocol (SFTP) from download.vista.med.va.gov

The Lab Micro Interface Release 1.0 is a combined build that contains the LR\*5.2\*474 and the LA\*5.2\*90 patches. The combined build will support the electronic bidirectional communication of automated identification and susceptibility testing instruments with the VistA Laboratory Universal Interface (UI) through middleware or a generic instrument manager.

Patch LR\*5.2\*474 will provide new functionality to the Enter/Verify Data option of the Lab UI package. Three new release actions will now be available to the Technologist with the authority to release results. Results will be available to the applicable authorized clinicians and providers. In addition, the patch will allow a VA Medical Center the option of setting release defaults at the Package or User level.

Patch LA\*5.2\*90 will provide the constructs necessary to allow Microbiology or MI subscripted tests to be added to an Auto Instrument entry. An enhancement is also included for antibiotic susceptibility result processing which will now allow laboratories the ability to report susceptibilities to antimicrobial agents by utilizing SNOMED CT codes such as Positive and Negative. The handling of variations is also included in the build, such as the reporting of extended-spectrum beta-lactamases or ESBL enzymes that are resistant to most beta-lactam antibiotics. Locally mapped codes using an “L” for code set ID will now be processed for antibiotic susceptibilities.

All of the following SNOMED CT codes shall be supported with the release of patch LA\*5.2\*90:

* 131196009 Susceptible
* 260357007 Moderately susceptible
* 264841006 Intermediately susceptible
* 30714006 Resistant
* 10828004 Positive
* 260385009 Negative

## Purpose

The purpose of this guide is to provide a single, common document that describes how, when, where, and to whom the Lab Micro Interface Release 1.0 build 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.

## Dependencies

Patch LA\*5.2\*90 includes the following dependencies:

* LA\*5.2\*74
* LA\*5.2\*88

Patch LR\*5.2\*474 includes the following dependencies:

* LR\*5.2\*221
* LR\*5.2\*291
* LR\*5.2\*416
* LR\*5.2\*422
* LR\*5.2\*433
* LR\*5.2\*453

## Constraints

Security controls will be inherited from VistA and therefore will be fully compliant with National Institute of Standards and Technology (NIST) controls and in compliance with Directive 6500. In addition, Lab Micro Interface Release 1.0 will be 508 compliant and designed to ensure no performance impacts will be experienced in the production environments.

## Orientation

This section addresses package or audience specific notations or directions (e.g., symbols used

to indicate terminal dialogues or user responses) for the installation instructions included in this document.

All headings and text in this guide are intentionally formatted flush left, regardless of the heading level, to save space and to make for better readability.

In tables which list mandatory steps (as for installation and post-installation), a column is provided at the right-hand side so that users may check (✔) off the step as it is performed.

### 1.4.1 Computer Dialogue

The computer dialogue will appear in Courier New 11-point font.

**Example:** Courier New font 11 points

### 1.4.2 Instructions

Instructions will appear in Arial 11-point font.

**Example:** Arial font 11 points

### 1.4.3 User Response

User entry responses will appear in Courier New 11-point font.

**Example:** Courier New font 11 points

In VistA, every response you type must be followed by pressing the **< Return >** key or the **< Enter >** key.

# Roles and Responsibilities

The deployment, installation, back-out, and roll-back roles and responsibilities are outlined in Table 1 which also lists the teams that will perform the tasks described in this guide.

**Table 1: Roles and Responsibilities**

| **ID** | **Team** | **Phase / Role** | **Tasks** |
| --- | --- | --- | --- |
| 1 | Field Operations (FO) | Deployment | Plan and schedule deployment (including orchestration with vendors). |
| 2 | FO | Deployment | Determine and document the roles and responsibilities of those involved in the deployment. |
| 3 | FO | Deployment | Test for operational readiness. |
| 4 | FO | Deployment | Execute deployment. |
| 5 | FO | Installation | Plan and schedule installation. |
| 6 | FO | Installation | Ensure authority to operate and that certificate authority security documentation is in place. |
| 7 | FO | Installation | Validate through facility point of contact to ensure that IT equipment has been accepted using asset inventory processes. |
| 8 | FO | Installations | Coordinate training. |
| 9 | FO | Back-out | Confirm availability of back-out instructions and back-out strategy. |
| 10 | FO | Post Deployment | Hardware, Software and System Support. |

# Deployment

The Microbiology (Micro) Initiative is a collaborative solution between the VistA Laboratory Enhancement (VLE) Team and Clinical Laboratory personnel. This solution provides Micro Laboratory Technologists a system that integrates with the existing VistA Microbiology system.

A National Release is planned for January 2017 after testing has been successfully completed at two Test Sites.

Deployment will be performed by Local Facility staff and supported by team members from one or more of the operations organizations: Enterprise Systems Engineering (ESE), Field Operations (FO), Enterprise Operations (EO), and/or others.

## Site Preparation

Each site must prepare for the deployment, installation, and implementation of the Micro capabilities. The extent for which they must prepare will vary based upon the sites current processes.

The following table describes preparation required by the site prior to deployment.

Table 2: Site Preparation

| **Site/Other** | **Problem/Change Needed** | **Features to Adapt/Modify to New Product** | **Actions/Steps** | **Owner** |
| --- | --- | --- | --- | --- |
| All | Determine changes to current processes. | Existing Micro MDRO and Instrument interface procedures. | Evaluate how new processes differ from current processes and adapt training accordingly. | Micro Technologists, Laboratory Information Managers (LIMs),  Facility Business Owners |
| Sites using a VistA Micro currently. | Evaluate configuration changes that will need to be made to adapt to new Micro enhancements. | Existing Order Menus, Order Sets, and Quick Orders. | If using Generic Lab or Consult Order Types, determine if there are ordering menus, sets, and/or quick orders that need to be modified. | Micro Technologists, LIMs,  Facility Business Owners |

## Software

The following table describes software specifications required at each site prior to deployment for the Lab Micro Interface Release 1.0.

Table 3: Software Specifications

| **Required Software** | **Manufacturer** | **Other** |
| --- | --- | --- |
| The following prerequisite release is required for the Lab Micro Interface Release 1.0:   * Lab Auto Release 1.0 (LR\*5.2\*458 and LA\*5.2\*88) | Not applicable. | Local OI&T staff will provide the assistance needed to ensure that the users have the latest patches and upgrades required for the build. |
| **Data Innovations Instrument Manager (IM) version 8.13.03 or greater.** | Data Innovations | Local OI&T staff and Data Innovations support will provide the assistance needed to ensure that the users have version 8.13.03or greater of the IM for the utilization of the full functionality in the Lab Micro Interface Release 1.0 build. |
| **VA Hybrid Health Level Seven (HL7) driver v8.00.0018 or greater.** | Not applicable. | Local OI&T staff will provide the assistance needed to ensure that the users have the latest HL7 driver. |

## Communications

Technicians will use email and conference calls for communication during the deployment; email and/or conference calls will be utilized to notify the stakeholders of the successful release of the product.

# Pre-Installation and Installation Preparation Instructions

This section provides pre-installation and installation preparation instructions for the Lab Micro Interface Release 1.0 build.

## Platform Installation and Preparation

The Lab Micro Interface Release 1.0 installation must be coordinated with the Laboratory Automated Data Processing Application Coordinator (ADPAC) at each site.

## Installation Timing Recommendation

The Lab Micro Interface Release 1.0 may be loaded with users on the system if the Lab Interface related activities have been halted, which includes, but is not limited to, the following:

* Editing of an Auto Instrument file entry.
* Turning off the Auto Downloading process to prevent the building and downloading

of a Load/Worklist to the Instrument Manager.

* Shutting down all LA7UI logical links and any other HL7 process (HLZTCP or HLLP processes) to prevent the processing of result messages from the IM.

### Estimated Timing

The installation will take less than 5 minutes.

### Kernel Patches

Kernel patches must be current on the target system to avoid problems loading and/or installing this patch.

### Global Growth

There is no significant change to global growth.

## Download and Extract Files

The product and associated documentation will be available via the National Patch Tracking Module in FORUM and the SOFTWARE.DIR directory at the OI&T Field Offices listed below.

* Albany ftp.fo-albany.med.va.gov
* Hines ftp.fo-hines.med.va.gov
* Salt Lake City ftp.fo-slc.med.va.gov

The preferred method is to retrieve the file(s) using Secure File Transfer Protocol (SFTP) from download.vista.med.va.gov, which transmits files from the first available SFTP server.

Table 4: Files for Retrieval

|  |  |  |
| --- | --- | --- |
| **File Name** | **Contents** | **Retrieval Format** |
| LAB\_MICRO\_INTERFACE\_ RELEASE\_1\_0.KID | Host File containing ASCII | ASCII |
| LAB\_MICRO\_INTERFACE\_  RELEASE\_1\_0\_DOCS.ZIP | VLE Micro\_Lab\_Micro\_Interface\_Release\_1.0\_  Technical\_Manual  VLE Micro\_Lab\_Micro\_Interface\_Release\_1.0\_  User\_Guide  VLE Micro\_Deployment\_Installation\_Roll Back\_Back Out\_Guide | Binary |

## Access Requirements and Skills Needed for the Installation

This guide is written with the assumption that the reader is experienced or familiar with the following:

* VistA computing environment
* VA FileMan data structures and terminology
* Microsoft Windows

Local or Regional OI&T staff will coordinate the patch installation with the Laboratory Information Manager (LIM) at each site. The Local or Regional OI&T staff have the necessary access and skill set to conduct the installation.

## Pre-Installation and System Requirements

The Lab Micro Interface Release 1.0 installation must be coordinated with the Laboratory Automated Data Processing Application Coordinator (ADPAC) to ensure that all Lab Interface related activities are halted.

## Installation Procedure

Follow the instructions outlined in the Table below to install the software.

Table 5: M Code Installation Instructions

| Step # | Description | |  |
| --- | --- | --- | --- |
| **1** | Access the KIDS menu (XPD MAIN). | |  |
| **2** | From the KIDS menu, select the Installation menu. | |  |
| **3** | From the Installation menu, select option #1: Load a Distribution. | |  |
| **4** | When prompted, ‘Enter a Host File:’, select LAB\_MICRO\_INTERFACE\_RELEASE\_1\_0.KID | |  |
| **5** | When prompted, ‘Want to Continue with Load? YES//’, respond "Yes". | |  |
| **6** | When prompted, ‘Want to RUN the Environment Check Routine? YES//’ respond "Yes". | |  |
| **7** | From the Installation menu, select option #2, Verify Checksums in Transport Global. | |  |
| **8** | When prompted ‘Select INSTALL NAME:’ respond ‘LA\*5.2\*90’ | |  |
| **9** | When prompted ‘Want each Routine Listed with Checksums: Yes//’ respond “Yes” | |  |
|  | **a** | Verify the following routine information for LA\*5.2\*90:  LA7VHLU6 Calculated 58736241  LA7VIN2A Calculated 34485992  LA7VIN7 Calculated 83943151  LA7VIN7A Calculated 61187996  LA7VIN7B Calculated 65792075  LA90A Calculated 5670536 |  |
|  | **b** | Verify the following routine information for LR\*5.2\*474:  LRMIEDZ2 Calculated 72283385  LRVR0 Calculated 154172378  LRVRMI2 Calculated 36282264  LRVRMI2A Calculated 78602425  LRVRMI3 Calculated 26756120  LRVRMI4 Calculated 39771458  LRVRMI4A Calculated 96471289 |  |
| **10** | From the Installation menu, select option #3, Print Transport Global | |  |
| **11** | When prompted ‘Select INSTALL NAME:’ respond ‘LA\*5.2\*90’ | |  |
| **12** | When prompted ‘Select one of the following:” respond “1” for Print Summary. | |  |
| **13** | When prompted ‘Want each Routine Listed with Checksums: Yes//’ respond “Yes” | |  |
| **14** | From the Installation menu, select option #4, Compare Transport Global to Current System. | |  |
| **15** | When prompted ‘Select INSTALL NAME:’ respond ‘LA\*5.2\*90’ | |  |
| **16** | When prompted ‘Select one of the following:” respond “2” for Second line of Routines only. | |  |
| **17** | From the Installation menu, select option #5: Backup a Global Transport. | |  |
| **18** | When prompted ‘Select INSTALL NAME:’ respond ‘LA\*5.2\*90’ | |  |
| **19** | From the Installation menu, select option #6: Install Package(s). | |  |
| **20** | When prompted ‘Select INSTALL NAME:’ respond ‘LA\*5.2\*90’ | |  |
| **21** | When prompted 'Want KIDS to INHIBIT LOGONs during the install?  NO//', respond "NO". | |  |
| **22** | When prompted 'Want KIDS to Rebuild Menu Trees Upon Completion of Install? NO//', respond "NO". | |  |
| **23** | When prompted 'Want KIDS to INHIBIT LOGONs during the install? NO//', respond "NO". | |  |
| **24** | When prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//', respond "NO". | |  |
| **25** | If prompted 'Delay Install (Minutes): (0 - 60): 0//', respond "NO". | |  |
| **26** | After receiving the message ‘Install Completed’, print out the Install for both the LA\*5.2\*90 and the LR\*5.2\*474 patches.  From the KIDS menu, select the Utilities menu. | |  |
| **27** | From the Utilities menu, select Install File Print**.** | |  |
| **28** | When prompted ‘Select INSTALL NAME:’ respond ‘LA\*5.2\*90’ | |  |
| **29** | From the Utilities menu, select Install File Print**.** | |  |
| **30** | When prompted ‘Select INSTALL NAME:’ respond ‘LR\*5.2\*474’ | |  |
| **31** | Save all printouts. | |  |

# Back-Out Procedure

The build does not make any changes that would affect the operational state of the software and platform settings. The functionality in the Lab Micro Interface Release 1.0 build will not be available until the installation process has been successfully completed.

## Back-Out Strategy

During installation, if the option to back up routines was run as directed, ‘Backup a Transport Global’, then routines have the ability to be restored from the “backup” MailMan message that was generated. However, the KIDS installation process does not perform a restore of other VistA components, such as data dictionary, cross-reference, and template changes, etc.

Prior to attempting a back-out of the software, please contact the VA Help Desk at 1-855-673-4357 for support or assistance.

## Back-Out Considerations

The LIM and the Chief of Pathology have the authority to order the back-out.

## Back-Out Criteria

Criteria for a back-out includes, but are not limited, to the following:

1. Failed baseline testing.
2. Non-recoverable software error.

## Back-Out Risks

No back-out risks have been determined at this time.

## Authority for Back-Out

The LIM and the Chief of Pathology have the authority to order the Back-out Procedure.

## Back-Out Procedure

The need for a back-out is highly unlikely, however if it is required, please contact the Product Support team for assistance.

# Rollback Procedure

The LR\*5.2\*474 and LA\*5.2\*90 patches (part of the combined build, Lab Micro Interface Release 1.0) as well as any installed dependent patch changes that follow these releases need to be taken out in reverse of the order in which they were installed; routines and data dictionary modifications and populated data must also be rolled back in reverse order.

Please contact the VA Help Desk at 1-855-763-4357 for support or assistance regarding roll-back procedures.

## Rollback Considerations

No rollback considerations have been determined at this time.

## Rollback Criteria

The only criteria for a rollback that has been determined at this time is that the installation failed baseline testing.

## Rollback Risks

The only risk determined at this time is the possibility of downtime which would only effect the users of the Laboratory package.

## Authority for Rollback

The LIM, the Lab Manager, and the Chief of Pathology have the authority to require the rollback and accept the risks.

## Rollback Procedure

The need for a rollback is highly unlikely, however if it is required, please contact the Product Support team for assistance. The rollback procedure will require Lab downtime and a reinstall of any previous KIDS versions.

# Appendix A: Examples of Auto Instrument File and Load / Worklists

Figure 1 below displays examples of the AUTO INSTRUMENT file (#62.4) and LOAD / WORKLIST pairs for the BD EpiCenterTM and **bioMérieux** Myla TM software and the BD BactecTM, Dade MicroScan TM, and **bioMérieux** VitekTM systems.

**Note:** For more information on configurations with applicable middleware and analyzers, consult the manufacturer of the product(s).

Figure 1: Examples of Auto Instrument File and Load / Worklists

|  |
| --- |
| **Auto Instrument: EPICENTER**    NUMBER: 285 NAME: EPICENTER  LOAD/WORK LIST: BACTEC FX  ENTRY for LAGEN ROUTINE: Accession cross-reference  CROSS LINKED BY: IDE MESSAGE CONFIGURATION: LA7UI3  METHOD: BACTEC DEFAULT ACCESSION AREA: MICROBIOLOGY  OVERLAY DATA: YES STORE REMARKS: YES  NUMBER: 1 TEST: BLOOD CULTURE  UI TEST CODE: STDANF ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  NUMBER: 2 TEST: MYCOLOGY CULTURE  UI TEST CODE: MYCFLYTIC ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  FILE BUILD ENTRY: EN FILE BUILD ROUTINE: LA7UID  AUTO DOWNLOAD: YES SHORT ACCESSION # LENGTH: 5  AUTO RELEASE: NO WKLD METHOD: BACTEC 9240  WKLD CODE METHOD NAME: BACTEC 9240 WKLD CODE SUFFIX: .7103  **Load/Worklist: BACTEC FX**  NAME: BACTEC FX LOAD TRANSFORM: UNIVERSAL  TYPE: TRAY,CUP CUPS PER TRAY: 10  FULL TRAY'S ONLY: NO INCLUDE UNCOLLECTED ACCESSIONS: NO  USER ACCESS AUTHORIZATION: LRVERIFY DATE OF SETUP: JUN 13, 2016  PROFILE: BLOOD CULTURE ACCESSION AREA: BLOOD CULTURE  UID VERIFICATION: ANY ACCESSION AREA STORE DUPLICATE COMMENTS: NO  DEFAULT REFERENCE LABORATORY: TAMPA VAMC  AUTO RELEASE: NO  TEST: BLOOD CULTURE BUILD NAME ONLY: NO  TEST: MYCOLOGY CULTURE BUILD NAME ONLY: NO  PROFILE: MYCOLOGY CULTURE ACCESSION AREA: FUNGAL  UID VERIFICATION: ANY ACCESSION AREA DEFAULT REFERENCE LABORATORY: TAMPA VAMC  AUTO RELEASE: NO  TEST: MYCOLOGY CULTURE BUILD NAME ONLY: NO  WKLD METHOD: BACTEC 9240 WKLD CODE METHOD NAME: BACTEC 9240  WKLD CODE SUFFIX: .7103 MAJOR ACCESSION AREA: MICROBIOLOGY  LAB SUBSECTION: BLOOD CULTURE  **Auto Instrument: VITEK MS**  NUMBER: 286 NAME: VITEK MS  LOAD/WORK LIST: VITEK MS  ENTRY for LAGEN ROUTINE: Accession cross-reference  CROSS LINKED BY: IDE MESSAGE CONFIGURATION: LA7UI3  METHOD: VITEK DEFAULT ACCESSION AREA: MICROBIOLOGY  OVERLAY DATA: YES STORE REMARKS: YES  NUMBER: 1 TEST: BLOOD CULTURE  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  NUMBER: 2 TEST: CULTURE & SUSCEPTIBILITY  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  NUMBER: 3 TEST: MYCOLOGY CULTURE  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  NUMBER: 4 TEST: CULTURE & SUSCEPTIBILITY  UI TEST CODE: o2-Final Organism Name ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: NO  FILE BUILD ENTRY: EN FILE BUILD ROUTINE: LA7UID  MICRO INTERPRETATION CHECK: CHECK BOTH FILE AND INSTRUMENT INTERPRETATION OVER  WRITE WITH FILE AUTO DOWNLOAD: YES  SHORT ACCESSION # LENGTH: 5 AUTO RELEASE: NO  WKLD METHOD: VITEK AMS WKLD CODE METHOD NAME: VITEK AMS  WKLD CODE SUFFIX: .7087  **Load/Worklist: VITEK MS**  NAME: VITEK MS LOAD TRANSFORM: UNIVERSAL  TYPE: SEQUENCE/BATCH CUPS PER TRAY: 0  FULL TRAY'S ONLY: NO EXPAND PANELS ON PRINT: NO  INCLUDE UNCOLLECTED ACCESSIONS: NO USER ACCESS AUTHORIZATION: LRVERIFY  DATE OF SETUP: JUL 15, 2016  PROFILE: CULTURE ACCESSION AREA: MICROBIOLOGY  UID VERIFICATION: ANY ACCESSION AREA STORE DUPLICATE COMMENTS: NO  DEFAULT REFERENCE LABORATORY: TAMPA VAMC  AUTO RELEASE: NO  TEST: BLOOD CULTURE BUILD NAME ONLY: NO  TEST: MYCOLOGY CULTURE BUILD NAME ONLY: NO  TEST: CULTURE & SUSCEPTIBILITY BUILD NAME ONLY: NO  WKLD METHOD: VITEK AMS WKLD CODE METHOD NAME: VITEK AMS  WKLD CODE SUFFIX: .7087 MAJOR ACCESSION AREA: MICROBIOLOGY  LAB SUBSECTION: MICROBIOLOGY  **Auto Instrument: VITEK II**  NUMBER: 287 NAME: VITEK II  LOAD/WORK LIST: VITEK II  ENTRY for LAGEN ROUTINE: Accession cross-reference  CROSS LINKED BY: IDE MESSAGE CONFIGURATION: LA7UI3  METHOD: VITEK DEFAULT ACCESSION AREA: MICROBIOLOGY  OVERLAY DATA: YES STORE REMARKS: YES  NUMBER: 1 TEST: CULTURE & SUSCEPTIBILITY  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  NUMBER: 2 TEST: BLOOD CULTURE  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  NUMBER: 3 TEST: MYCOLOGY CULTURE  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES  FILE BUILD ENTRY: EN FILE BUILD ROUTINE: LA7UID  AUTO DOWNLOAD: YES AUTO RELEASE: NO  WKLD METHOD: VITEK WKLD CODE METHOD NAME: VITEK  WKLD CODE SUFFIX: .7015  **Load/Worklist: VITEK II**  NAME: VITEK II LOAD TRANSFORM: UNIVERSAL  TYPE: SEQUENCE/BATCH CUPS PER TRAY: 0  FULL TRAY'S ONLY: NO EXPAND PANELS ON PRINT: NO  INCLUDE UNCOLLECTED ACCESSIONS: NO USER ACCESS AUTHORIZATION: LRVERIFY  DATE OF SETUP: SEP 16, 2016  PROFILE: CULTURE ACCESSION AREA: MICROBIOLOGY  UID VERIFICATION: ANY ACCESSION AREA STORE DUPLICATE COMMENTS: NO  DEFAULT REFERENCE LABORATORY: TAMPA VAMC  AUTO RELEASE: NO  TEST: CULTURE & SUSCEPTIBILITY BUILD NAME ONLY: NO  TEST: BLOOD CULTURE BUILD NAME ONLY: NO  TEST: MYCOLOGY CULTURE BUILD NAME ONLY: NO  WKLD METHOD: VITEK AMS WKLD CODE METHOD NAME: VITEK AMS  WKLD CODE SUFFIX: .7087 MAJOR ACCESSION AREA: MICROBIOLOGY  LAB SUBSECTION: MICROBIOLOGY  **Auto Instrument: MICROSCAN**  NUMBER: 95                              NAME: MICROSCAN    LOAD/WORK LIST: MICROSCAN    ENTRY for LAGEN ROUTINE: Accession cross-reference    CROSS LINKED BY: IDE                  MESSAGE CONFIGURATION: LA7UI1    METHOD: MICROSCAN                     OVERLAY DATA: YES    STORE REMARKS: YES  NUMBER: 1                               TEST: CULTURE, ABSCESS    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 2                               TEST: CULTURE, ASPIRATE    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 3                               TEST: CULTURE, BLOOD    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: BLOOD CULTURES  NUMBER: 4                               TEST: CULTURE, BODY FLUID    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 5                               TEST: CULTURE, TISSUE    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 6                               TEST: CULTURE, BONE    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 7                               TEST: CULTURE, BONE MARROW    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 8                               TEST: CULTURE, BRONCHIAL    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 9                               TEST: CULTURE, CATHETER TIP    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 10                              TEST: CULTURE, CSF    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 11                              TEST: CULTURE, EAR    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 12                              TEST: CULTURE, EYE    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 13                              TEST: CULTURE, GC    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 14                              TEST: CULTURE, SPUTUM    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 15                              TEST: CULTURE, STOOL    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 16                              TEST: CULTURE, URINE    UI TEST CODE: ID                      ACCEPT RESULTS FOR THIS TEST: YES    DOWNLOAD TO INSTRUMENT: YES           STORE REMARKS: YES    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 17                              TEST: CULTURE, WOUND-DEEP    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES                    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 18                              TEST: CULTURE, WOUND-SUPERFICIAL    UI TEST CODE: ID                      ACCEPT RESULTS FOR THIS TEST: YES    DOWNLOAD TO INSTRUMENT: YES           STORE REMARKS: YES    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 19                              TEST: PRE-PROSTATE BIOPSY RECTAL SCREEN    UI TEST CODE: ID                      ACCEPT RESULTS FOR THIS TEST: YES    DOWNLOAD TO INSTRUMENT: YES           STORE REMARKS: YES    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 20                              TEST: MDRO SCREEN    UI TEST CODE: ID                      ACCEPT RESULTS FOR THIS TEST: YES    DOWNLOAD TO INSTRUMENT: YES           STORE REMARKS: YES    ACCESSION AREA: MICROBIOLOGY CDD  NUMBER: 21                              TEST: .CULTURE, THROAT    UI TEST CODE: ID                      DOWNLOAD TO INSTRUMENT: YES    STORE REMARKS: YES    FILE BUILD ENTRY: EN                  FILE BUILD ROUTINE: LA7UID    AUTO DOWNLOAD: YES                    WKLD METHOD: MICROSCAN    WKLD CODE METHOD NAME: MICROSCAN      WKLD CODE SUFFIX: .7038    **Load/Worklist: MICROSCAN**  NUMBER: 109                             NAME: MICROSCAN    LOAD TRANSFORM: UNIVERSAL             TYPE: SEQUENCE/BATCH    CUPS PER TRAY: 0                      FULL TRAY'S ONLY: NO    VERIFY BY: ACCESSION                  SUPPRESS SEQUENCE #: NO    INCLUDE UNCOLLECTED ACCESSIONS: NO    DATE OF SETUP: NOV 12, 2016    FIRST TRAY: 1                         STARTING CUP: 1    LAST TRAY: 1                          BUILDING IN PROGRESS: NO  PROFILE: BLOOD CULTURE                  ACCESSION AREA: BLOOD CULTURES    UID VERIFICATION: ANY ACCESSION AREA  TEST: CULTURE, BLOOD                    BUILD NAME ONLY: NO  PROFILE: MICROBIOLOGY                   ACCESSION AREA: MICROBIOLOGY CDD    UID VERIFICATION: ANY ACCESSION AREA  TEST: CULTURE, ABSCESS                  BUILD NAME ONLY: NO  TEST: CULTURE, ASPIRATE                 BUILD NAME ONLY: NO  TEST: CULTURE, BODY FLUID               BUILD NAME ONLY: NO  TEST: CULTURE, BONE                     BUILD NAME ONLY: NO  TEST: CULTURE, BONE MARROW              BUILD NAME ONLY: NO  TEST: CULTURE, BRONCHIAL                BUILD NAME ONLY: NO  TEST: CULTURE, CATHETER TIP             BUILD NAME ONLY: NO  TEST: CULTURE, CSF                      BUILD NAME ONLY: NO  TEST: CULTURE, EAR                      BUILD NAME ONLY: NO  TEST: CULTURE, EYE                      BUILD NAME ONLY: NO  TEST: CULTURE, GC                       BUILD NAME ONLY: NO  TEST: CULTURE, SPUTUM                   BUILD NAME ONLY: NO  TEST: CULTURE, STOOL                    BUILD NAME ONLY: NO  TEST: CULTURE, TISSUE                   BUILD NAME ONLY: NO  TEST: CULTURE, URINE                    BUILD NAME ONLY: NO  TEST: CULTURE, WOUND-DEEP               BUILD NAME ONLY: NO  TEST: CULTURE, WOUND-SUPERFICIAL        BUILD NAME ONLY: NO  TEST: MDRO SCREEN                       BUILD NAME ONLY: NO  TEST: PRE-PROSTATE BIOPSY RECTAL SCREEN    BUILD NAME ONLY: NO  TEST: .CULTURE, THROAT                  BUILD NAME ONLY: NO    WKLD METHOD: MICROSCAN                WKLD CODE METHOD NAME: MICROSCAN    WKLD CODE SUFFIX: .7038               MAJOR ACCESSION AREA: MICROBIOLOGY CDD  **Auto Instrument: MYLA**  NUMBER: 602 NAME: MYLA  LOAD/WORK LIST: IMB  ENTRY for LAGEN ROUTINE: Accession cross-reference  CROSS LINKED BY: IDE MESSAGE CONFIGURATION: LA7UI4  METHOD: MYLA DEFAULT ACCESSION AREA: IBACTERIOLOGY  OVERLAY DATA: YES STORE REMARKS: YES  NUMBER: 1 TEST: BLOOD CULTURE (AEROBE,ANAEROBE)  UI TEST CODE: C ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES STORE REMARKS: YES  ACCESSION AREA: IBLOOD CULTURE  NUMBER: 2 TEST: C&S (AEROBIC) + GRAM STAIN  UI TEST CODE: CGS ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES STORE REMARKS: YES  ACCESSION AREA: IBACTERIOLOGY  NUMBER: 3 TEST: GRAM STAIN  UI TEST CODE: GS ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES STORE REMARKS: YES  ACCESSION AREA: IBACTERIOLOGY  NUMBER: 4 TEST: C&S (AEROBIC CULTURE/SUSCEPT)  UI TEST CODE: CNS ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES STORE REMARKS: YES  ACCESSION AREA: IBACTERIOLOGY  NUMBER: 5 TEST: AFB CULTURE & SMEAR  UI TEST CODE: AFB ACCEPT RESULTS FOR THIS TEST: YES  DOWNLOAD TO INSTRUMENT: YES ACCESSION AREA: IMYCOBACTERIUM  NUMBER: 6 TEST: C&S (URINE CULTURE)\*NE,IC  UI TEST CODE: UCS DOWNLOAD TO INSTRUMENT: YES  ACCESSION AREA: IBACTERIOLOGY  FILE BUILD ENTRY: EN FILE BUILD ROUTINE: LA7UID  AUTO DOWNLOAD: YES AUTO RELEASE: NO  **Load/Worklist: IMB**  NUMBER: 247 NAME: IMB  LOAD TRANSFORM: UNIVERSAL TYPE: SEQUENCE/BATCH  CUPS PER TRAY: 0 FULL TRAY'S ONLY: NO  EXPAND PANELS ON PRINT: NO INCLUDE UNCOLLECTED ACCESSIONS: NO  USER ACCESS AUTHORIZATION: LRVERIFY  PROFILE: IMB ACCESSION AREA: IBACTERIOLOGY  UID VERIFICATION: ANY ACCESSION AREA STORE DUPLICATE COMMENTS: YES  DEFAULT REFERENCE LABORATORY: IOWA CITY HCS  AUTO RELEASE: NO  TEST: BLOOD CULTURE (AEROBE,ANAEROBE) BUILD NAME ONLY: NO  TEST: C&S (AEROBIC) + GRAM STAIN BUILD NAME ONLY: NO  TEST: GRAM STAIN BUILD NAME ONLY: NO  TEST: C&S (AEROBIC CULTURE/SUSCEPT) BUILD NAME ONLY: NO  TEST: ANAEROBIC CULTURE BUILD NAME ONLY: NO  TEST: C&S (URINE CULTURE)\*NE,IC BUILD NAME ONLY: NO  WKLD METHOD: MANUAL MICRO WKLD CODE METHOD NAME: MANUAL MICRO  WKLD CODE SUFFIX: .7000 MAJOR ACCESSION AREA: IBACTERIOLOGY  LAB SUBSECTION: IBACTERIOLOGY  **Load/Worklist: IBC (a second one used for MYLA)**  NUMBER: 390 NAME: IBC  LOAD TRANSFORM: UNIVERSAL TYPE: SEQUENCE/BATCH  CUPS PER TRAY: 0 FULL TRAY'S ONLY: NO  EXPAND PANELS ON PRINT: NO INCLUDE UNCOLLECTED ACCESSIONS: NO  USER ACCESS AUTHORIZATION: LRVERIFY  PROFILE: IBC ACCESSION AREA: IBLOOD CULTURE  UID VERIFICATION: ANY ACCESSION AREA STORE DUPLICATE COMMENTS: YES  DEFAULT REFERENCE LABORATORY: IOWA CITY HCS  AUTO RELEASE: NO  TEST: BLOOD CULTURE (AEROBE,ANAEROBE) BUILD NAME ONLY: NO  TEST: FUNGAL BLOOD CULTURE\*NE,IC BUILD NAME ONLY: NO  TEST: AFB CULTURE & SMEAR BUILD NAME ONLY: NO  WKLD METHOD: MANUAL MICRO WKLD CODE METHOD NAME: MANUAL MICRO  WKLD CODE SUFFIX: .7000 MAJOR ACCESSION AREA: IBLOOD CULTU |

# Appendix B: Captured Install

The following is an example of a captured install with LA\*5.2\*90 installed first followed by LR\*5.2\*474 as part of the installation process for the Lab Micro Interface Release 1.0 build.

Figure 2: Captured Installation

|  |
| --- |
| Select Installation <TEST ACCOUNT> Option: install Package(s)  Select INSTALL NAME: la\*5.2\*90      12/20/16@15:20:44       => LAB MICRO INTERFACE RELEASE 1.0  ;Created on Dec 20, 2016@11:55:47  This Distribution was loaded on Dec 20, 2016@15:20:44 with header of     LAB MICRO INTERFACE RELEASE 1.0  ;Created on Dec 20, 2016@11:55:47     It consisted of the following Install(s):        LA\*5.2\*90     LR\*5.2\*474  Checking Install for Package LA\*5.2\*90  Will first run the Environment Check Routine, LA90A                          --- Environment Check is Ok ---  Install Questions for LA\*5.2\*90  Incoming Files:     62.4      AUTO INSTRUMENT  Note:  You already have the 'AUTO INSTRUMENT' File.  Checking Install for Package LR\*5.2\*474  Install Questions for LR\*5.2\*474  Want KIDS to INHIBIT LOGONs during the install? NO//  Want to DISABLE Scheduled Options, Menu Options, and Protocols? NO//  Enter the Device you want to print the Install messages.  You can queue the install by enter a 'Q' at the device prompt.  Enter a '^' to abort the install.  DEVICE: HOME//   HOME(CRT)                                    LR\*5.2\*474  ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,   Installing PACKAGE COMPONENTS:     Installing PARAMETER DEFINITION   Installing PARAMETER TEMPLATE                 Dec 20, 2016@15:21:18   Updating Routine file...   Updating KIDS files...   LR\*5.2\*474 Installed.                 Dec 20, 2016@15:21:18   Not a production UCI   NO Install Message sent  ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,            R,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,T    100%    .             25             50             75               .  Complete  F,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,G  Install Completed |