HLA SQL Server Test Plan.docx

Created: 1/26/2013

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# Introduction

The software called “HLA Oracle” is a client-server database system used by the HLA Lab in Dedham to accession samples and record and report HLA types. The HLA lab has used it since 2003, and since that time it has used an Oracle v 8i database, and it runs on an old Windows NT server. NT Server and Oracle 8i have long been de-supported. To upgrade this server and the Oracle version would be very expensive. Instead, the lab has agreed to pursue a conversion of the software to run in SQL Server, and to add this SQL Server database to the HLA6 server that is already running another SQL Server database for the Fusion product. With this conversion, the lab will have one supported database server, running under a supported Windows Server operating system, and one integrated backup that can be monitored by VPN. The rest of this document will call the new software version “HLA SQL Server”.

# Progress so far

At this time, 1/26/2013, Chip has converted the software on his own computer and done some testing. Gil and Chip have created a database named hla\_test on the HLA4 server. Chip has converted data to hla\_test from the Oracle production data, and has created a run-time application on Sharon’s computer and run the application at Dedham. The system is now ready for a wider validation by the HLA staff. The rest of this document describes the testing and validation that remains.

# Test environment

The test environment needs, of course, a separate test database and a separate software version. The database hla\_test is on HLA4. The software version, HLA SQL Server version 5.0, is in folder c:\hlasqlserver\ on client machines. The software also reads and writes lots of files, and we need places to test this that do not collide with any production area. So, these folders are being set up:

|  |  |
| --- | --- |
| Description of the folder | Location of this folder |
| HLA Search results HTML | R:\hlasqlserver\export\ |
| For Reader log and error log | R:\hlasqlserver\log |
| Exports to NMDP (tab, hml, proj22, txt) | R:\hlasqlserver\mci\ |
| Panel data | R:\hlasqlserver\panel\data\ |
| Panel footers | R:\hlasqlserver\panel\footer\ |
| Panel templates | R:\hlasqlserver\panel\template\ |
| Dynal Sbt Directory for Dynal imports | R:\hlasqlserver\Reader\DynalSBT\ |
| Luminex HML imports | R:\hlasqlserver\Reader\HML\ |
| Luminex LBSW imports | R:\hlasqlserver\Reader\LuminexLBSW\ |

# Preparation for the test

Before you start any testing, make sure you do these steps:

1. Review the list of test scenarios, and identify anything that is left out. Add any needed item to this list.
2. Decide how you will document your validation. Your HLA lab has a lot of experience with this, so this is just a friendly reminder. If you need help finding a particular input or output that you want to include in this documentation, please phone Chip
3. Look at the ‘Map of directories” in the next section, and make sure it is clear to you, and that you will know where to put import files and know where to find export files.
4. Explain to all HLA staff that you will be doing this testing, and explain how to identify reports and any other printout that comes from the testing, so that there is no confusion.
5. Gather the files you will need for import (Reader) testing, and any files you plan to use for Oracle to SQL Server comparisons. Use a mix of files and cases, for example: Luminex files for all locus values; patient and donor login and result entry.
6. Define any new templates or code tables you will need. We will start with recent data copied from Production, but as the testing goes on, dictionaries in test will not be up to date.
7. Plan the test steps so that you can perform things efficiently, in sequence, following the way you do day to day work. For example, import readings and then do result entry; import packing lists and then log them in.
8. PLEASE NOTE: A software failure can be just that ‘Step X is not done’. The system will not always display an error message. Carefully check all outputs. For example, after result entry, run a patient/donor inquiry.

# Map of the directories for imports and exports

R:\HlaSqlServer \log

to test this that do not collide with any production area. So, these folders are being set up:

|  |  |
| --- | --- |
| Description of the folder | Location of this folder |
| For Reader log and error log | R:\hlasqlserver\log |
| Dynal Sbt Directory for Dynal imports | R:\hlasqlserver\Reader\DynalSBT\ |
| Luminex HML imports | R:\hlasqlserver\Reader\HML\ |
| Luminex LBSW imports | R:\hlasqlserver\Reader\LuminexLBSW\ |
| Panel templates | R:\hlasqlserver\panel\template\ |
| Panel data | R:\hlasqlserver\panel\data\ |
| Panel footers | R:\hlasqlserver\panel\footer\ |
| Exports to NMDP (tab, hml, proj22, txt) | R:\hlasqlserver\mci\ |
| HLA Search results HTML | R:\hlasqlserver\export\ |

# List of Workflows

1. Code table updates
2. Define a new antigen, edit an antigen
3. Define a new login template
4. HML import of Luminex readings
5. LBSW import of readings
6. uType import of readings (XMLS files)
7. Import NMDP packing list
8. Import NMDP Expected typings
9. Print Donor Info Sheets
10. Import Cryolife samples
11. Import Enterolab samples
12. Import Hong Kong samples
13. Login single specimen
14. Login NNMDP packing list
15. Login supplier samples
16. Edit patient/specimen
17. Result Entry
18. Print final reports – single
19. Patient Reports – data entry
20. Print batch reports, final and patient
21. NMDP Export: Text, HML, PROJ22
22. Create worksheets, add specimens to worksheets
23. Create Panels, export to file
24. Inventory
25. Box Entry
26. Define Panel template
27. Canned Comments
28. HLA search, including Save to File
29. Donor Inquiry
30. Security Window