Unified Terminology Governance (UTG) Alpha Test Report
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## REVISION HISTORY

<table>
<thead>
<tr>
<th>Version Number</th>
<th>Date of Issue</th>
<th>Author(s)</th>
<th>Brief Description of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Version 1.0</td>
<td>August 29, 2019</td>
<td>Jessica Snell</td>
<td>Initial document for review and approval</td>
</tr>
</tbody>
</table>
INTRODUCTION

The purpose of the test report is to communicate the test approach and test results from the Unified Terminology Governance (UTG) Alpha Test. It includes objectives, scope, approach, assumptions, risks, results and recommendations.

Objectives

The UTG project relies on several web-based tools in addition to a locally installed tool suite. The test team was responsible for testing all tools required for the UTG project. The two main areas that were tested are as follows:

1. Proposal Submission Workflow
2. Proposal Review Workflow

The primary objective of testing was to ensure that the project meets the needs of the HL7 community and will be acceptable to replace the current harmonization process. This includes ensuring that all use cases and requirements are met and that there is general usability. To do so, the HL7 community was engaged to participate in the testing. In particular, individuals who submitted harmonization proposals for the July harmonization cycle were asked to participate. However, any user with a basic knowledge of HL7 vocabularies should be able use the tooling with the provided documentation to accomplish submitting a proposal.

The secondary objective was to identify all issues associated with UTG tooling and processes. This included review of documentation for correctness and completeness. All issues were documented and will be prioritized and fixed based on the severity of the issue.

OVERVIEW

There are two main tester roles. The first role is the ‘submitter’. Submission of a harmonization proposal requires the ‘submitter’ to install additional tooling required to create the content for the proposal. The second role is the ‘reviewer’. This role does not require installation of any tooling on their machines.

The UTG Alpha Test followed a functional testing approach in which each use case was tested. It also included integration testing, as multiple modules must be tested to ensure that the system works as a whole.

Each test case was documented in the UTG test scripts and distributed to the testers. Each test script was marked as Pass, Fail, or Pass/Fail by the tester. The UTG test script format also provided an area to document failures, opportunities for improvement, etc. All failures or recommendations gathered during testing are in the Test Results or Recommendations sections below.
Testing Requirements
Testing of the UTG process required utilization of HL7-hosted servers as well as tooling installed on the proposal submitter’s machine. Those requirements are listed below.

Server Requirements:
1. JIRA Development environment configured for UTG project (https://jiradev.hl7.org/projects/UP/issues)
3. GitHub Repository (official repository) (https://github.com/HL7/UTG/)
4. IG Publisher for rendering of UTG content (https://build.fhir.org/ig/HL7/UTG/)
5. UTG Confluence Page for project information and documentation (https://confluence.hl7.org/display/VOC/Unified+Terminology+Governance+Project+%28UTG%29+Page)

User Requirements:
1. PC or Mac with Internet access
2. SourceTree application v3.1.3
3. Vocab Server application v0.0.6
4. FHIR Toolkit application v0.0.56

Phase 1 – Proposal Submission Testing
Phase 1 of testing was isolated to the process of submitting harmonization proposals. This process included creation of a proposal ticket in JIRA, creating/cloning a branch in BitBucket, modeling content for the proposal, and submitting the proposal for consensus review.

Schedule: July 29, 2019 to August 9, 2019

Testers:
1. Riki Merrick
2. Sheila Abner
3. Kathleen Connor

Phase 2 – Proposal Review Testing
Phase 2 of testing was isolated to the process of voting on harmonization proposals. This process included reviewing proposal content, voting, commenting, and determining if the correct workflow path (i.e. approved, controversial, rejected) was taken based on votes cast.

Schedule: August 19, 2019 to August 27, 2019

Testers:
1. Ted Klein
2. Jess Bota
3. Dave Hamill
4. Rob Hausam
5. Bryn Evans
6. Sandy Stuart
7. Brian Pech
8. Craig Newman
9. Scott Robertson
10. Alex DeLeón
11. Joel Francis
12. Michael Stevens

SCOPE

Testing was limited to functionality related to UTG proposal submission and review. Many of the tools utilized for UTG have additional functionality that was out of scope for testing. For example, the UTG Editor was repurposed for this project and includes additional functionality not required to model content for a UTG proposal. That functionality was out of scope for testing.

ASSUMPTIONS AND RISKS

The following sections list the assumptions and risks identified for the UTG Alpha Test.

Assumptions
1. Testers will have a basic knowledge of their computer and be able to download and install applications
2. The testing will be completed in the specified time
3. Testers have access to the internet

Risks
1. Functionality requests can impact timelines
2. Testers are almost entirely volunteer

TEST INCIDENTS

All test incidents noted during the UTG Alpha Test are categorized below. Incidents are separated by workflow; Submitter or Reviewer. Additionally, incidents are categorized by their resolution. Incidents can be related to tooling or documentation.

Resolved Test Incidents (Submitters)
The table below lists all incidents reported by the Submitter group that have been resolved.

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Severity</th>
<th>Additional Comments</th>
<th>Reporter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing step for installing tooling on Windows 10</td>
<td>Low</td>
<td>Step added in documentation to ‘allow access to hard drive’ for Windows 10 users.</td>
<td>Riki</td>
</tr>
</tbody>
</table>
Add documentation step for naming branch

Unable to install Sourcetree

Resolved Test Incidents (Reviewers)
The table below lists all incidents reported by the Reviewer group that have been resolved.

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Severity</th>
<th>Additional Comments</th>
<th>Reporter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voting multiple times is allowed</td>
<td>Critical</td>
<td>This was introduced by an update to a Jira plugin and has been resolved.</td>
<td>Jess</td>
</tr>
<tr>
<td>Notifications being received even though user not a submitter or watcher</td>
<td>Medium</td>
<td>This has been modified so only submitters and watchers receive notifications.</td>
<td>Carol</td>
</tr>
<tr>
<td>No documentation on how to view voting and other requirements</td>
<td>Medium</td>
<td>Documentation added to 'Consensus Review and Voting' section.</td>
<td>Jess</td>
</tr>
</tbody>
</table>

Unresolved Test Incidents (Submitters)
The table below lists all incidents reported by the Submitter group that have not yet been resolved. Unresolved incidents are documented, reviewed by the technical lead, and added as tasks to the project plan. HL7 management will be notified of any incidents that significantly affect project timelines.

All incidents related to the UTG Editor have been sent to Grahame Grieve so that they can be addressed prior to the Atlanta Working Group Meeting.

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Severity</th>
<th>Additional Comments</th>
<th>Reporter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Switching between JIRA and Confluence logs user out</td>
<td>Low</td>
<td>This is problematic because the documentation currently lives on Confluence and user must also use JIRA for proposal submission.</td>
<td>Riki, Jess</td>
</tr>
<tr>
<td>Screenshots are fuzzy on Confluence</td>
<td>Low</td>
<td>Screenshots are readable but, in many cases, fuzzy.</td>
<td>Riki</td>
</tr>
<tr>
<td>Confluence links causing issues following migration</td>
<td>Medium</td>
<td>Sometimes the Confluence pages reference a port number, and this can cause issues loading the page.</td>
<td>Sheila, Jess</td>
</tr>
<tr>
<td>Issue Description</td>
<td>Severity</td>
<td>Additional Comments</td>
<td>Reporter(s)</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------</td>
<td>----------</td>
<td>------------------------------------------------------------------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>Date field in UTG Editor incorrect</td>
<td>Low</td>
<td>The date field in the UTG Editor is automatically set to a date in 2017. The Toolkit itself also has a date (as shown in the Applications folder on Mac) of 2017 even though it has been released in 2019.</td>
<td>Sheila</td>
</tr>
<tr>
<td>Date of proposal creation incorrect in Jira</td>
<td>Medium</td>
<td>The Created date in Jira is incorrect in some cases.</td>
<td>Sheila</td>
</tr>
<tr>
<td>Additional documentation needed to explain how to complete each field in UTG Editor and what is required</td>
<td>Medium</td>
<td>There is some documentation on this for v3, but this needs to be available for all product families.</td>
<td>Sheila</td>
</tr>
<tr>
<td>Clicking 'Update from Concepts' brings up incorrect pop-up screen in UTG Editor</td>
<td>Medium</td>
<td>The 'Update from Concepts' button brings up an incorrect pop-up box and does not update the count from the concepts in the Code System.</td>
<td>Riki</td>
</tr>
<tr>
<td>Error when selecting Filter in UTG Editor</td>
<td>Medium</td>
<td>Error indicated index is out of bounds.</td>
<td>Riki</td>
</tr>
<tr>
<td>Error when adding Contributor in HL7 Process of UTG Editor</td>
<td>Medium</td>
<td>Error received about resolving entry to a date.</td>
<td>Riki</td>
</tr>
<tr>
<td>Editorial History section should be removed for concepts in UTG Editor</td>
<td>Low</td>
<td>Policy decision was made that Editorial History will not be maintained on concepts.</td>
<td>Ted</td>
</tr>
<tr>
<td>R4 version of UTG Editor throws package errors</td>
<td>Medium</td>
<td>Errors about missing packages are thrown upon opening the Editor. Attempts to download correct packages are unsuccessful.</td>
<td>Jess</td>
</tr>
</tbody>
</table>

**Unresolved Test Incidents (Reviewers)**

The table below lists all incidents reported by the Reviewer group that have not yet been resolved. Unresolved incidents are documented, reviewed by the technical lead, and added ask tasks to the project plan. HL7 management will be notified of any incidents that significantly affect project timelines.

<table>
<thead>
<tr>
<th>Issue Description</th>
<th>Severity</th>
<th>Additional Comments</th>
<th>Reporter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add information on how users voted</td>
<td>High</td>
<td>Users cannot currently determine how they or others voted on the proposal.</td>
<td>Alex</td>
</tr>
<tr>
<td>Unable to abandon a proposal</td>
<td>Medium</td>
<td>An option to abandon a proposal in Consensus Review should be available.</td>
<td>Jess</td>
</tr>
</tbody>
</table>
RECOMMENDATIONS

All recommendations noted during the UTG Alpha Test are categorized below based on workflow. Recommendations are documented, reviewed by the technical lead, and added as tasks to the project plan if deemed necessary for the project to succeed. Other recommendations are noted for possible implementation at a later date. HL7 management will be notified of any recommendations that would significantly affect project timelines.

Submitter Recommendations
The table below lists all recommendations reported by the Submitter group.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Additional Comments</th>
<th>Reporter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sponsored group should be dropdown containing groups</td>
<td>This may or may not be possible because a proposal allows you to select more than one option.</td>
<td>Riki</td>
</tr>
<tr>
<td>Automatically make assignee the submitter</td>
<td>Assignee can be confusing, and anyone can change it. It might be better to restrict the assignee to be the Submitter and have the Admin as the only user to be able to change it.</td>
<td>Jess</td>
</tr>
<tr>
<td>Allow links from documentation to open in new tab</td>
<td>When downloading tooling from the Confluence documentation, the pages are not opened in new tabs. It would be nice to have those pages open in new tabs.</td>
<td>Riki</td>
</tr>
</tbody>
</table>

Reviewer Recommendations
The table below lists all recommendations reported by the Submitter group.

<table>
<thead>
<tr>
<th>Recommendation</th>
<th>Additional Comments</th>
<th>Reporter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allow replying to comment on Jira</td>
<td>Currently, the comments are all in a flat list. If there are multiple comments, it can be difficult to organize your thoughts. One approach could be to utilize threads to organize comments.</td>
<td>Scott</td>
</tr>
<tr>
<td>Add ability to ‘react’ to comments</td>
<td>Request is similar to Microsoft features such as ‘thumbs up’ to acknowledge comment has been seen.</td>
<td>Scott</td>
</tr>
<tr>
<td>Allow user to re-cast a vote</td>
<td>If a user accidentally clicks the wrong button, they are not able to pull back the vote and vote again.</td>
<td>Rob</td>
</tr>
</tbody>
</table>
**TESTING SUMMARY**

The UTG Alpha Testing focused on the submission of HL7 harmonization proposals and voting on those proposals by reviewers. Two separate groups were engaged to complete the testing. Testers used standardized test scripts to go through each test case and document failures and recommendations. All incidents and recommendations were documented above.

Critical issues that were identified during testing were addressed quickly to ensure minimal impact on the testing timelines.

Many issues have already been reviewed and added to the project plan to be addressed. All UTG Editor issues have been reported to Grahame Grieve.

**Next Steps**

All unresolved incidents and recommendations are being reviewed and prioritized by the UTG team. Each item is being investigated for feasibility and level of effort. The items will then be incorporated into the project plan and be addressed in a future development cycle based on priority. Any item that could have a significant impact on project timelines will go through HL7 prior to being approved for implementation.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Suggestion</th>
<th>Author</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficulty returning to JIRA following looking at branch in BitBucket</td>
<td>It would be helpful if opening the branch information in BitBucket opened in a new tab.</td>
<td>Joel</td>
</tr>
<tr>
<td>Add information for voting on what requirements have not been met</td>
<td>Currently it only shows requirements that have been met. It could also list requirements not met for clarity.</td>
<td>Jess</td>
</tr>
</tbody>
</table>