RuntimeTerror

Test plan

Version <1.0>

04/16/2020

Document Control

Approval

The Guidance Team and the customer shall approve this document.

Document Change Control

|  |  |
| --- | --- |
| Initial Release: | 1.0 |
| Current Release: |  |
| Indicator of Last Page in Document: | $$$ |
| Date of Last Review: | 04/16/2020 |
| Date of Next Review: | 04/17/2020 |
| Target Date for Next Update: | 04/20/2020 |

Distribution List

This following list of people shall receive a copy of this document every time a new version of this document becomes available:

Guidance Team Members: Dr. Steven Roach

Jake Lasely

Customer: Mr.Baltazar Santella

Ms.Herandy Vasquez

Mr.Vincent Fonseca

Ms. Florencia Larsen

Mr. Eric de Nava

Software Team Members: Gilbert Alvarez

Jose Gallardo

Itzel Rivas

Eder Rodriguez

Nusrat Sarmin

Change Summary

The following table details changes made between versions of this document

|  |  |  |  |
| --- | --- | --- | --- |
| Version | Date | Modifier | Description |
| 1.0 | 04/10/2020 | Jose Gallardo | Created document |
| 1.1 | 04/10/2020 | Jose Gallardo | Added Purpose |
| 1.2 | 04/12/2020 | Itzel Rivas | Added Document Overview |
| 1.3 | 04/12/2020 | Eder Rodriguez | Added System Overview and Scope |
| 1.4 | 04/13/2020 | Gilbert Alvarez | Added Suspension and Exit Criteria |
| 1.5 | 04/14/2020 | Jose Gallardo | Added Section 2 |
| 1.6 | 04/16/2020 | Jose Gallardo  Eder Rodriguez  Itzel Rivas  Gilbert Alvarez | Added Section 3  Added Section 4, 4.1 (TEST XX)  Added Section 5 |

Note: The template presented in this document was taken from:

Donaldson, S., and S. Siegel, *Successful Software Development*. Upper Saddle River, NJ: Prentice Hall, 2001, pp. 321-323.

Note: The template presented in this document was taken from: Donaldson, S., and S. Siegel, *Successful Software Development*. Upper Saddle River, NJ: Prentice Hall, 2001, pp. 321-323 and modified by Humberto Mendoza and Steve Roach.

Supplementary information is from:

Pfleeger, S. *Software Engineering, Theory and Practice*. Upper Saddle River, NJ: Prentice Hall, 1998, p. 365.

Table of Contents

[Document Control ii](#_Toc37959674)

[Approval ii](#_Toc37959675)

[Document Change Control ii](#_Toc37959676)

[Distribution List ii](#_Toc37959677)

[Change Summary ii](#_Toc37959678)

[1. Introduction 1](#_Toc37959679)

[1.1. Purpose 1](#_Toc37959680)

[1.2. Scope 1](#_Toc37959681)

[1.3. System Overview 1](#_Toc37959682)

[1.4. Suspension and Exit Criteria 1](#_Toc37959683)

[1.5. Document Overview 1](#_Toc37959684)

[1.6. References 2](#_Toc37959685)

[2. Test Items and Features 3](#_Toc37959686)

[3. Testing Approach 4](#_Toc37959687)

[4. Test XX 5](#_Toc37959688)

[3.1. Test PS TEST1 5](#_Toc37959689)

[4. User Interface Testing 6](#_Toc37959690)

[5. Test Schedule 8](#_Toc37959691)

[6. Other Sections 9](#_Toc37959692)

[7. Appendix 10](#_Toc37959693)

# Introduction

## Purpose

The purpose of a project test plan is to provide an overall structure to the development and test effort. This type of test plan will provide the overall strategy for testing the PMR Insight Collective Knowledge (PICK) system. Below you will find the components that will be tested, how they will be tested, and when they plan to be tested.

## Scope

<<Specify the project software releases/versions encompassed by the plan. >>

This test plan will focus on the latest released version (v. 7.0) of the PICK System.

## System Overview

<<Describe the system to be exercised by the testing approach specified in the plan. This overview serves to identify aspects of the system operation that will be the focus of the plan’s testing approach. This should align with the systems overview of other documents in the project.>>

The system that will be tested is the PICK system and its interfacing with the third-party system Splunk.

## Suspension and Exit Criteria

<< “suspension criteria” describes when we suspend testing, to be resumed at a later time. For example, if 40% of the test cases fail, or if any of the critical test cases fail. If there are no suspension criteria, indicate that all tests cases will be executed. “Exit criteria” indicates when testing stops. This could be based on run rate (number of test cases run divided by number of test cases specified) or pass rate (number of test cases passed divided by number of test cases run, or test cases passed divided by number of test cases specified). Nominally, we expect to run all of the specified tests. We want the pass rate to be high. We might specify that all critical tests must pass, and 90% of the non-critical must pass. In general, we want this to be high. >>

Suspension of all testing will take place if fail rate of the total test cases that has occurred reaches 40%. This indicates that the number of defects prevents further testing on the system. Testing will terminate once there is a pass rate of 90%.

## Document Overview

The Document is divided into 8 main sections which are Introduction, Test Items and Features, Testing approach, Test, User Interface Testing, Test Schedule, Other Sections and Appendix. In the Introduction Section is divided into 6 subsections that will give an overview of the document. The second section is Test Items and Features which describes the test items like the components, classes, functions between others in a table format. The third section is Testing approach on which we will describe the approach that is being used by the system and specifying the types of tests performed. The fourth section is to add the test cases, in which it will document the test input, specific test procedures and outcomes. It will stablish the test methods and explain the nature and extent of each test. The next section is User Interface Testing and focuses on the interaction between the user and the system. The 6th section, Test Schedule talks about the testing activities, here we will add a table with the order and completion dates of the tests. The next section, Other Components in which we will add other sections that may appear in the test plan. The last section is the Appendix will contain the extra information we used in the document.

## References

<<List all the references applicable to the test plan. Generally, this includes project standards, SRS, SDD, and a product assurance plan.>>

# Test Items and Features

|  |  |
| --- | --- |
| Features | Being Tested |
| Splunk | Connecting to Splunk |
| Ingestion | Uploading log files to Splunk |
| Ingestion | Results returned by Splunk |
| Ingestion | Parsing results of Splunk to Log Entry objects |
| Cleansing | Correct lines removed |
| Graph | Adding of nodes |
| Graph | Adding of edges |

# Testing Approach

Table 1: Test Plan

|  |  |  |
| --- | --- | --- |
| **TEST SUITE <Splunk>** | | |
| **Description of Test Suite** | **This test suit will focus on testing the interaction of the PICK system and the Splunk system** | |
| **Test Case Identifier** | **Objective** | **Criticality** |
| PS TEST1 | Connect to Splunk | Critical |
| PS TEST2 | Ingest Log Files | Critical |
| PS TEST3 | Return Indexed Log Entries | Critical |

# Test XX

<<The purpose of this section is to:

* document test input, specific test procedures, and outcomes.
* establish test methods,
* explain the nature and extent of each test >>

<< for each test case, complete the following: >>

## Test PS TEST1

**Objective: <**< Define the objective of Test XX.Y. >> To test the process of connecting Splunk to the system

**Notes:** <<This area provides general notes concerning the test procedure. Such notes might include comments on how to execute the test procedure, an estimate of the test duration, the requirements of the procedure tests, or a statement of resources needed for this test.>>

A Splunk config file exist that the user has to place their credentials into the appropriate fields to connect to Splunk.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test No.: PS TEST 1 | | | | Current Status: Passed | | |
| Test title: Connect to Splunk | | | | | | |
| Testing approach: <<Included in this section is a description of test harnesses, testing frameworks, environmental requirements, test tools and test automation that will be employed to achieve testing. Include naming conventions for tests and test scripts if appropriate. Provide requirements traceability and test priority.  >>  This test will be conducted using the 8.0 version of Splunk installed on a Linux machine. Behavior of the is observed on the monitor of the machine being used. | | | | | | |
| STEP  1 | OPERATOR ACTION  Provide Splunk Admin credentials in Splunk Config file. | PURPOSE  Initial Condition | | | EXEPCTED RESULTS  User information is stored and ready to be used when called upon | COMMENTS |
| STEP  2 | Describe the actions taken by the person executing the test procedure. Include the test suite, or the name of the test file (in this case, the contents of the file should be given in the appendix).  Enter configuration information | Provide directory path for Splunk ingestion | | | Directory is stored |  |
| STEP  3 | Press button “Start new project” | Begins connection to Splunk | | | Splunk connection successful |  |
| Concluding Remarks: | | | | | | |
| Testing Team:  << List members of testing team and lead >>  Lead: Eder Rodriguez  Jose Gallardo  Itzel Rivas  Gilbert Alvarez | | | Date Completed:  4/15/2020 | | | |

# User Interface Testing

<<This section focuses on the interaction between the user and the system. For testing the user interface, consider the following traits:

* Consistent terminology, shortcut keys, menu selections, and presentation
* Correct language, spelling, and grammar.
* Flexibility in navigation between windows and interface elements.
* Error handling that will inform user of critical operations.
* Follows standards and guidelines such as placement of scroll bars, windows, and menu items.

This section could be integrated into Section 4.

>>

# Test Schedule

<< Specify the schedule for testing activities. A table with the order and completion dates of the tests is useful. The table below might be useful.>>

|  |  |  |
| --- | --- | --- |
| **Task and date** | **People** | **Description** |
| Splunk: 04/15 | Eder Rodriguez, Itzel Rivas, Jose Gallardo, Gilbert Alvarez | Testing the connection |
| Ingestion: 04/18 | Eder Rodriguez, Gilbert Alvarez | Testing uploading of files to Splunk and parsing the results into Log Entries. |
| Cleansing: 04/18 | Jose Gallardo, Itzel Rivas | Testing the cleansing process to remove unwanted lines in the log file |
| Graph: 04/20 | Eder Rodriguez, Jose Gallardo, Itzel Rivas | Testing the creation of nodes. |
| Graph: 04/20 | Eder Rodriguez, Jose Gallardo, Gilbert Alvarez | Testing the creation of edges |

# Other Sections

<< Other sections that may appear in a test plan (but not required for this course) are:

* Test Management Requirements: how testing is to be managed; a delineation of responsibilities of each project organization involved with testing
* Staffing and training needs: delineate the responsibilities of those individuals who are to perform the testing, level of skill required, and training to be provided
* Environmental Requirements: describe the hardware (including communication and network equipment) needed to support testing; describe configuration of hardware components on which software and database to be tested are to operate.
* Software Requirements: describe the software needed to support testing; include the software code and databases that are object of the testing. Also include software tools such as compilers, CASE instruments and simulators that are needed to model the user’s operational environment.
* Risk and contingencies
* Cost: include an estimate of costs.
* Approvals
* Test Deliverables

>>

# Appendix

<< possibly more readable to put the expected output here and refer to it in the previous sections. Might also provide explicit directions for analysis of output, if it’s easier to read as an appendix or if analysis is post execution. >>