Business Requirements Specification

Pipeline Bootstrap

Contents

[1 Introduction 3](#_Toc8918237)

[1.1 Business Problem/Opportunity 3](#_Toc8918238)

[1.2 Problem/Opportunity Scope 3](#_Toc8918239)

[1.3 Definitions, Acronyms and Abbreviations 3](#_Toc8918240)

[1.4 Document References 3](#_Toc8918241)

[1.5 Change Overview 3](#_Toc8918242)

[2 General Description 4](#_Toc8918243)

[2.1 Description of the current business process 4](#_Toc8918244)

[2.2 Business Objectives 4](#_Toc8918245)

[2.3 Change Perspective 4](#_Toc8918246)

[2.4 Overview of Change Properties 4](#_Toc8918247)

[2.5 User Characteristics 4](#_Toc8918248)

[2.6 Operational Environment 5](#_Toc8918249)

[3 Project Management Requirements 6](#_Toc8918250)

[3.1 Work Breakdown Structure 6](#_Toc8918251)

[3.2 Work Packages 7](#_Toc8918252)

[3.3 Constraints 8](#_Toc8918253)

[4 Implementation Requirements 9](#_Toc8918254)

[4.1 Training Requirements 9](#_Toc8918255)

[4.2 Documentation 9](#_Toc8918256)

[4.3 Support Requirements 9](#_Toc8918257)

[4.4 Delivery Requirements 9](#_Toc8918258)

# Introduction

## Business Problem/Opportunity

HA is currently setting-up and configuring software development pipelines across multiple systems manually. This limits our ability to efficiently create a set of consistently configured digital workspaces to allow end users to commence project work.

Administrators need to be able to efficiently create software development pipelines to be able to service end-user requests, and this process needs to be done in a consistent manner to allow for reliable use of the platform by the Department.

## Problem/Opportunity Scope

The problem relates to the process of creating software development pipelines within HA. Current configurations are undertaken manually by the current team with information submitted by end users. It does not include configuration of non-software development projects on the Department’s digital workspace. It also does not include management of/changes to existing software development project pipelines. Additionally, it does not include the creation of a self-service option which would remove involvement of the Border Tech team.

## Definitions, Acronyms and Abbreviations

|  |  |
| --- | --- |
| Term | Definition |
| BABOK | Business Analysis Body of Knowledge – Document published by the International Institute of Business Analysis which describes current best practice approaches to business analysis |
| HA | Home Affairs |
| CI/CD | Continuous Integration / Continuous Deployment |
| API | Application Programming Interface |

## Document References

|  |  |  |
| --- | --- | --- |
| Reference No. | Document Title | Version |
| N/A | Preliminary Major Project Brief | 2 |

## Change Overview

This change will ensure that administrators undertaking setup and configuration of software development pipelines will be able to create artefacts across multiple systems using a single interface. It will also improve consistency of creating online artefacts according to pre-configured templates and will improve the efficiency of creating software development pipelines.

# General Description

## Description of the current business process

Current Process:

* End-user submits request for each artefact of software development pipeline via online form (using Jira issue collector form interface).
* Issue is created in HA Jira instance with information populated by end-user and assigned to an administrator.
* The administrator reviews information submitted for errors/missing information and contacts end-user if necessary.
* Upon receipt of complete information, the administrator creates artefact in each system according to requirements.
* Process repeated by an administrator for each system/artefact as per user requirements.
* Aadministrator notifies end-user upon completion of software development pipeline artefacts.
* End-user reviews configured pipeline and notifies administrator of any errors/issues with configuration.
* Administrator marks Jira issue as resolved.

Proposed process changes:

Current administrators will no longer be creating artefacts across multiple different systems manually. Instead, they will enter information provided by the end-user into a single interface to provision the requisite artefacts across each of the systems. The reason for this change is to streamline the manual data-entry of servicing an end-user request and to allow for a standard set of templates to be used across all HA pipeline artefacts.

## Business Objectives

Successful completion of this project will streamline the HA pipeline by removing the need for administrators to create each artefact individually via an automated mechanism.

## Change Perspective

The change will replace an existing business process undertaken by the current team. The replaced process is the manual creation of pipeline artefacts across multiple CI/CD systems.

Successful completion of this change lays the groundwork, to augment the workflow such that end-users can create their own pipeline artefacts. This would have the effect of removing the business process entirely from the current team.

## Overview of Change Properties

Priority One – Provide a streamlined configuration process for the team.

Priority Two – Ensure all automated testing and user guides meet the required standard.

## User Characteristics

The identified user groups are: (1) current administrators, (2) Project technical managers, (3) Project teams (4) Project customers. (5) Visa and Citizenship delivery section

No users will not require any additional equipment. User group 1 will be provided with thorough user guide documentation.

When complete user group 1 will follow the streamlined process to create artefacts as indicated by the end user through the existing request system.

User groups 2-5 will not notice any change in services.

## Operational Environment

The business process relies upon the existence and utilisation of a predetermined set of CI/CD pipeline tools. These tools are:

* Atlassian Confluence Server
* Atlassian Jira Server
* Atlassian Bitbucket Server
* Jenkins

Integration with these tools via APIs will be developed to underpin the single interface. By consuming system APIs of these tools, the proposed custom development is critically dependent upon them. Removal of these tools will remove the functionality of the interface. Similarly, changes in these tools (e.g. functionality changes within the tool APIs) could require future software changes for the proposed custom development tool.

# Project Management Requirements

## Work Breakdown Structure

## Work Packages

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 1. Project management | 2.Requirement Gathering | 3. Analysis and Design | 4. Software Development | 5. Testing |
| 1.1 Scope | 2.1 Identifying requirement | 3.1 High Level design | 4.1 Research and code | 5.1 Test cases |
| 1.1.1 Plan | 2.2 Functional requirement | 3.1.1 UML diagrams (use cases) | 4.1.1 Module definition | 5.1.1 Test case plan |
| 1.1.2 Define | 2.2.1 Interface requirement | 3.2 Low level design | 4.1.2 Interface definition | 5.2 Product Testing |
| 1.2 Project Schedule | 2.2.2 Business requirement | 3.2.1 Databases | 4.1.3 Program coding | 5.3 User acceptance testing |
| 1.2.1 Gantt Chart | 2.2.3 Regulatory requirement |  | 4.1.4 Software Installation |  |
| 1.3 Risk Management Plan | 2.2.4 Security requirement |  |  |  |
| 1.3.1 Risk Register | 2.3 Non-functional requirement |  |  |  |
| 1.3.2 Identify Risk | 2.3.1 Performance requirement |  |  |  |
| 1.3.3 Assess and develop | 2.3.2 Operating constraints |  |  |  |
| 1.4 Milestones | 2.3.3 Platform constraints |  |  |  |
| 1.4.1 Define | 2.3.4 Usability requirement |  |  |  |
| 1.5 Project Closure Plan |  |  |  |  |
| 1.5.1 Define |  |  |  |  |
| 1.5.2 Release Systems |  |  |  |  |
| 1.6 Monitoring and control |  |  |  |  |
| 1.6.1 Plan and Define |  |  |  |  |

## Constraints

The delivered product is required to be WCAG 2.1 AA compliant.

Processes will rely on the third party API’s of the existing products in the pipeline. Changes in these API’s may necessitate an update to the product. Removal of these API’s will result in a non-functional product.

# Implementation Requirements

## Training Requirements

Thorough user guide documentation will be provided with the final product. No specific training will be required.

## Documentation

Documentation will be provided as per the deliverables. All documentation will be open access with no access restrictions.

## Support Requirements

Ownership of the product will be handed over upon completion, this team will manage ongoing support and final implementation.

## Delivery Requirements

Final project scheduled for delivery in November.