CSC430 - Software Engineering

EZ-Software

BlueBox

Deployment Plan

December 2019

Version *1*

Artifact Rationale

The Deployment Plan defines the scope and approach planned for the deployment of project deliverables. The plan includes information about system support, issue tracking, escalation processes, and roles and responsibilities that apply before, during, and after deployment. Its purpose is to provide clients, stakeholders and support personnel with a smooth transition to the new product or software. It should be structured appropriately, to reflect deployment planning for a single location or multiple locations, a single-phase deployment or a multiphase deployment, and should identify the requirements and responsible party for each process step.

Instructions

| Activity | New Capability (A) | Feature Enhancement (B) |
| --- | --- | --- |
| **Field Deployment (1)** | Yes | Yes |
| **Cloud/Web Deployment (2)** | Yes | Yes |
| **Mobile Application (3)** | Yes | Yes |

Table of Contents

[1. Introduction 1](#_Toc350438855)

[1.1. Purpose 1](#_Toc350438856)

[1.2. Key Definitions 1](#_Toc350438857)

[1.3. Plan Overview 2](#_Toc350438858)

[1.4. Assumptions 2](#_Toc350438859)

[2. Roles and Responsibilities 3](#_Toc350438860)

[3. Schedule 4](#_Toc350438861)

[3.1. Timeline - ESE/FO 4](#_Toc350438862)

[3.1.1. Master Deployment Schedule 4](#_Toc350438863)

[4. Site Readiness Assessment 5](#_Toc350438864)

[4.1. Special Operational Requirements 5](#_Toc350438865)

[4.2. Deployment Topology 5](#_Toc350438866)

[4.3. Site Information (Locations, Deployment Recipients.) 5](#_Toc350438867)

[4.4. Site Preparation 5](#_Toc350438868)

[4.5. Assessment of Deployment Readiness 6](#_Toc350438869)

[5. Resources 6](#_Toc350438870)

[5.1. Facility Specifics *(optional)* 6](#_Toc350438871)

[5.2. Hardware - ESE 6](#_Toc350438872)

[5.3. Software - ESE 7](#_Toc350438873)

[6. Documentation and Training 7](#_Toc350438874)

[6.1. Documentation – ESE 7](#_Toc350438875)

[6.1.1. Communications – ESE 8](#_Toc350438876)

[6.2. Training *(optional)* 8](#_Toc350438877)

[7. Approval Signatures 9](#_Toc350438878)

# Introduction

This document describes the plan to deploy and install the BlueBox app, as managed through the BlueBox, management system for a movie vending machine, project. This document is a companion to the project management plan for this effort.

## Purpose

The purpose of this plan is to provide a single, common document that describes how, when, where, and to whom the BlueBox app will be deployed and installed. Appropriate communications planning should also be completed, as well as the training plan and rollout schedule.

## Key Definitions

**Deployment Design**. Phase of the solution life cycle in which architectural design and implementation specifications are developed and tested. The preparation of plans and specifications necessary to implement the solution are part of the Deployment Design phase. At the end of the Deployment Design phase, a solution is ready for implementation in the production environment.

**Implementation**. Phase of the solution life cycle in which the newly designed or changed hardware, software, functionality, or process is installed into the production environment and activated. The specifications and plans created during Deployment Design steer the work that is performed during the Implementation phase.

**Release**. Release baseline is defined as the product build (software and hardware specifications) along with the body of documents that support testing, installation, operations, training, and support of the product. Projects will determine the release baseline early in the development cycle. Baseline components enter change control once the project is approved for deployment.

## Plan Overview

Deployment and installation of the BlueBox app is planned as a phased rollout to any client.

Deployment will be performed by the BlueBox team members with representatives from peer organizations, as needed. Installation will be performed the BlueBox team members, along with representatives from peer organizations.

## Assumptions

The Deployment Plan is developed with the following assumptions:

* Deployment, installation, and ongoing maintenance costs (including capacity planning, recurring costs) will be identified and funded. All funding sources and issues should be resolved and documented prior to deployment and installation.
* Product Development will complete collaborative field testing (site survey) prior to deployment.
* Release Management will certify production readiness based upon the level of testing that has occurred prior to deployment. As part of the release baseline, this information will be identified in the release profile.
* Product Development will provide a training plan prior to deployment.

# Roles and Responsibilities

Table 1: Deployment Roles and Responsibilities

| ID | Team | Phase / Role | Tasks | Supervisor | Project Phase (See Schedule) |
| --- | --- | --- | --- | --- | --- |
| 1 | Product Development (depending upon project ownership) | Deployment | Plan and schedule deployment (including orchestration with vendors) | Patrick  Monaghan | A |
| 2 | Product Development (depending upon project ownership) | Deployment | Develop O&M Plan | Pierre Louis-Jacques | B |
| 3 | Field Team | Deployment | Test for operational readiness | Bilal Khan | C |
| 4 | Field Team | Deployment | Execute deployment | Mubashar Akram | D |
| 5 | Field Team | Installation | Plan and schedule installation | Patrick  Monaghan | E |
| 6 | Field Team | Installation | Ensure authority to operate and that certificate authority (CA)/security documentation is in place | Pierre Louis-Jacques | F |
| 7 | Field Team | Installation | Validate through facility to ensure that IT equipment has been accepted using asset inventory processes | Bilal Khan | G |
| 8 | Field Team | Installation | Coordinate training | Mubashar Akram | H |

# Schedule

## Timeline - ESE/FO

The deployment and installation is scheduled to run for at most 8 weeks, as depicted in the master deployment schedule.

Table 2: Schedule

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Project Phase/Weeks | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 |
| A |  |  |  |  |  |  |  |  |
| B |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |
| D |  |  |  |  |  |  |  |  |
| E |  |  |  |  |  |  |  |  |
| F |  |  |  |  |  |  |  |  |
| G |  |  |  |  |  |  |  |  |
| H |  |  |  |  |  |  |  |  |

The master deployment schedule is available at the Manhattan office of the BlueBox Company.

# Site Readiness Assessment

The BlueBox app will be deployed on vending machines located at different locations. Every vending machine will have a touch screen desktop computer, equipped with Microsoft 10.

This section discusses the locations that will receive the BlueBox app deployment..

## Site Information (Locations, Deployment Recipients.)

|  |  |  |
| --- | --- | --- |
| **ID** | **Locations** | **Deployment Recipients** |
| 1 | 851 Cedarwood St. Harvey, IL 60426 | Retail Store |
| 2 | 83 West Street Bellmore, NY 11710 | Hotel |
| 3 | 7667 Hamilton Rd. Hyde Park, MA 02136 | Auto Shop |
| 4 | 150 Devon Dr. Fitchburg, MA 01420 | Apartment Community |

## Site Preparation

Testing the quality of the electricity source is vital as an unstable electricity source will damage the equipment deployed. The next test is the internet connection. Every vending machine will have to communicate with our main server, thus the site should provide an internet connection allowing us to setup the system. Once these two conditions are met the deployment of BlueBox vending machine will be ready.

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 |
| --- | --- | --- | --- | --- |
| 1 | Unstable Electricity source | None | None | Miah Bautista |
| 2 | Unavailable electricity source near the vending machine | None | None | Kason Stanley |
| 3 | Unstable Electricity source.  No suitable Internet connection. | None | None | Rachel Jennings |
| 4 | None | None | None | Lamar Montgomery |

# Resources

Hardware, software, systems post-deployment support, and system support roles and responsibilities are defined in the Project OM Plan.

## Facility Specifics

The following table lists facility-specific features required for deployment.

Table 3: Facility-Specific Features

| Site | Space/Room | Features Needed | Other |
| --- | --- | --- | --- |
| 1 | 1 | Stable Electricity Source / close AC socket | Internet Connection |
| 2 | 1 | Stable Electricity Source / close AC socket | Internet Connection |
| 3 | 1 | Stable Electricity Source / close AC socket | Internet Connection |
| 4 | 1 | Stable Electricity Source | Internet Connection |

## Hardware – ESE

The scope of the BlueBox team was limited to the software. The hardware will be provided by another contractor hired by the client. Only memory, CPU limitation, and what the OS to be provided were known by the team.

## Software - ESE

The following table describes software specifications required at each site prior to deployment.

Table 5: Software Specifications

| Required Software | Make | Version | Configuration | Manufacturer | Build N |
| --- | --- | --- | --- | --- | --- |
| Microsoft Windows 10 |  | 1909 | Pro | Microsoft | 10.0.18362 |

Please see the Roles and Responsibilities table in Section 2 above for details about who is responsible for preparing the site to meet these software specifications.

# Documentation and Training

A user manual detailing all the functionalities of the system will be provided to the stakeholder upon deployment of the system. Setting up the stakeholders credentials will take place one day after the deployment. The following week, after confirming that the system had maintained an interrupt connection with the main server, the training of the stakeholder will take place.

This section describes the products and processes planned to provide product documentation and training.

## Training

Training will be provided to the stakeholder in order to be able to

1. Setup the system by adding credentials of the stakeholder.
2. Add and remove movies from the vending machine.

The information provided by the training will be also available in the user manual. However, guiding the stakeholder through the first steps will be conducted within 1 week of the deployment of the sytem.

# Approval Signatures

This section is used to document the approval of the Deployment Plan during the Formal Review. The review should be conducted face to face where signatures can be obtained ‘live’ during the review, however the following forms of approval are acceptable:

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name Date

Title (Senior Manager from Service Delivery & Engineering)

REVIEW DATE: <date>

SCRIBE: <name>

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Release Manager Date

Signed:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Program Manager Date

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Business Subject Matter Experts Representative Date

Signed: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Software Engineering Representative Date

Template Revision History

| Date | Version | Description | Author |
| --- | --- | --- | --- |
| February 2013 | 1.1 | Updated formatting | Process Management |
| January 2013 | 1.0 | Initial Version | PMAS Business Office |