

OPERATIONAL CONCEPT DESCRIPTION (OCD)

JEP Online platform

Team: 15

Team Members:

Name	First role	Second role
Wei Yan	Developer	Tester
Shreya Nigam	Project Manager	Developer
Wei-ting Cheng	Life Cycle Planner	Developer
Reem Alfayez	Requirement Engineer	Developer
Rebecca Lin	Developer	Tester
Nicholas Pecoraro	IIV&V	Quality Focal Point

04/30/2014

Version History

Date	Author	Changes	Version
10/05/2013	Ricardo Solano	Created Results chain, PM, Boundary diagram and Buisness Workflow	1.0
10/10/2013	Ricardo Solano	Results chain and PM changed	1.1
10/14/2013	Ricardo Solano	Stakeholders, Results Ch, PM changed	1.2
10/15/2013	Ricardo Solano	Stakeholders changed	1.3
10/16/2013	Ricardo Solano	Complete Document review, Added missing points for VC pachage Stakeholders, , PM changed. Results Ch removed Part 3 Rewrited	2.0
10/16/2013	Ricardo Solano	Terms disambicuation, ARB Corrections: ER Diagram, Boundary diagram, Added Susan Harris as stakeholder, business workflow	2.1
11/11/2013	Ricardo Solano	Changed System boundary, results chain, Finished OCD, business workflow, element relationship diagram, goals and level of service	3.0
12/03/2013	Ricardo Solano	Slight grammar, spelling and format corrections	3.1
02/09/2014	Shreya Nigam	Slight formatting and version update	4.0
03/30/2014	Shreya Nigam	Updated section 2.1and version number	5.0
04/02/2014	Shreya Nigam	Update for IOC and TS set	5.1
04/15/2014	Shreya Nigam	Remove GPS granularity and fix formatting	5.2
04/30/2014	Shreya Nigam	Final update. Final deliverable	5.3

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1. Introduction

1.1 Purpose of the Operational Concept Description Document

The purpose of the Operational Concept Description (OCD) for JEP online platform is to describe to the stakeholders of the system, how the system will function in practice. The functions of the system are included in the operational concept as well as the interactions of the system users.

The stakeholders include the customer, the users, the project manager, and the developers. The users include JEP volunteers, JEP staff, and site teacher or coordinator.

The OCD will provide clear and concise documentation to the stakeholders, especially for reference and guidance for all parties, to ensure that the correct system is being developed and the system is being developed correctly. A clear understanding of how stakeholders will interact with the system and how they interact with each other with regards to the system is a crucial function of the OCD. Specifically, the main goals of the OCD are to enable the operational stakeholders to evolve knowledgeably from their current and inadequate operational concept to the new operational concept, and to enable stakeholders to collaboratively adapt the operational concept as new developments arise. Therefore, the operational concept description is written in the common language of all interested parties.

1.2 Status Operational Concept Description Document

The operational concept description is complete as of version 5.2.

1.3 References

System and Software Architecture Description 5.3
Feasibility Rationale Description 5.0
Life Cycle Plan 5.0

2. Shared Vision

2.1 Success-Critical Stakeholders

Table 1.1: Key Stakeholders

Stakeholder	Organization	Authorized Representatives	Relation to Benefits Chain
Client: JEP	USC JEP	Susan Harris	Provide information and Feedback to Dev. Team
Developer Team	USC CSCI-577b	Wei Yan	Develop System
		Shreya Nigam	Provide initial training to use the system
		Reem Alfayez	
		Rebecca Lin	
		Nicholas Pecoraro	
JEP Administrators	USC JEP	Susan Harris	Use the system
		Jacob Peters	Train future staff and volunteers.
		Yujung Nam	Check attendance
JEP Volunteers / Students	USC JEP	Not yet Assigned	Use the system
			Check In
JEPOP Maintainer	N/A	Justin Gondek	Maintain the System
Dornsife Staff	Dornsife	Susan Cheng	Connect system with database and Shibboleth

2.2 Overview of the system

Table 2.2: The Program Model

Assumptions <ol style="list-style-type: none"> 1. JEPOP will improve volunteers experience and learning at JEP 2. The centralized JEPOP location database will be significantly more efficient than the existing process 3. Most students will use Geo-location instead of old paper-based system 4. Volunteer will Access the site information using JEPOP 5. PA's and JEP staff will Use check in messages to communicate with volunteers. 			
Stakeholders	Initiatives	Value Propositions	Beneficiaries
<ul style="list-style-type: none"> • JEP Administrators • JEP Volunteers • JEP Alumni • CSCI-577 Developers • DEN Staff • JEPOP Maintainer • Dornsife staff 	<ul style="list-style-type: none"> • Develop integrated JEPOP with GUI (User interface) • Integrate Geo-location Check-in into database. • Provide specific site information and directions • Install JEPOP In JEP Server • Connect System to Shibboleth 	<ul style="list-style-type: none"> • Facilitate communication across JEP volunteers/staff/sites • centralize and organize JEP Information • Simplify and Streamline existing paper processes • Increased learning from the JEP program 	<ul style="list-style-type: none"> • JEP Administrators • JEP Volunteers • JEP Site teachers • JEP Alumni • Community Sites

2.3 System Capability Description

The System to be developed is an on line web application to be used by the JEP volunteers and staff. Volunteers will be able to log in using shibboleth to this web application primarily on their mobile devices to, from their web browsers.

The main purpose of it is that volunteers can check-in to their corresponding sites. But they will also be able to interact with the platform and get valuable information from the sites and Program Assistants.

2.4 Expected Benefits

These are the major expected benefits of the system:

- Facilitate communications across JEP
- Centralize and Organize JEP information
- Simplify and Streamline existing paper process
- Increase learning in the JEP program

2.5 Benefits Chain

Below the expected results chain is shown. This explains how the benefits are expected to be realized by the development of the system.

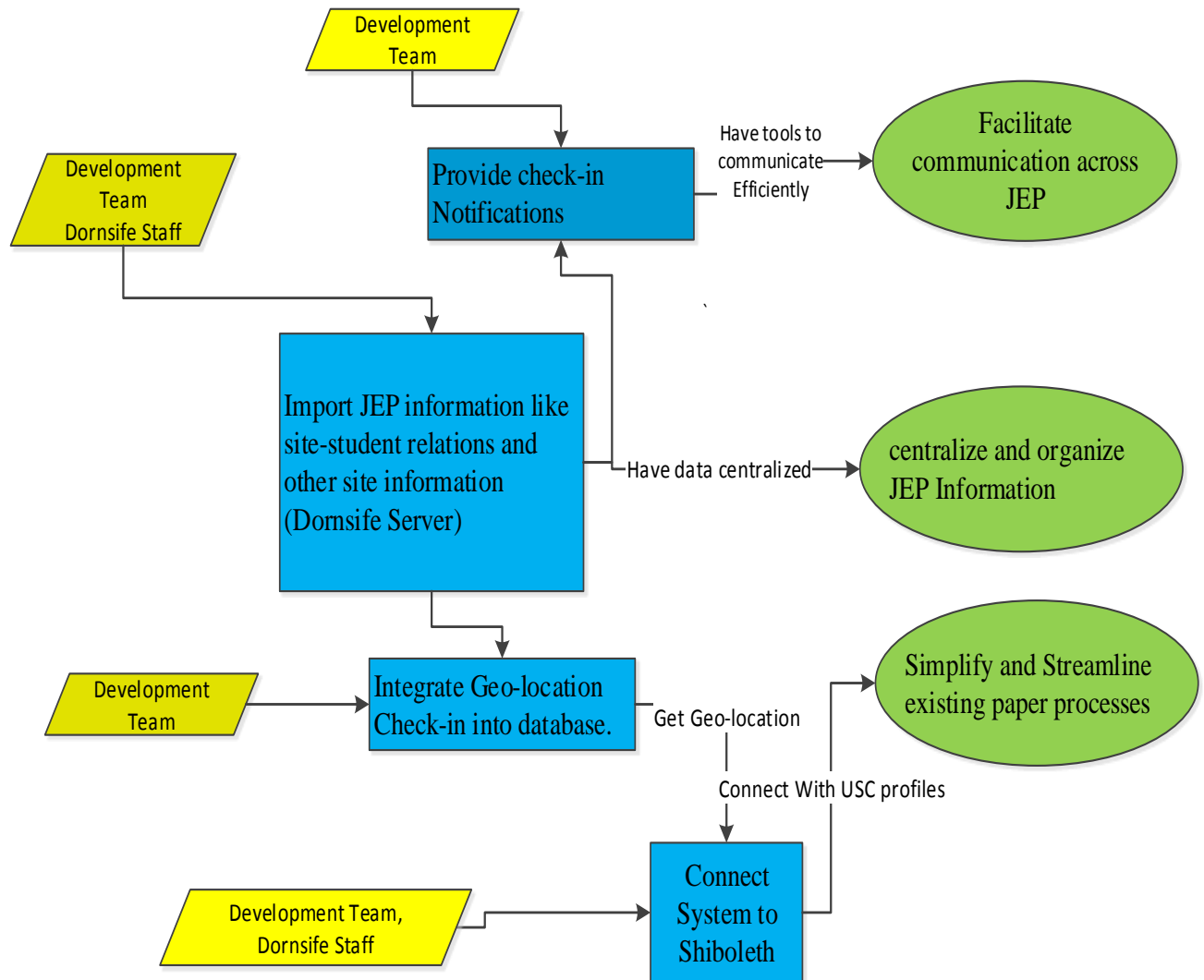


Figure 1: Results Chain

2.6 System Boundary and Environment

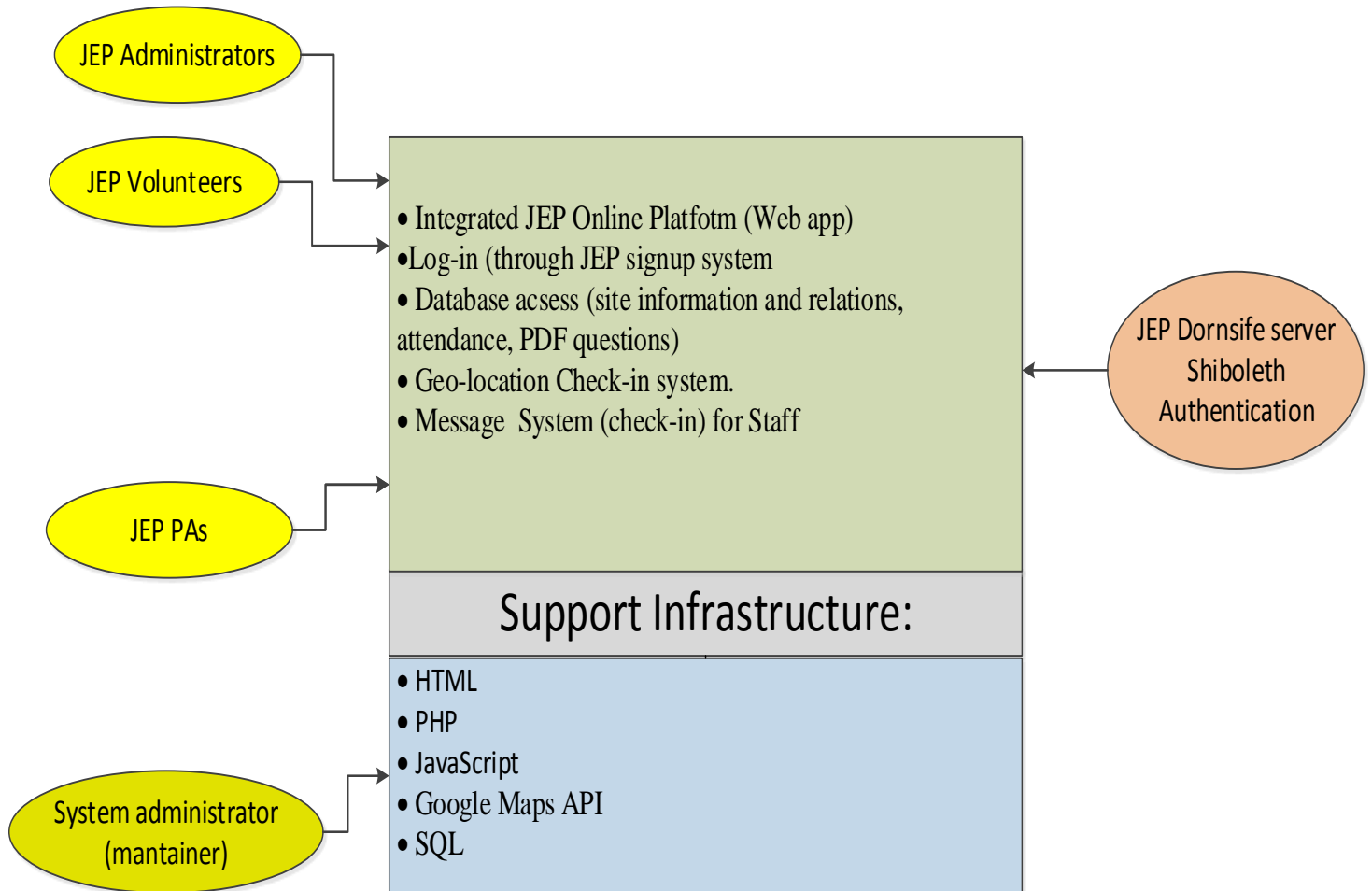


Figure 2: System Boundary and Environment Diagram

3. System Transformation

3.1 Information on Current System

3.1.1 Infrastructure

Most of the processes to be implemented by the system are currently done manually. Documents are sent to the volunteers by their PAs and the volunteers have to browse themselves. Attendance is managed using attendance papers that the volunteers fill and turn in.

3.1.1 Artifacts

Artifact	Description	Requested/ Shown/ Received	Planned Delivery Date
Initial presentation	Walkthrough of the system	Shown	09/27/2013
Requirements	Project requirements and goals	Shown	09/27/2013
Volunteer Check-in Sheet	Check-in form	Received	09/27/2013
Volunteer assignment sheet	For volunteers after they are assigned a site	Received	10/16/2013
Site information sheet	Handed to students to locate the site, coordinator, etc...	Received	10/16/2013
Volunteer Application	Application form for USC students	Received	10/16/2013

3.1.2 Current Business Workflow

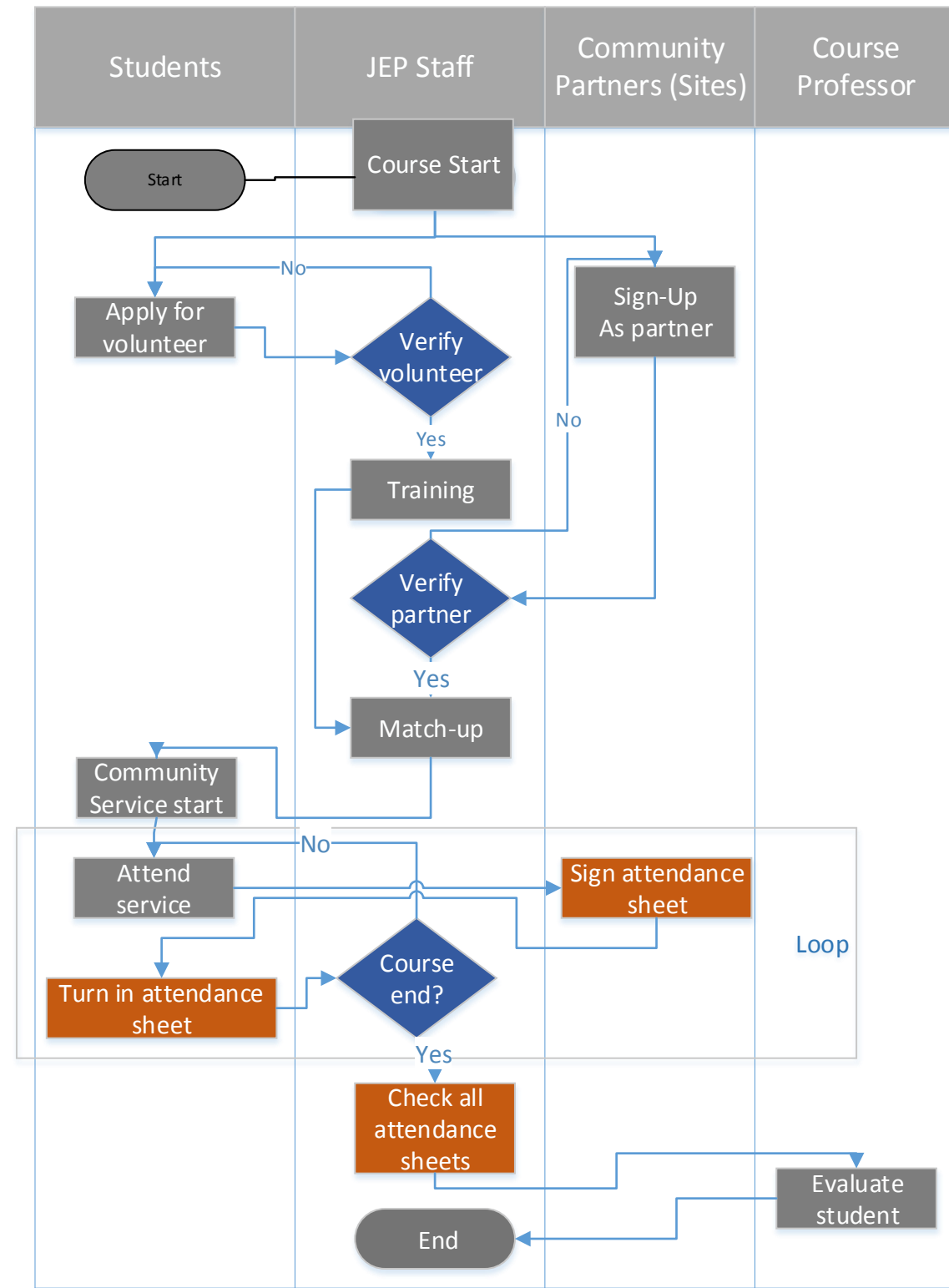


Figure 3: Business Workflow Diagram

3.2 System Objectives, Constraints and Priorities

3.2.1 Capability Goals

Table 3.5: Capability Goals

Capability Goals	Priority Level
OC_1 receive custom message upon check-in	Must Have
OC_2 Unique User accounts (JEP PAs, Administrators, Volunteers)	Must Have
OC_3 Geo-Location Check-In	Must Have
OC_4 Access to Site information (Map, contact, description)	Must Have
OC_5 Organize and access PDF Documents (reflective questions)	Must Have

3.2.2 Level of Service Goals

Table 4.6: Level of Service Goals

Level of Service Goals	Desired level	Acceptance level	Priority Level	Referred WinWin Agreements
Check-in Time	5s	15s	Med	WC_2610
System Availability	99%	95%	Med	WC_2610

3.2.3 Organizational Goals

OG-1: Facilitate communication across JEP volunteers/staff/sites

OG-2: centralize and organize JEP Information

OG-3: Simplify and Streamline existing paper processes

OG-4: Increased learning from the JEP program

3.2.4 Constraints

CO-1: Mobile platform support: The new system must be able to run on mobile platforms.

CO-2: Little or Zero Budget: The selected NDI/NCS should be free or no monetary cost.

3.3 Proposed New Operational Concept

This section contains information about the transformation of new operational concept that will be introduced to the system.

3.3.1 Element Relationship Diagram

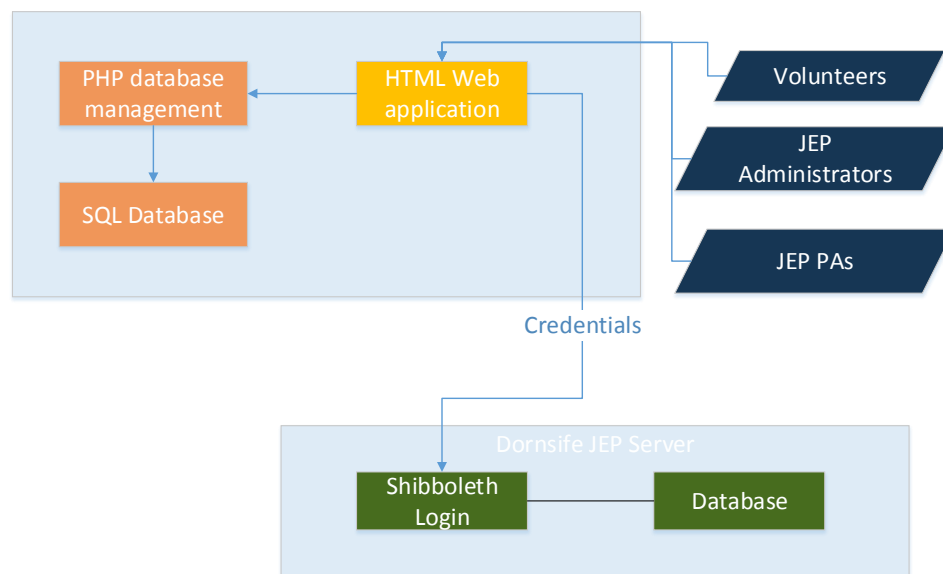


Figure 4: Element Relationship Diagram

3.3.2 Business Workflow

The business activities of JEP will change minimally with this system. The only difference is that the check-in will be done via this platform, and it will be much simpler.

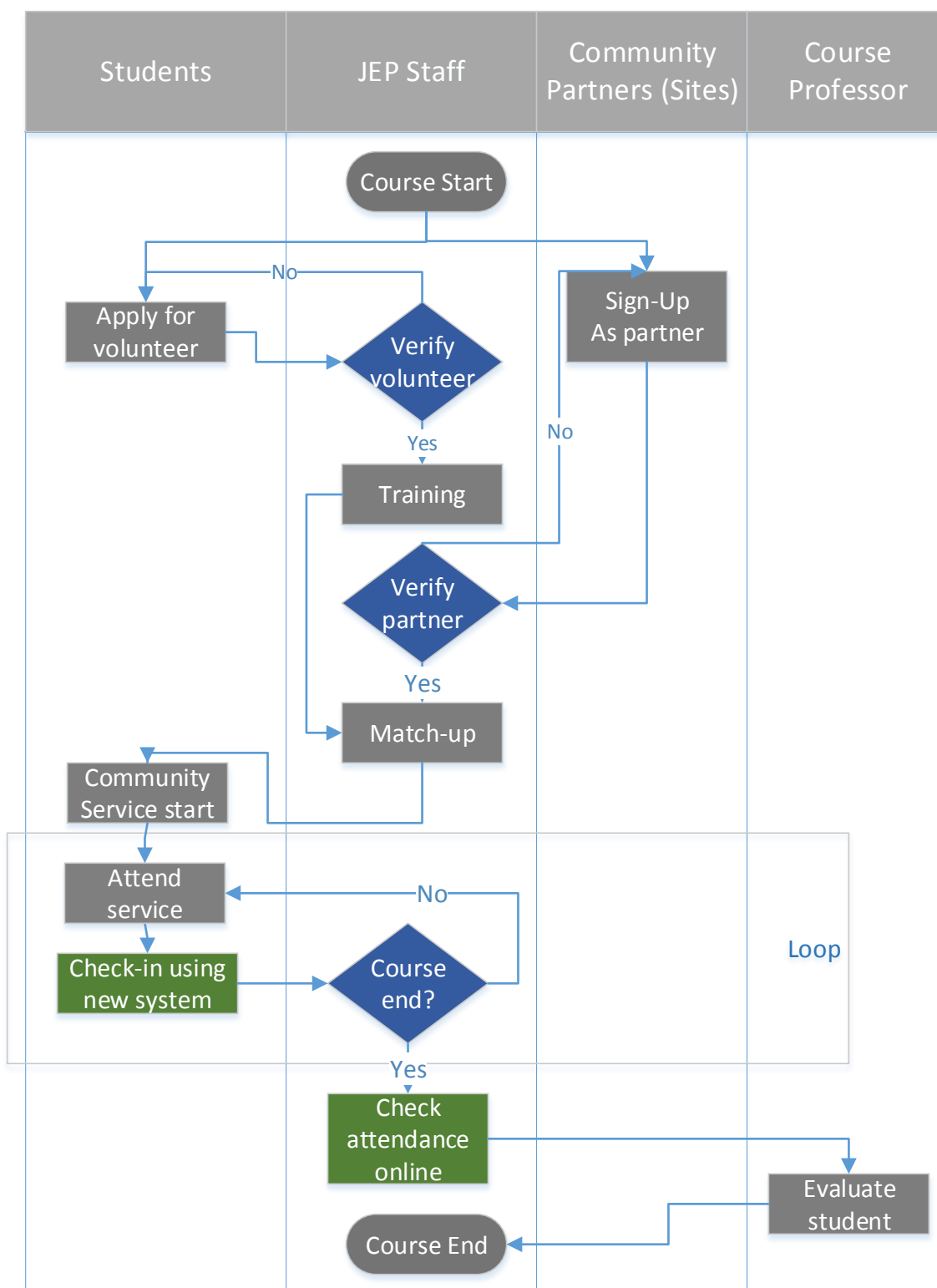


Figure 5: New Business Workflow Diagram

3.4 Organizational and Operational Implications

3.4.1 Organizational Transformations

- The elimination of the current, time-consuming attendance paperwork
- The need to hire a new system maintainer to take care of the system

3.4.2 Operational Transformations

- Replacement of inefficient manual e-mail method with an group e-mail capability provided by the site relations with volunteers, or other relations in the database
- Volunteers do not have to fill any attendance sheets anymore
- JEP Staff will not have to check attendance sheets manually
- Volunteers will access site information through JEPOP