

# **System and Software Support Plan (SSSP)**

## **Data Mining of Digital Library Usage Data**

**Team 07**

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# Version History

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# 1. Support Objectives and Assumptions

System and Software Support Plan outlines the support strategy for Data Mining of Digital Library Usage Data application developed for USC Information Services Division. The document will guide system's support stakeholders to successfully operate and maintain the system.

## 1.1 Support Objectives

The key objective for software support is to ensure the system provides up-to-date, reliable and better information for improving digital archive collections while the legacy systems and data collection are changing. Software support also helps to adapt to new users' needs by basing on the system for time and cost effectiveness.

## 1.2 Support

In order to carry out the support of the system successfully, the following assumptions need to be adhered:

- The system will be funded
- Personnel is staffed for maintaining and operating the system
- Supported by upper management
- Requirements and schedule for releases need to be stable and viable

## 1.3 References

Operational Concept Description

[http://seacliff.usc.edu/~team7b/RLCA/OCD\\_RLCA\\_S05b\\_T07\\_V7.0.doc](http://seacliff.usc.edu/~team7b/RLCA/OCD_RLCA_S05b_T07_V7.0.doc)

System and Software Requirements Definition

[http://seacliff.usc.edu/~team7b/RLCA/SSRD\\_RLCA\\_S05b\\_T07\\_V2.2.doc](http://seacliff.usc.edu/~team7b/RLCA/SSRD_RLCA_S05b_T07_V2.2.doc)

Life Cycle Plan

[http://seacliff.usc.edu/~team7b/RLCA/LCP\\_RLCA\\_S05b\\_T07\\_V06.0.doc](http://seacliff.usc.edu/~team7b/RLCA/LCP_RLCA_S05b_T07_V06.0.doc)

MBASE Guidelines 2.4

[http://sunset.usc.edu/classes/cs577b\\_2005/guidelines/MBASE\\_Guidelines\\_v2.4.2.pdf](http://sunset.usc.edu/classes/cs577b_2005/guidelines/MBASE_Guidelines_v2.4.2.pdf)

Team 7 Website

<http://seacliff.usc.edu/~team7b>

## **2. Support Strategy and Environment**

### **2.1 Support Strategy**

#### **2.1.1 Support Lifetime**

This is a research project and the produced application may not be stable as new solutions may arrive. Thus, the system is envisioned to have a short lifetime of roughly 1 to 2 years.

#### **2.1.2 Release Strategy**

Releases in the support stage include:

- Minor releases: each minor release may have bugs fixed and/or minor changes to the application. Minor release may synchronize with new updates of H3Viewer and MCL which are two third-party components used in the system.
- Major releases: a major release includes major changes and new requirements (such as evolution requirements documented in SSRD Section 6). Major release may synchronize with new updates of the third-party components used. Each major release will need a transition period of about 2-4 weeks before being fully deployed.

#### **2.1.3 Release Requirements Determination**

New release content will be driven primarily by schedule and staffing considerations as well as new strategies or solutions for analyzing Digital Archive arrive. Based on schedule and budget thresholds, support stakeholders will categorize and prioritize the requirements and allocate requirements into each release.

#### **2.1.4 Release Process**

For minor releases, the product is released after the changes, fixes are tested and approved. The process includes requirements gathering, implementation, test and release.

For major releases, each release may include inception, elaboration, construction, and transition phases; each of these phases corresponds to an intermediate LCO, LCA, TRR/IOC and RRR milestones respectively. Support stakeholders will negotiate and agree on the phases as well as milestones of each release.

For major releases that require more than 2 months to implement, construction phase should consist of two iterations. Iteration plans in construction phase will be a means to detail the objectives, capabilities to be implemented, tested, etc.

## 2.2 Support Environment

### 2.2.1 Hardware

A computer with the following configurations:

- RAM: minimum 128 MB. Recommended: 256 MB
- HDD: minimum 50 MB disk space available. Recommended: 100MB.

### 2.2.2 Software

Software required:

1. Operation System – required platform for the system
  - Version: Linux 2.6.9
  - Vendor: any Linux-OS vendor
  - Vendor support: N/A
  - Licensing: free/open source
2. Anjuta IDE – required for writing and compiling the source code
  - Version: 1.3
  - Vendor:
  - Licensing: open source

### 2.2.3 Facilities

N/A: There are no specific facilities needed to maintain the delivered system.

### 2.2.4 Other Documentation

The following documents will be packaged and delivered along with the product for the system support. All documents are developed by the team and will be delivered to the client. Support stakeholders are granted to use these documents for software support purposes.

- OCD
- SSRD
- SSAD
- LCP
- FRD
- Iteration Plans 1 and 2.
- Iteration Assessment Reports 1 and 2.
- Peer Review Plan
- Test Plan and Cases Description

- Quality Management Plan
- Peer Review Reports 1 and 2.
- Transition Plan
- User Manual
- Support Plan (this document).
- Training materials

### 3. Support Responsibilities

<b>Stakeholder</b>	<b>Responsibility</b>
Customer and User (currently: Jewel Ward)	Decide on which evolutionary features are to be implemented or enhanced in the future
Maintainer: (currently: Jeff Pearson)	Maintain integrity and evolutionary development of system. Provide support or responsible for development of release whenever necessary.
Development Team(Software Engineers)	Responsible for developing the new changes, fixing defects for the system.

## 4. Support Approach

This section identifies (if any) differences between the support approach and the development approach in the [LCP Section 4].

- **Monitoring and Control**  
Depending on specific organization of the support team, monitoring and control of the support team may differ compared to that of the development team. The client representative is the program manager responsible for the product development strategies. A maintainer is responsible for technical aspects of the system. Dependent on the characteristics of each release, the program manager and maintainer will work together to organize development team and outline monitoring and control strategies for the team.
- **Methods, Tools, and Facilities**  
No real major changes expected.
- **Configuration Management**  
No real major changes expected.
- **Quality Management**  
No real major changes expected.

## **5. Support Resources**

### **5.1 Support Budget**

The estimated support budget is \$7200 per year for support stage. This is equivalent to 240 hours per year for labor cost.

### **5.2 Other Resources**

Training materials and training will be provided by the CS577b developer to the current maintainer.

## 6. Common Definition Language for Requirements

**ARB**

Architecture Review Board

**FRD**

Feasibility Rationale Description

**LCA**

Life Cycle Architecture

**LCO**

Life Cycle Objective

**IOC**

Initial Operational Capability

**LCP**

Life Cycle Plan

**OCD**

Operational Concept Description

**SSRD**

Software and System Requirement Definition

**SSAD**

Software and System Architecture Description

**QMP**

Quality Management Plan

**SSSP**

System and Software Support Plan