

Transition Plan

Team 07

Clients

Jewel Ward

Team Members

Project Manager: Maxim Krivokon
Developer: Bo Lee
Developer: Genesan Kim
Developer: Vu Nguyen
IV&Ver: Shing-Cheung Chan
IV&Ver: Marie Chi
IV&Ver: Kristine Guevara

Version History

Date	Author	Versio n	Changes made
2/4/05	Genesan Kim	V0.0	<ul style="list-style-type: none">• Initial Transition Plan Draft
2/8/05	Genesan Kim	V1.0	<ul style="list-style-type: none">• Added section 3 (Stakeholder Roles and Responsibilities) and section 5 (Required Resources)
2/22/05	Genesan Kim	V1.1	<ul style="list-style-type: none">• Added section 2.5 (Operational Test and Evaluation)• Added section 4 (Milestone Plan)

Table of Contents

1	Transition Strategy	6	
	1.1 <i>Transition Objectives</i>	6	
	1.2 <i>Transition Process Strategy</i>	6	
2	Preparing For Transition	8	
	2.1 <i>Hardware Preparation</i>	8	
	2.2 <i>Software Preparation</i>	8	
	2.3 <i>Site Preparation</i>	8	
	2.4 <i>Staff Preparation</i>	8	
	2.5 <i>Operational Test and Evaluation</i>	10	
3	Stakeholder Roles and Responsibilities	13	
4	Milestone Plan	14	
5	Required Resources	16	

List of Figures

No Figures

List of Tables

No Tables

1 Transition Strategy

1.1 Transition Objectives

The purpose of the transition plan is to ensure that the stakeholders will be able to transition from construction to support successfully. This involves ensuring that the operational stakeholders will be able to operate and maintain the complete system.

The system that is to be implemented is the USC Digital Archive Usage Analysis System. This will be a new system that will be installed on the client's target machine, and after construction, will be available for use. The following table shows the various dimensions of success associated with a specific transition activity:

Extent of capability transitioned	Full Operation
Degree of post-transition developer support	None
Degree of validation of operational satisfaction of stakeholder objectives	95%
Nature of product transition	New system

1.2 Transition Process Strategy

The system built will be a new system that will be installed for the clients. Given the location of and the actual hardware where the system to be installed and executed, the development team will initially do so in the presence of all stakeholders.

Phasing of Cutover: Instantaneous transition process. The system will integrate all components of the system into one software piece (Standalone application). Since the raw data that the system takes as an input will be available at the target client site, the transition will involve an instantaneous installation of this new system.

Phasing of transition of multiple increments to multiple sites: Due to the fact that this is a new system, it will be only installed on one site where multiple users can use one at a time.

Role of alpha-testing, beta-testing, independent operational testing and evaluation: There will be alpha and beta testing by the development team after the completion of the construction. Testing will also be done with the client present at the site of the transition. Then following an independent operational testing will be executed where the client can test the system independently and provide feedback to the development team.

2 Preparing For Transition

2.1 Hardware Preparation

In preparation for transition, there will be no additional hardware that needs to be purchased. The client already has an install ready workstation running Mac OS X. Since the complete system is a standalone application which can be installed on any workstation with OS X, there are no special instructions for placing the hardware in a state of readiness.

2.2 Software Preparation

The only software requirement for the system to be installed is to have Mac OS X as the operating system on the target computer (Which will be provided). The installation requires the executable file, which is the final product of our system and will be provided during the transition stage.

Given that only open source and free components were used to build the system, there is no software preparation required for licenses for COTS. This software includes SQLite, H3Viewer, and Open Motif. All components of this new system will be integrated into one standalone application; therefore so separate software preparation is needed during the transition stage.

The necessary data needed to run the system is also already available on the client workstation. Furthermore, the system will use the log data provided by an existing log data recorder for the Digital Archive system, and this data is provided as part of normal functional of the DA system and therefore does not result in any preparation for this transition.

2.3 Site Preparation

There is no additional preparation for the site. As stated before, the client has a ready target computer that runs OS X in the desired location.

2.4 Staff Preparation

This section will describe the preparation needed for training support.

2.4.1 Training Deliverables

A user manual for the system will be provided as a training deliverable. Since the client has knowledge of the DA system and the log data used as an input to this system, the team will provide information on how to use the system starting with the importing of this log data to generating log analysis reports, then to the visualization capabilities of the system. It is important to take note that all potential users of this system will have this same knowledge whether it is the program manager, project manager or researcher [OCD 4.3].

This user manual will be detailed enough so that the client or any user will be able to use the system properly. The manual will consist of two sections for organizational purposes. The first section will cover how to use the system in terms of managing log data and log analysis. The second section will consist of how to use the system with already produced log analysis data and generating the visual analysis.

The client will be trained as the administrator of this system, and the estimated training time for this is 2 hours [LCP 2.2]. This will involve at least 2 members of the development team to be present at the time of training. The client will be trained so that she is capable of training/assisting other library staff or user [OCD 4.3] so that may use the system (with the help of the user manual provided).

The maintainer as well as any other USC ISD personnel will be trained, each requiring 2 hours. The specifics of whether or not other staff members, besides the client and the maintainer, are to be trained are not yet known.

Training preparation for hardware or software other than this system is not required. The client is familiar with the DA system, the target computer, and the operating system. Thus the impact on the staff time is just the training time required for our client, Jewel Ward.

2.4.2 Training Schedule

The training schedule includes 2 hour training sessions for the client and maintainer (Tentative). The schedule for this training is planned for 2 days which can be seen in

http://seacliff.usc.edu/~team7b/RLCA/MPP_RLCA_S05b_T07_V06.0.mpp.

Whether or not other users, personnel (including library staff), are to be trained is still unknown, but each require 2 hour training sessions which will be completed during these two days.

The sessions include a walk through of the system, with members of the development team, using the manual provided. This involves the importing of that log data, generating analysis reports, and then running the visualization tool. All these components are combined into one standalone application, and since the clients have knowledge with the DA system, the only training material required is the manual.

The manual will basically have the step by step process on how to execute the software and go through it using the log data.

2.4.3 Measure of Success

After the training session, the client will be given time run through the system independently. All feedback and questions will be noted and mitigated. In a general manner, the training will be considered a success if the user is able to successfully get a visual representation of some log data by using the system. The following is a more detailed description of the measure of success:

User is successfully able to manage usage log data

- Successfully imports usage log data into the system
- Successfully is able to browse and remove the desired usage data from the system

User is successfully able to generate analysis reports

- User is able to successfully generate a analysis report on a set of usage log data
- Is able to open and view the usage analysis report that was generated by the system on the desired set of usage data
- Is able to browse various generated analysis reports, and delete a particular one
- Successfully saves a desired log analysis result

User is successfully able to visualize results in the analysis reports

- Successfully launches the visualization tool after selecting a particular analysis report
- Is able to pan and rotate the visualization of the analysis report
- Is able to select a particular desired node in the 3d visual graph

2.5 Operational Test and Evaluation

The assurance of a successful transition is necessary and important for an actual successful transition. Therefore operational test and evaluation is addressed in the following sections.

2.5.1 Evaluation Criteria

The evaluation criteria for the system can be defined through improved efficiency, quality of service, stakeholder satisfaction, and the return on investment. These criteria will help assure that stakeholder expectations are met and also provide feedback for the team in terms of risks and problem areas.

The new system should improve the efficiency in analyzing usage log data compared to manually analyzing this data as described in OCD 3.3, where there is no way of generating relationships or visual graphs from the data. The new system should be compared to this manual analysis of the usage data and stakeholders should see an improvement in this analysis process. The user can not only generate analysis reports with the system, but also generate a 3d graph of all the relationships between Digital Archive resources. The criterion involves the new system allowing the user to have an improved efficient method of understanding the archive collection and the usage trends.

Another evaluation criterion is the quality of service that the system provides. For example in SSRD LR-2 describes that the system's user interface should be user friendly. Not only in terms of generating the reports and graphs, but also in the area of viewing the actual item relationships. The system should be easy to use and provide an easily understandable analysis graph and report. These criteria also involve the stability of the system, whereby the user should be able to rely on the system that it won't crash. Performance should also be evaluated in that it will provide organized data in a timely manner.

The stakeholder satisfaction evaluation criteria will involve all stakeholders. The system can be evaluated with respect to for example, the maintainer, client, program manager, project manager, and other researchers. The system should satisfy all intended users and meet the expectations of stakeholders that hold different roles.

The return on investment is also an area of evaluation criteria when the system is to be used. The cost of the benefits of the system is expected to exceed the actual costs required for the system. The time spent in training users for the system should also be worthwhile in that it will allow users to improve the digital archive system in less time (with the training time required) than it did manually without the new system. Thus in terms of effort and money the system should expect to produce this return on the time and money invested in developing it.

2.5.2 Procedures

The participants for this evaluation will consist of USC Information Services Division personnel, which include the client and the maintainer for this system. The exact number of other users that will participate is still unknown due to availability.

There will be problem reports that will be provided by the participants in response to all the evaluation criteria listed in section 2.5.1 of this document. All concerns will be received by development team for feedback and distributed among all stakeholders. All measurements will be recorded in the form of user feedback.

The improvement in efficient, quality of service, and stakeholder satisfaction will all be evaluated in the same manner. Usage of the system is required, which includes performing all capabilities of the system by each user. After performing all capabilities of the system, users can provide personal feedback with respect to the 3 evaluation criteria.

The return on investment will be calculated by recording the monetary values and the effort (in terms of time) that is involved with using this new system. In a timeline manner, these values will be compared to previous estimates of the time and costs it took for the same tasks to be done manually.

2.5.2 Outline of Operational Test and Evaluation Report

1. Improved Efficiency Evaluation Criteria

-Users test system, users that have done usage data log analysis manually prior to the new system

-Users provide feedback through problem reports in terms of comparison between the efficiency with and without the system

2. Quality of Service Evaluation Criteria

-Users test system

-Provide feedback through problem reports based on usability, stability, performance

3. Stakeholder Satisfaction Evaluation Criteria

-Wide variety of users test the system

-Provide feedback through problem reports

-Developers gather and combine problem reports, distribute to all stakeholders

4. Return on Investment Evaluation Criteria

-Record costs and effort saved from the start of the system in use. Compared to estimates of previous costs without the system

-Provide feedback through problem reports with respect to results

5. Problem Reports

-Problem reports may result in changes/modifications and stakeholder meetings

3 Stakeholder Roles and Responsibilities

The roles include the project manager, system analyst, system architect, designer, and developer according to LCP 3.2. The project manager will be responsible in the transition of this system in terms of analyzing the generated analysis report. The manager does this in parallel with the users during the transition phase in order to ensure that the analysis report is being generated correctly. The system analyst, architect, designer, and developer will hold the role during transition to help provide training in the areas of managing usage log data and generating visual graphs of the relationships. In general, all members of the developing team will take on the role of training and support, as well as receiving feedback from the evaluation criteria after the testing of the system by the users. The system architect and designer will also have the roles of installing the system with all the critical stakeholders to ensure that the transitioning is successful.

The client, maintainer, and users are all part of the USC Digital Archive Staff, and USC ISD. These stakeholders are responsible for providing the feedback based on the evaluation criteria after using the system. These users are also the operational testers.

4 Milestone Plan

<input type="checkbox"/> Construction	40 days?	Mon 2/21/05	Fri 4/15/05
<input type="checkbox"/> Identify the activities for the next week	16 days	Mon 2/21/05	Mon 3/14/05
<input type="checkbox"/> Identify the issues, defects and problems of the	16 days	Wed 2/23/05	Wed 3/16/05
<input type="checkbox"/> Risk Management - Update Assessments	16 days	Wed 2/23/05	Wed 3/16/05
<input type="checkbox"/> Record the weekly project progress	16 days	Wed 2/23/05	Wed 3/16/05
<input type="checkbox"/> Team weekly meeting	16 days	Mon 2/21/05	Mon 3/14/05
<input type="checkbox"/> Client weekly meeting	16 days	Wed 2/23/05	Wed 3/16/05
<input type="checkbox"/> Iteration #1	22 days?	Mon 2/21/05	Tue 3/22/05
<input type="checkbox"/> Planning (update plans - if any)	7 days	Mon 3/7/05	Tue 3/15/05
<input type="checkbox"/> Training	6 days	Mon 2/21/05	Mon 2/28/05
<input type="checkbox"/> Requirements Management	17 days	Mon 2/21/05	Tue 3/15/05
<input type="checkbox"/> Detailed Design	2 days?	Mon 3/14/05	Tue 3/15/05
<input type="checkbox"/> Implementation and Unit Test	20 days	Mon 2/21/05	Fri 3/18/05
<input type="checkbox"/> Environment and Configuration management	15 days	Mon 2/21/05	Fri 3/11/05
<input type="checkbox"/> Assessment	22 days	Mon 2/21/05	Tue 3/22/05
<input type="checkbox"/> Quality Management	20 days	Mon 2/21/05	Fri 3/18/05
<input type="checkbox"/> Deployment	6 days	Mon 3/14/05	Mon 3/21/05
Draft User manual and installation guide	4 days	Mon 3/14/05	Thu 3/17/05
Create Release Notes/Description	2 days	Fri 3/18/05	Mon 3/21/05
Create Installation Package	5 days	Mon 3/14/05	Fri 3/18/05
Core Capability Drivethrough	1 day	Mon 3/21/05	Mon 3/21/05
IOC Working Set #1	1 day	Mon 3/21/05	Mon 3/21/05
<input type="checkbox"/> Iteration #2	18 days?	Wed 3/23/05	Fri 4/15/05
<input type="checkbox"/> Update Plans	4 days	Wed 3/23/05	Mon 3/28/05
<input type="checkbox"/> Requirements Management	2 days	Wed 3/23/05	Thu 3/24/05
<input type="checkbox"/> Detailed Design	10 days?	Wed 3/23/05	Tue 4/5/05
<input type="checkbox"/> Implementation and Unit Test	18 days	Wed 3/23/05	Fri 4/15/05
<input type="checkbox"/> Environment and Configuration management	10 days	Wed 3/23/05	Tue 4/5/05
<input type="checkbox"/> Assessment	5 days?	Wed 3/23/05	Tue 3/29/05
<input type="checkbox"/> Quality Management	14 days	Wed 3/23/05	Mon 4/11/05
<input type="checkbox"/> Deployment	3 days	Tue 4/12/05	Thu 4/14/05
Update User manual and installation guide	3 days	Tue 4/12/05	Thu 4/14/05
Create Release Notes	2 days	Wed 4/13/05	Thu 4/14/05
Create Installation Package	2 days	Wed 4/13/05	Thu 4/14/05
IOC Working Set #2	0 days	Fri 4/15/05	Fri 4/15/05
TRR Draft on Web	1 day?	Wed 4/6/05	Wed 4/6/05
<input type="checkbox"/> Transition Readiness Review (TRR)	4 days	Mon 4/4/05	Thu 4/7/05

<input type="checkbox"/> Transition	19 days?	Fri 4/8/05	Wed 5/4/05
<input type="checkbox"/> Identify the activities for the next week	16 days	Mon 4/11/05	Mon 5/2/05
<input type="checkbox"/> Identify the issues, defects and problems of the	16 days	Wed 4/13/05	Wed 5/4/05
<input type="checkbox"/> Risk Management - Update Assessments	16 days	Wed 4/13/05	Wed 5/4/05
<input type="checkbox"/> Record the weekly project progress	16 days	Wed 4/13/05	Wed 5/4/05
<input type="checkbox"/> Team weekly meeting	16 days	Mon 4/11/05	Mon 5/2/05
<input type="checkbox"/> Client weekly meeting	16 days	Wed 4/13/05	Wed 5/4/05
<input type="checkbox"/> Plans	3 days	Mon 4/18/05	Wed 4/20/05
Create System Software and Support Plan (SSSP)	3 days	Mon 4/18/05	Wed 4/20/05
Refine Transition Plan	2 days	Mon 4/18/05	Tue 4/19/05
<input type="checkbox"/> Requirements Management	2 days	Mon 4/18/05	Tue 4/19/05
<input type="checkbox"/> Detailed Design	10 days	Fri 4/8/05	Thu 4/21/05
<input type="checkbox"/> Implementation	13 days	Fri 4/8/05	Tue 4/26/05
<input type="checkbox"/> Environment and Configuration management	10 days	Mon 4/18/05	Fri 4/29/05
<input type="checkbox"/> Quality Management	17 days	Fri 4/8/05	Mon 5/2/05
<input type="checkbox"/> Deployment	5 days?	Mon 4/18/05	Fri 4/22/05
Update User manual and installation guide	3 days	Wed 4/20/05	Fri 4/22/05
Update Release Notes	2 days	Mon 4/18/05	Tue 4/19/05
Create Installation Package	1 day?	Fri 4/22/05	Fri 4/22/05
<input type="checkbox"/> Training	4 days	Wed 4/20/05	Mon 4/25/05
Create Training materials	2 days	Wed 4/20/05	Thu 4/21/05
Training for maintainers and users	2 days	Fri 4/22/05	Mon 4/25/05
Transition Set delivery	1 day	Mon 4/25/05	Mon 4/25/05
Support Set delivery	1 day?	Mon 4/25/05	Mon 4/25/05
Product Release	1 day?	Mon 5/2/05	Mon 5/2/05
Closeout Report	2 days	Tue 5/3/05	Wed 5/4/05
Project End	0 days	Wed 5/4/05	Wed 5/4/05

START FINISH

5 Required Resources

Development team will use personal workstations and computing facilities provided by the USC Information Services Division. The proposed application is standalone and therefore does not require hosting facilities to be tested.

Project will use the following open source components which are available at no cost: SQLite, H3Viewer, Open Motif. The following free open source development tools will be used: gcc, make, autoconf etc. Project management will be done using software tools licenses for which are provided with no cost as part of the class: Rational Rose, Microsoft Project.

Training:

- Trainer preparation time = 4 hours. Since training preparation will be done by the development team, cost = \$0.
- Client will be trained as an administrator of the system, and will be given instructions on how to analyze log data using the system and distribute results of the analysis to regular users. Client training time = 2 hours; Average client salary = \$35 per hour. Therefore cost = $2 * \$35 = \70 .
- Library staff users will be trained on how to visualize analyzed data received from the admin using the system. Number of users = 5; Training time = 2 hours; Average salary = \$25 per hour. Thus, cost = $5 * 2 * 25 = \$250$.
- Maintainer training time = 2 hours; Average maintainer salary = \$30 per hour. Cost = $2 * \$30 = \60 .

Total training costs = $\$70 + \$250 + \$60 = \380

Data preparation:

The system will use the log data provided by existing Digital Archive system. This data is provided as part of normal functioning of the DA system and therefore does not incur any costs.

Data preparation costs = \$0;

COTS licenses:

Proposed system uses only open source and free components.

COTS licenses costs = \$0

Operational readiness testing:

This testing will be done by the client through comprehensive evaluation of major functionality of the system. Estimated testing time = 2 hours; Average client's

salary = \$35. Cost = $2 * 35 = \$70$.
Total testing costs = \$70

Site preparation:

The proposed system is a standalone application which can be installed on any workstation running Mac OS X, which does not require any special preparations
Site preparation costs = \$0

Facilities preparation:

Proposed system does not require use of any specialized facilities.
Facility preparation costs = \$0

Equipment purchase:

The developed system will be installed on existing Digital Library equipment and also on personal workstation of the client; therefore no equipment will be purchased.
Equipment cost: = \$0

Please look at FRD 2.1.1 and LCP 5 for more information.