State of Louisiana
Department of Social Services

ACESS
A Comprehensive Enterprise Social Services System

Scope and Change Management Plan

Deliverable AC07

APRIL 27, 2005
VERSION 2.0

TABLE OF CONTENTS

TABLE OF CONTENTS **2**

1.0 DOCUMENT CONTROL **3**

2.0 OVERVIEW AND DESCRIPTION **4**

2.1 Document Purpose 4
2.2 Scope and Change Management Process Objectives 4
2.3 Scope and Change Management Process Scope 5
2.4 The Difference between Scope and Change Management and Configuration Management 5
2.5 Components of the Scope and Change Management Plan 5
2.5.1 The Contract and Contract Changes 5
2.5.2 The Change Request 6
2.5.3 The Change Control Board 6
2.5.4 Change Order 7
2.5.5 Contract Amendment 7

3.0 DEFINITION OF SCOPE AND CHANGE CONTROL **7**

3.1 Definition of Scope 8
3.2 In-Scope Changes 8
3.3 Out-of-Scope Changes 9

4.0 PROCESS DESCRIPTION: OVERVIEW AND ROLES **9**

4.1.1 The Change Request 9
4.2 The Investigation Process 10
4.2.2 Recommend Course of Action 15

APPENDIX A: MAIN CLEARQUEST WORKSPACE SCREEN **16**

APPENDIX B: CLEARQUEST CHANGE REQUEST **17**

APPENDIX C: CHANGE REQUEST RATIONALE **18**

APPENDIX D: CHANGE REQUEST EVALUATION **19**

1.0 DOCUMENT CONTROL

Summary of Changes

Version #	Version Date	Nature of Change	Date Submitted
1.0	July 2, 2004	Original	July 2, 2004
1.1	July 27, 2004	Revisions from the State	July 27, 2004
2.0	April 27, 2005	Update for Quarterly Deliverables	April 28, 2005

Document Change Approvers

Function	Name
State of Louisiana ACESS Project Director	Barbara J. Hunter
IBM ACESS Project Manager	Rick Valentine

2.0 OVERVIEW AND DESCRIPTION

Scope and change management includes the processes required to control unforeseen changes that arise during the course of a project that may jeopardize cost, quality, or schedule. Therefore, the management of change is a critical factor in the success of a project. The primary focus of scope and change management is on those changes that are introduced by the ACESS stakeholders. Requirements changes, changes to the content of deliverables, or changes to due dates are examples of this kind of introduced change. Scope changes may affect:

- Technical work
- Contracts and any contract changes
- Project management plans
- Procedures

2.1 Document Purpose

The Scope and Change Management Plan has two main purposes for the ACESS project. First, it provides reference documentation on ACESS scope and change management procedures for project stakeholders. Second, it provides scope and change management process participants with a description of their change management responsibilities and tasks and the tools with which they will interact so the process can be implemented and managed consistently. Overall, the goals of this Scope and Change Management Plan are to:

- Establish a standard process to initiate change requests,
- Facilitate management of changes to scope
- Ensure proper documentation of the change request process, and
- Provide guidelines to manage change related project documentation

2.2 Scope and Change Management Process Objectives

Even in the simplest of projects, some modifications to project scope are unavoidable. Although changes may result in increasing costs, duration, and risk, changes can also be important agents for improving the overall quality of the ACESS project. Too much change, at best, impacts productivity and, at worst, can lead to the project becoming out of control with different project team members working on conflicting objectives. The objective of the Scope and Change Management Plan is to enable the ACESS project management staff the ability to manage scope and change, and only the work contractually required, to complete the ACESS project successfully. The scope of the Scope and Change Management Plan is primarily concerned with defining and controlling the components of what was not contractually included in the ACESS project, in other words what is out-of-scope.

The process of scope and change management is therefore to be used to manage all scope changes, regardless of their degree of impact on the project. Changes initiated by the State, an

external source, IBM, or a member of the ACESS project are controlled and managed using the same consistent approach. Even the smallest of changes require coordination and communication, and the scope and change management process can be streamlined to handle small changes effectively when needed.

2.3 Scope and Change Management Process Scope

The primary concept for the items that are to be handled in the Scope and Change Management Plan is that scope changes are exceptions. In-scope requests are not handled in the Scope and change management process, but are instead handled in regular project planning and plan management as normal events. The work performed in *implementing* the changes that are approved using the Scope and Change Management Plan processes is likewise handled in the other areas of project, mainly functional or technical project management.

The Scope and Change Management Plan handles changes up to the point of detailed process planning and laying out the implementation of the changes with the adequate amount of detail for project team leaders. The project leadership continues the process of change implementation when they integrate the approved changes into the project plan. These changes become essentially new, replacement, or amended project tasks or requirements.

2.4 The Difference between Scope and Change Management and Configuration Management

Change management and configuration management are different processes. Configuration management is concerned with controlling the different versions of work products that are required for different purposes during the development cycle and with ensuring that the correct versions of the work products are assembled to make the deliverables. For example, in a software development project, one software version may be being system tested while a newer version of the software is being unit tested and an older software version is being packaged for delivery to the State.

2.5 Components of the Scope and Change Management Plan

2.5.1 The Contract and Contract Changes

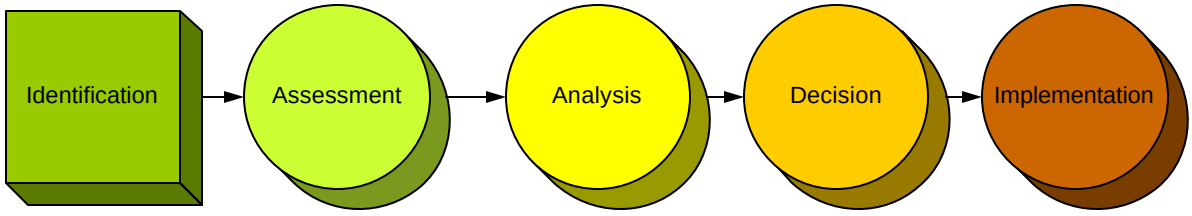
The Contract is the formal definition of the mutual commitments of IBM and the State of Louisiana. The Contract formally defines what products and services are to be supplied and how they are to be delivered within the framework of the terms and conditions for the ACESS project. Considering that at any point in time a contract is represented by both an initial contract and possible changes or project change orders, the Contract description reflects this by containing two components: one for the initial Contract and another for any changes. Therefore, when reading the term Contract, it should be understood it means the Contract and any approved contract amendments. The purpose of change orders is to assure only work authorized by the Contract is being performed.

2.5.2 The Change Request

A Change Request is a document or set of documents that contains all the information required to support the decision-making processes that are used to manage the unforeseen changes that arise during the course of projects. The prime purpose of scope and change management is to ensure that proposed changes that are of benefit to the project are implemented in a controlled manner and that proposed changes that are of little or no value are not. Change requests support this objective by providing:

- A record of the proposed change and the rationale behind it
- A record of the results of any analysis of the potential impact of the proposed change
- The information required by the Change Control Board to decide how to proceed with the proposed change and a record of those decisions

From the highest level, the change process includes five basic steps. First, the change is identified and documented, which includes a description of the proposed change and the rationale behind it. Next the change undergoes an assessment where it is evaluated with members of project management and other ACESS team members to decide the size of the requested change and whether or not it is a wise use of resources. The initial assessment will be documented in the Change Request document by the Change Request Owner. The requested change will then undergo an in-depth analysis which includes the evaluation of the outcome of an impact analysis. At this point, the Change Control Board (CCB) will have enough information to make a recommendation that is then reviewed by the Executive Steering Committee for final approval. The final step is the implementation of the change into the regular project plans where the change is then incorporated as a normal part of the ACESS project.



2.5.3 The Change Control Board

The Change Control Board is a formally constituted group of stakeholders responsible for approving or rejecting change requests. These stakeholders include representatives from both the State and IBM. For the ACESS Project, this group has been defined as the following:

- The State Project Director
- The State Deputy Project Director
- The IBM Project Manager
- The IBM Deputy Project Manager
- The State QA Vendor Representative

The members of the Change Control Board will be encouraged to include team members with specialized knowledge about the potential change's subject area when discussing Change Requests. The goal is to bring the best skills and background to the discussion and evaluation of the Change Request in order to make the highest quality decision. The Change Control Board will be the final approver of what are defined later in this document as "small" changes and will be the source of informed recommendations to the Executive Steering Committee for larger changes.

2.5.4 Change Order

The Change Order is the mechanism that allows an approved Change Request to actually move into the regular project planning process and become a fully integrated component of the project. It functions as an attachment to the detailed information of the Change Request to solidify the decision-maker for the change, the dates that the decision was made and any supporting documentation needed. Change Orders are only completed after the Change Control Board has recommended a Change Request for approval. The Executive Steering Committee is informed of the rejection of change requests including a very high level description of the request and a suitable amount of information to understand the justification of the decision. This information will be presented as a status update to the Executive Steering Committee meetings during the scheduled meeting following the decision. A special meeting will not be called to discuss rejection of small changes. The ACESS Project Management Office is responsible for creating the Change Order prior to the approval by the Executive Steering Committee. The goal is that the change in the Change Order information will be documented at a high level for use as a discussion tool and then can be signed and completed during the meeting when the Executive Steering Committee confirms the recommended decision.

2.5.5 Contract Amendment

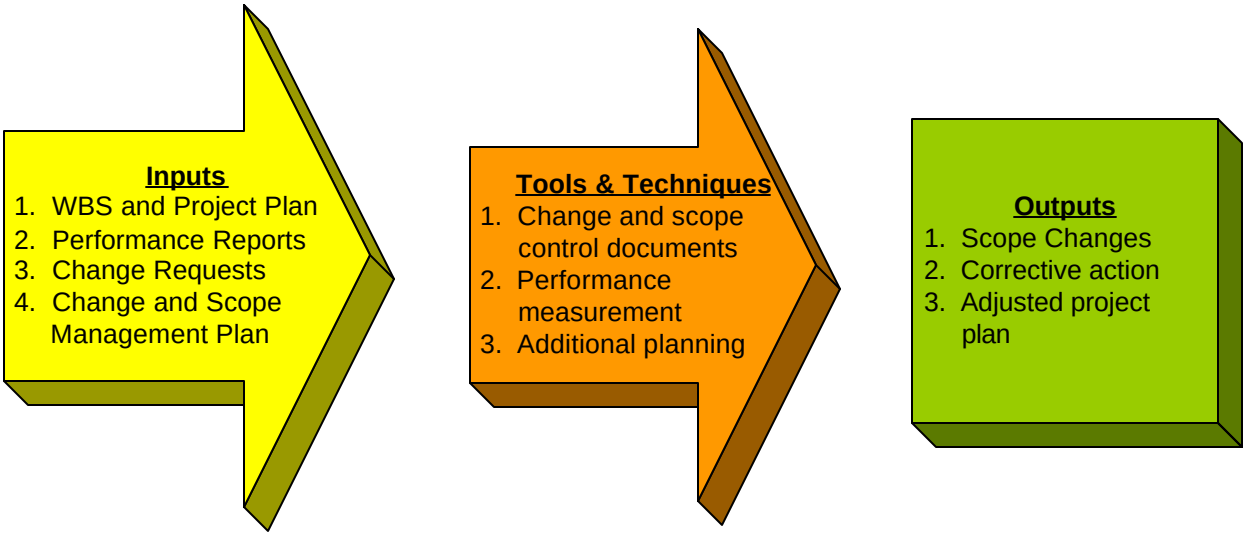
Upon completion of the Change Order process, the Change Order must still be approved through the contract amendment process. This includes approval by the DSS Executive Management, Office of Contractual Review, and in most cases the Administration for Children and Families. Development efforts will not begin until all necessary parties have approved the contract amendment.

3.0 DEFINITION OF SCOPE AND CHANGE CONTROL

The Scope and Change Management Plan must be tightly linked to other project management functions including schedule control, quality control, cost control, etc. Scope change control is concerned with:

- Influencing the factors that create scope changes to ensure that scope changes are agreed upon
- Determining that a scope change has occurred
- Managing the actual scope changes when and if they occur

An overview of the inputs, tools and techniques, and outputs of the Scope and Change Management process are shown in the following picture:



Many of the inputs of Change Requests that will occur in the ACESS project will stem from regular project reporting and updates. During the regular project reporting process, regular reports are drawn from repositories and documentation that will initiate the most common types of changes. These include status and reporting on risks, issues, project plan, and project team information.

3.1 Definition of Scope

The boundaries for inclusion and exclusion that define the depth and breadth of the project are classified as scope. Areas of consideration for the project definition include:

- Functionality (e.g., which Cúram modules will be implemented in a project)
- Organization (e.g., parts of the State's organization that will be affected)
- Life cycle phases (e.g., concept phases only or specification phase plus development)
- Deliverables (e.g., products included, services offerings excluded)
- Geographic areas (e.g., worldwide or within the state of Louisiana only)

The Scope and Change Management Plan is the final component of the scope planning process. This document describes how project scope will be managed and how scope changes will be integrated into the ACESS Project.

3.2 In-Scope Changes

One of the most basic components of the Scope and Change Management Plan is the definition of which changes are considered "in-scope" and are not required to be handled through the Scope and Change Management Plan and which changes are "out-of-scope" and are required to be managed through the plan. An "in-scope" request is a request for work as specified in the contract. On an ongoing basis, project management for the ACESS project will participate in the process of adjusting plans to attempt to keep the project on track and in good

health, in spite of variances that have occurred. Regardless of these adjustments, there will be events that require the project to change. The contract is the formalization of mutual. If the State and IBM determine a change to be "in-scope", it will be provided for under the terms of the contract.

3.3 Out-of-Scope Changes

Out-of-scope changes are those that are outside the boundaries laid out by the contract for inclusion and exclusion that define the depth and breadth of the project. Examples of out-of-scope changes might include the following:

- Functionality changes (e.g., requesting a processor to be included in a systems offering that is different than what was agreed upon in the contract)
- Organization changes (e.g., implementing functionality which affects different areas of the State's organizational structure than what was agreed upon in the contract)
- Life cycle phases or the timeline approach (e.g., requesting that certain functionality be delivered in or deferred to a different phase of the project than what was agreed upon in the contract)
- Deliverable changes (e.g., requesting different deliverables or significant revisions to deliverables that was not included in the contract)
- Geographic scope change (e.g. changing from a state-wide implementation to Baton Rouge only)

4.0 PROCESS DESCRIPTION: OVERVIEW AND ROLES

4.1.1 The Change Request

The prime purpose of Scope and change management planning is to ensure that proposed changes that are of benefit to the project are implemented in a controlled manner and that the proposed changes that are of little or no value are not. The process of gathering the information for investigation and entering it in the Change Request database is the important beginning of the decision-making process. The individuals who are raising the change request, the initiator, will meet with their team leads and appropriate members of the IBM and State team.

The initiator will create the initial Change Request record (identify the minimum items of information needed to register a change request). This process will be done using the Rational ClearQuest Change Request Functions. This new function was added to the same ClearQuest Database where the Issues and Risk are located. This information will then be available to the ACESS Project Management team who can assign the Change Request Owner. A unique change request identifier will be assigned to ongoing tracking of this Change Request. This identifier will be exclusive to one Change Request. The newly assigned owner and the appropriate ACESS team members will start to develop the action plan for investigation at this point and review it with the State and IBM project management team. The Change Request ClearQuest tool contains all of this detailed information and the details regarding the action plan. A sample view of the ClearQuest Change Request tool is included in Appendices.

The active change requests will be presented on a weekly basis to the ACESS Project management team for review and update purposes. On a monthly basis, the entire change order log will be reviewed for completeness and adherence to the processes described within this document. The Change Request has the following status options:

- Submitted
- Assigned
- Reviewed
- Defer
- Approve
- Reject
- Implemented

This process is designed to evaluate the best approach to manage the investigation of the requested change. Part of the initial review of information includes a review of the Change Request and discussions to clarify, if needed, what is proposed and the rationale behind the proposal. Typical rationale for initiating Change Requests includes:

- The need to resolve an issue
- The need to correct something
- The need to react to new conditions in the project environment
- The need to improve something based on more detailed information that has become available.

At this point, the Change Request will contain the basic information regarding the change to incorporate it into the Scope and Change Management Plan.

4.2 The Investigation Process

It is imperative that the investigation process of the Change Request be thorough and pertinent to the particular change. Without high quality Change Request information and investigation, the project could be faced with:

- Poor decision-making
- Project team confusion about what changes are to be made
- Inadequate analysis of all the activities required to implement a proposed change

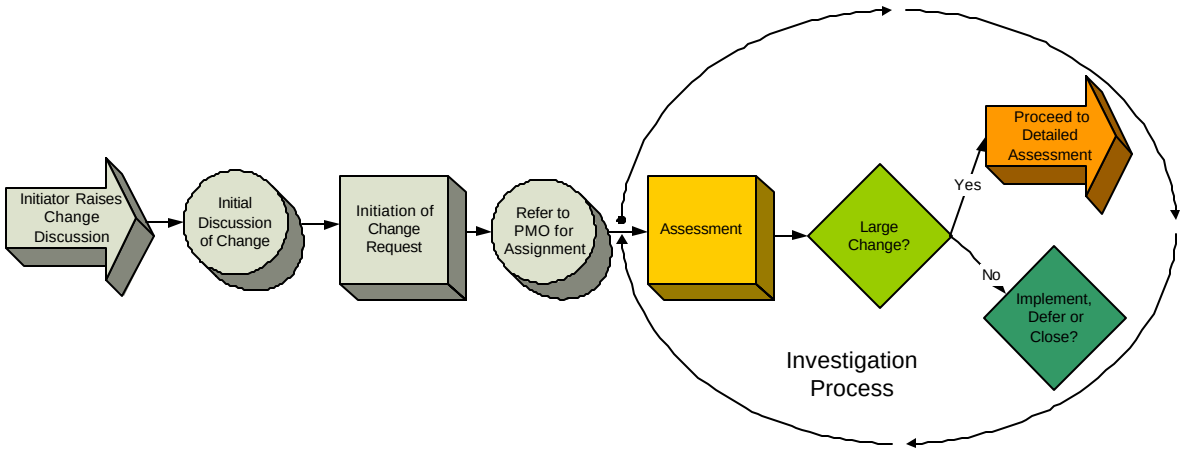
It may be immediately obvious from the most basic information contained in the Change Request that the request should either be deferred or rejected in which case it does not need further consideration by the team members, but should have documentation of the rationale behind the decision to reject the change. For this reason, the Investigation process has a screening component, or *assessment,* and is only escalated to additional investigation when the assessment is completed.

4.2.1.1 Assessment of the Change Request

The purpose of the assessment component of the investigation is to decide quickly how to proceed with a new Change Request. This process will occur during the initial review with the Project Management team members and other ACESS team members. One of the objectives of the assessment is to manage the amount of project decisions that are escalated to the Executive Steering Committee and assure that the committee's participation in the Scope and change management process remains meaningful instead of simply a process to be endured for every miniscule change. The possible outcomes for the initial assessment are:

- To accept the change with no further detailed impact analysis and no escalation to the Executive Steering Committee
- To approve further investigation and impact analysis before making a recommendation to the Executive Steering Committee to accept, reject or defer the change
- To defer or reject the change without escalation to the Executive Steering Committee

At this point, a preliminary judgment is made by the review team of whether or not the change should be classified as "small" or "large". Typically, small changes have no impact outside the ACESS project team, have no impact on the critical path for the project, and have no unplanned costs associated with them. Examples of small changes include making proposed improvements to the ACESS issues repository tool to help smooth the linking of issues and change order reference numbers. Small changes do not require further analysis before the Change Control Board decides whether the change should be implemented, deferred or rejected.



Larger changes should not be implemented without a detailed analysis of their potential impact. However, there are several reasons for briefly assessing large changes before deciding whether or not to analyze them in detail.

- Change Requests occur randomly and analyzing them may place significant demands on key resources already assigned to other ACESS activities. The ACESS project management team must decide how to perform the analysis while minimizing the short-term impact on project progress. Project management staff should review all change requests at their weekly Project Management Meeting.

- The detailed analysis process of Change Requests may result in unplanned expenditure aside from the decision to approve and implement the change. The potential size and effort of the Change Request should be evaluated to determine if significant time (more then a few days) will be required to perform the proper analysis. In the event the analysis will take more then a few days, there is the potential that the analysis activities will have a cost impact.

- A Change Request often involves several stakeholders and, potentially, other functions within IBM and Executive Management in DSS. Because change orders may involve negotiations and approvals, contributions from this group must be planned as part of the process.

4.2.1.2 Detailed Analysis of the Impact of the Change Request

For large changes, the first component of investigation is to quickly analyze the potential impact of the change at a high level, establish a plan for adequate investigation, and then investigating at a more detailed level. It is also decided during this part of the analysis to review the timeline for performing the detailed impact analysis and, if required, decide how the costs thereof should be distributed. The Change Request owner will then expand the project change assessment to decipher what the impact of the change will be on the project work products and/or deliverables. For example:

- Would the solution definition significantly change the existing design documentation?

- How significant will the impact of the change be to the project plan or overall project management procedures?

- Will the change have significant impact to the contract documents with the State or IBM?

Following this step, the investigation proceeds to identifying the affected stakeholders. The stakeholders should include anyone, who is likely to be affected by the change. For the ACESS project, this might include a change request for a different method to be used for data entry in the OFS field offices. The stakeholders would be the management of the OFS field offices, overall OFS management, State infrastructure and support teams, etc. The Change Request could not be evaluated without incorporating the impact on and benefits for the other groups and individuals who have a vested interest in the process.

The next step is to assess the pros and cons of implementing the requested change from each stakeholder's point of view and for the project as a whole. Drawing on the previous example, the Change Control Board needs to be able to evaluate the true impact of a change on the entire State and State-customer perspective, not just for the ACESS project team. One of the cons of project changes is often the impact on time-scales and costs. Therefore, once the investigation identifies the potential impacts of the change, the project timeline changes and associated costs should be estimated with as much detail as possible. The level of impact should be incorporated into the Change Request ClearQuest document during this process. The level of impact is impact that the change, if approved, would have on the ACESS project. The levels of impact are:

IMPACT CATEGORY	DEFINITION
Critical	**Scope** – Business critical function cannot be delivered or new

IMPACT CATEGORY	DEFINITION
	business function is essential to the functioning of the system and can not be delayed. **Schedule** – Immediate critical path impact; major milestone(s) will be missed by > 1 week; multiple team members currently unable to continue work until the risk is resolved **Cost** – Total program cost grown > 5% **Quality** – Quality issue that is causing the deliverable(s) to be unusable in their current state
High	**Scope** – Business critical function cannot be delivered or will be impaired if the change is not addressed in the time frame of the contract **Schedule** – Future critical path impact; major milestone(s) will be missed by > 1 week; multiple team members will be unable to continue work at a future point if the risk is not resolved **Cost** – Total program cost grown > 5% **Quality** – Quality issues will yield future deliverable(s) unusable or significant workaround will be required for a high priority requirement
Medium	**Scope** – Optional function cannot be delivered **Schedule** – Non-critical path impact > 1 week; 1-2 team members will be unable to continue work at a future point if the risk is not resolved **Cost** – Exceed WBS element cost > 5% **Quality** – Quality issues will require workaround for lower priority requirement
Low	**Scope** – Optional, lower priority function cannot be delivered **Schedule** – None or trivial **Cost** – None or trivial **Quality** – None or trivial

The appropriate level of overall impact can be deduced from a high level view of four main areas: project scope, project quality, project schedule, and project cost. When evaluating the change evaluation, team members should assign a level of 1 to the item that is defined as having a low impact to the particular change, a level of 2 to the change that has a medium impact to the change, a level of 3 should be assigned for those items that have a high impact, and a level of 4 should be assigned for those items having a critical impact to the project. For example, if the ACESS project management were to choose to purchase a brand new technical tool which would reduce the development documentation task by one-third, the evaluation might look like this:

Scope Impact Rating – 2 – This is a new development tool that could greatly increase the amount of time needed for the training component of the project, before the tool can even be used. This training, skill development and tool roll-out time was not included in the original estimates for time and resources resulting in a medium level of impact to the project. It would not be a high impact to the project as it does not concern the end resulting application scope, but only concerns the development time which occurs in essentially the background of the project.

Quality Impact Rating – 2 – It is unknown whether the quality of the resulting code will be up to the State's high standards.

Schedule Impact Rating – 2 – The tool might reduce the development time, but the ACESS team members will have a certain amount of ramp-up time associated with the new tool and the level of support from the vendor for this new product is unknown.

Cost Impact Rating – 3 – This is an unplanned, unbudgeted expense on a fixed price contract. There are no funds to use to implement this change.

From this simplified example, the change review team can deduce that the overall impact score is 9 (2+2+2+3). This is a medium impact score and therefore is a medium impact change. The following chart shows the classification of those scores in terms of the impact to be used on the Change Request Form.

Total Impact Score	Impact Level
4 – 6	Low
7 – 9	Medium
10 – 12	High
13 – 16	Critical

All of the previous steps should provide the basis for developing a summary of the investigational assessment. The summary should be in a format that when the information is reviewed with the Executive Steering Committee or the Change Control Board, the summary has the crux of the information in a structure that can be easily understood by individuals without specific, detailed knowledge of the requested change's subject area. The summary information is incorporated into the Change Order.

4.2.2 Recommend Course of Action

When the required background and investigational information is complete, the information will be submitted to the Change Control Board. The Change Control Board, pertinent affected parties selected by the ACESS project management team, and the owner of the Change Request will review the background, supporting documentation, and investigation of impact information. The ACESS Project Management Office (PMO) will facilitate this process. The Change Control Board will then recommend approval, denial or deferral of the Change Request and complete the information required on the Change Request Form. Change Requests recommended for approval will be submitted to the ACESS Project Executive Steering Committee for formal approval. Once formal approval is received the necessary contract amendments will be prepared and processed.

APPENDIX A: MAIN CLEARQUEST WORKSPACE SCREEN

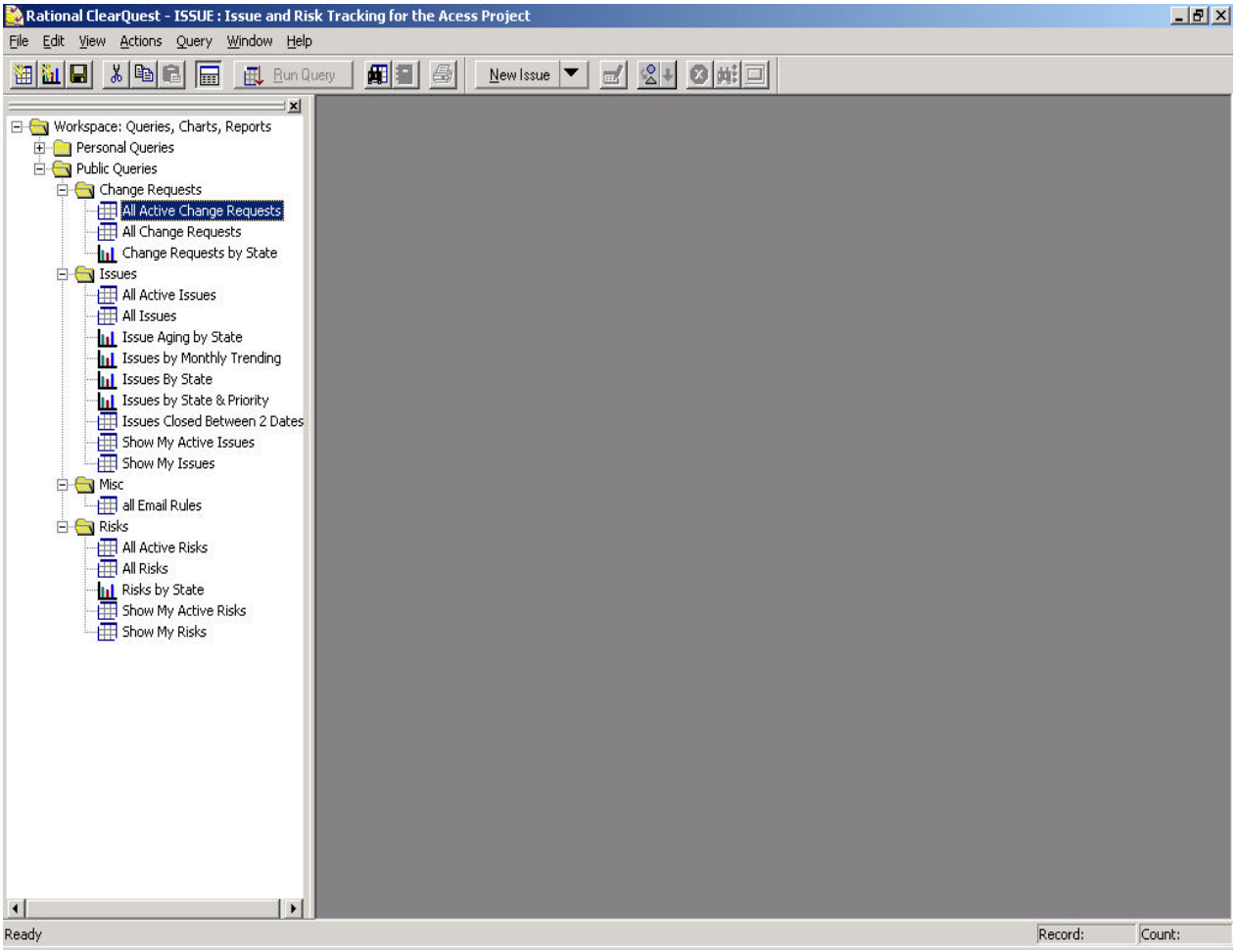


Figure 1: Main ClearQuest Workspace Screen

APPENDIX B: CLEARQUEST CHANGE REQUEST

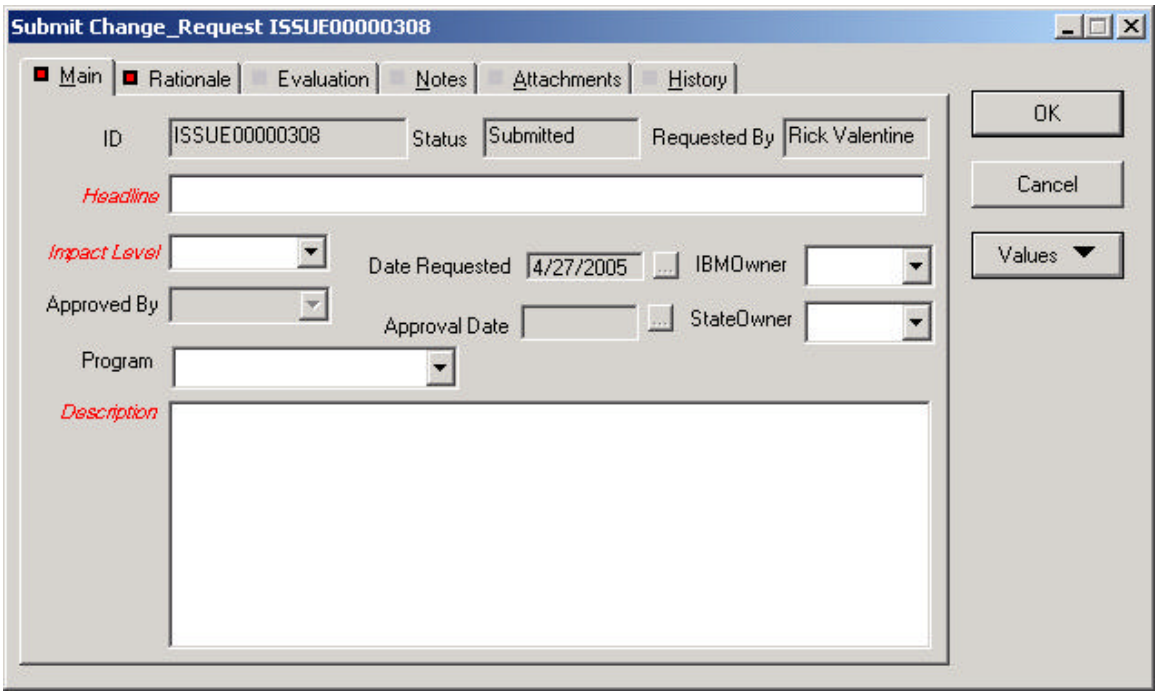


Figure 2: Change Request Main Screen

APPENDIX C: CHANGE REQUEST RATIONALE

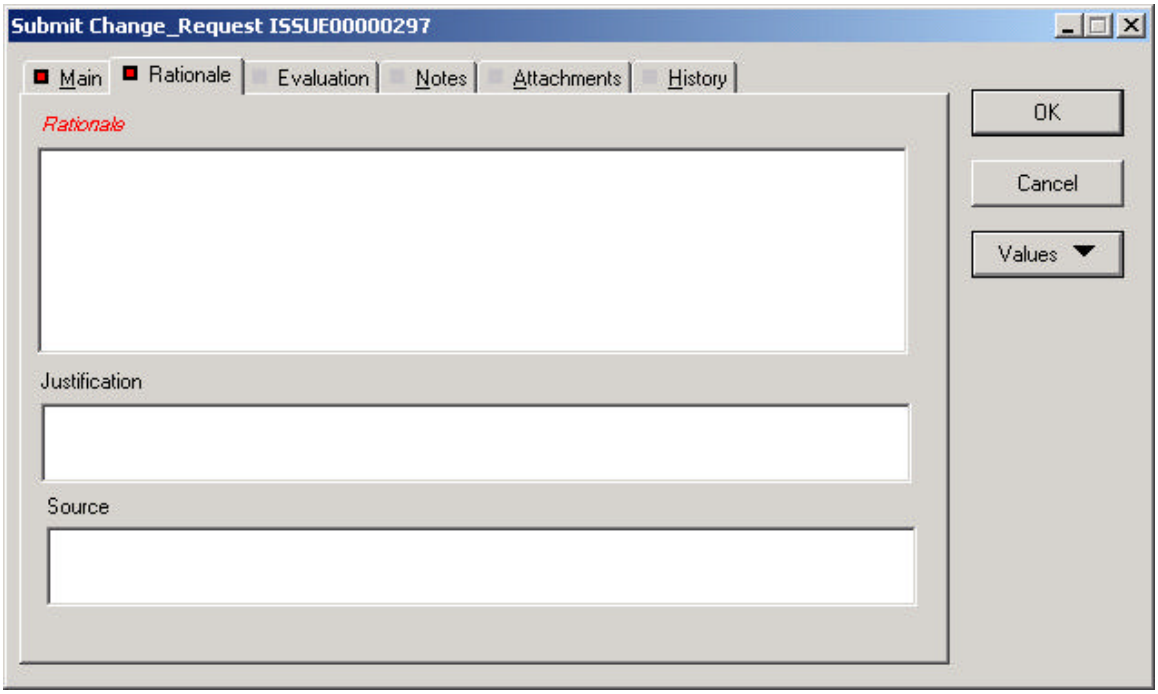


Figure 3: Change Request Rationale Entry Screen

APPENDIX D: CHANGE REQUEST EVALUATION

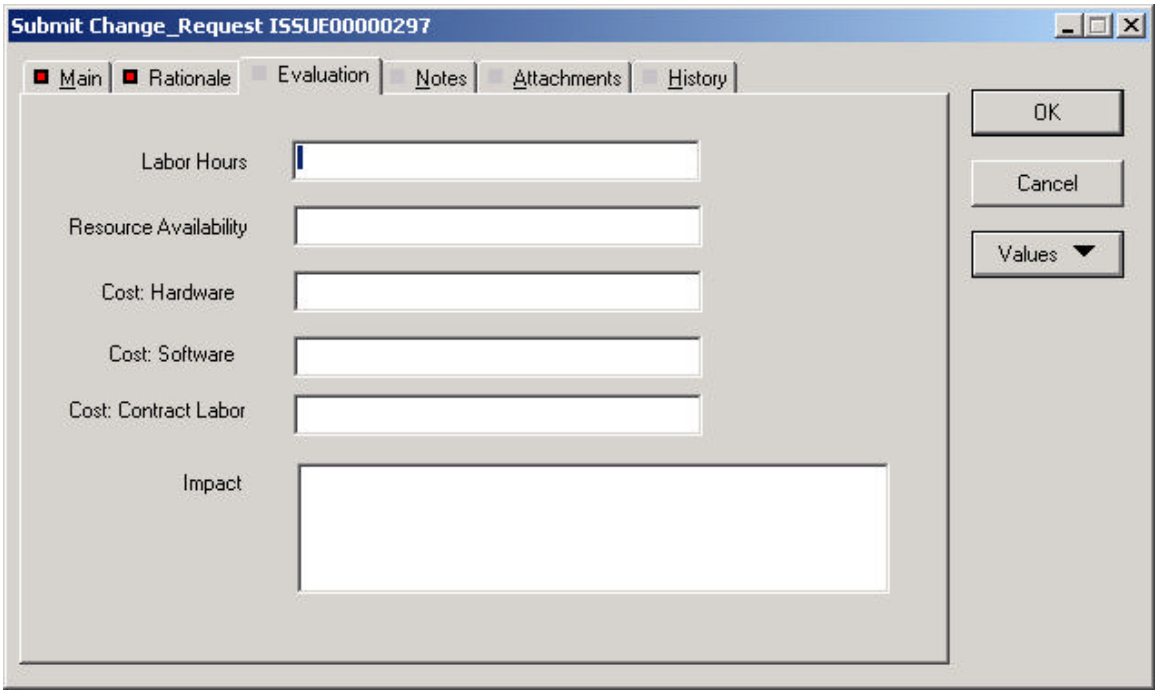


Figure 4: Change Request Evaluation Screen