Using Scope Change

Overview

If there is any single reason above all others that cause projects to be perceived as failures, it is because the objectives of the projects changed while the staffing, funding and management expectations remained constant.

While many project management purists believe that the only correct way to do a project is to lock the objectives on day one and never allow any changes, there is little evidence that this is the best model for project work in commercial enterprises. For one thing, it makes the project leader appear unresponsive to management and business realities. For another, it assumes that the project definition is very complete and well researched and that any required technology is understood and stable. Those requirements set a high standard for planning that can significantly add to the project duration and may impact its acceptability to the customer while still not really dealing with changing external factors such as new competition.

Given the practical problems just listed, how can you successfully run projects that are subject to change?

The accepted solution is to create an orderly process of change. We call this a scope change control system. The purpose of this system is twofold. First, to create an audit trail of the changes that were made and the reasoning behind them. Second, and more important, to force the project stakeholders to approve each change and be recorded as doing so. This spreads the responsibility for the decisions and their consequences to a larger community. Smart project leaders will actively engage their customers and managers in the scope change approval process.

Note that scope change control is just that, scope change control. Nothing in a scope change system relieves the project leader or team from their responsibility to do what they have committed to do in the time planned. Nor does it provide a way to cover up a lack of realistic planning or lack of understanding.

What it does do, however, is tie to specific changes in the project goals to approved changes in resources and delivery dates so that the project leader has a reasonable opportunity to succeed in a changing environment.

The Project Gateway scope control system provides a straightforward way to initiate, investigate, and approve scope changes for projects.

In order to make scope change control work best, it is desirable to have a good solid "starting point" that lays out the goals of a project. One way to do this is by using creating a Project Charter. Project Charters are one form of Project Document. The Project Charter provides a place to set expectations by defining both the Goals and the Non-Goals of a project. By doing this with some care, the project leader and customer has a basis for determining what requires a "scope change" and what is already included in the project objectives.

Another important tool in process control is the use of Milestone Definition documents. These are particularly useful in technical projects done for non-technical customers because they allow you to lay out in detail what to stakeholders should expect to be done at each point in the project process. If you have ever heard "but I must have finished prototypes for the photo shoot next week so we can have brochures at the July trade show!" you know how important it is to have the intermediate goals of a project well characterized.

The point being made is simply that it is much easier to manage scope change when you have a good description of what you are planning to do in the first place. Otherwise a scope change process can become a free for all where people dump everything they cannot get another project funded for onto your project because your goals are so open and you budget still so large.

A second point is that scope change control must be taken seriously if it is to be of any real value. This means that scope change approval should be a high hurdle that has management and customer involvement. Once everyone knows that changes are only approved if they are well justified, there will be few changes proposed, and those will be worth the effort to investigate, approve and implement.

The Scope Change form

The scope change form contains the following items

Topic:

A title for the requested change.

Status:

Requested

The initial status. Use this while the scope change is being defined.

Under Investigation

Use this to initiate an investigation. This will require an investigator to be selected and will give you to option (when the document is closed) to initiate a regular task assignment in addition to the standard notification.

To Be Approved - Waiting For Approval

Set "To Be Approved" to initiate approval. Before doing this, make sure that the investigation is complete and that the estimates shown are correct.

Approved

This status is set when the approval process is successfully completed.

Rejected

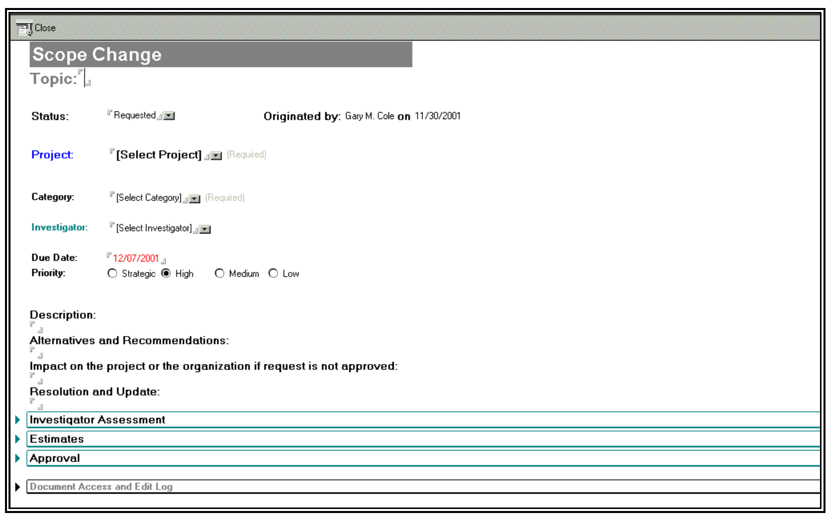
This status is set when the approval project leads to rejection, or manually by any editor of the scope change.

Deferred

This status is set manually by any editor of the scope change to postpone action indefinitely.

Merged

This status is set manually by any editor of the scope change to indicate that this change has been merged into some other scope change so it no longer being activity handled. Merging is not uncommon when large numbers of changes are being used.



Project

This is the project associated with the scope change. Unlike an issue, a project selection is required. If the wrong project is initially selected, or the project evolves into another, the scope change can be moved to another project using the Associate action.

Category

This is the classification of the change. It must be chosen from a list preconfigured by the repository administrator. It is a required field.

The category may be a factor in the approval process because project policy escalation rules based upon category may introduce extra approvals. Thus it is important to choose the correct category. Contact the administrator if the category names are unclear.

Investigator

This is the person most recently assigned to research the work associated with the scope change. This name can be selected by choosing a participant from the drop list, or by selecting "[Other]" and entering a user name. The investigator selected will receive an immediate email when the document is closed and saved or submitted.

Due Date

This is the date you set for required action on the scope change. If the scope change status is still Requested, Under Investigation, or Waiting for Approval on this date, the scope change will become overdue. If the change is Approved, Rejected, Deferred or Merged, the date has no meaning.

Priority

This is a selection made from a list of possible priorities defined by the repository administrator. Higher priorities appear first. Priority is normally set by the requester, but it is subject to modification by the project leader or other designated editors.

Description

What exactly are you proposing to add or remove from the project scope. Be very specific both to the content change and the timing of that within the project. So the description should say what you want and when it needs to be delivered (i.e., provide marketing with 2 production quality working prototypes for photo shot on July 14th)

Alternatives and Recommendations

There are often several possible ways to achieve a result. Please offer alternatives that make sense.

Impact on the project or the organization if request is not approved

There must be some value to this request, state it in an objective way.

Resolution and Update

This section is reserved for the project leader to put in comments after the change is implemented or committed into the project.

Investigator Assessment Section

These fields are intended to be used by the investigator to record their findings.

Impact (Cost, Deliverables, Work effort, Schedule, Organizational)

Who gets hit and how hard. Here we want the description of the likely impact, please put the hard numbers into the *Estimate* section. Provide enough text to convince others that you have actually investigated this objectively.

Overall Assessment/Recommendations:

Should this be approved? If not, why not? Provide reasons that go beyond the numbers.

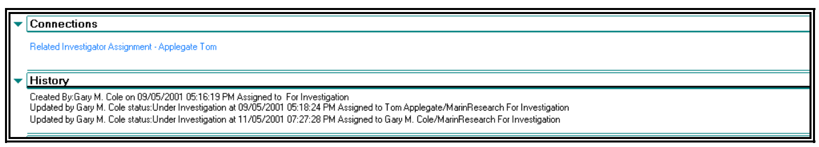
Connections (display only)

Connections provides a hyperlinked hotlist for all assignments and other documents directly linked to this scope changed (because they were created using the actions on the scope change form.)

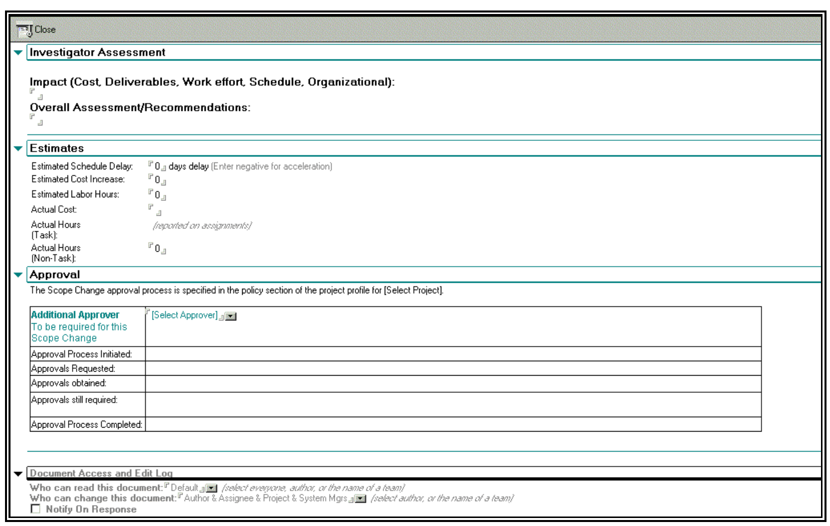
Clicking on one of these in Notes will display a dialog box listing the choices. Selecting a title and OK will open that document.

Clicking on one of these titles in a web browser will open the referenced document.

History (display only)



This section contains a log showing the user name and date of every status change of this scope change document. It will also log repeated approval attempts, rejections, etc.



Estimate Section

Estimated Schedule Delay

How will approving this change affect the final end date. This can be a positive number (slip, bad) or a negative number (acceleration, good).

Estimated Cost Increase

How will approving this change affect the final cost. Use an average value for labor costs.

Estimated Labor Hours

How will approving the change affect the total work. Zero is not a credible answer.

Actual Cost

If any actual money is spent on this change (buying equipment, services, etc. enter it here)

Actual Hours (Task): (display)

This field will show the actual labor hours reported on assignments that are linked to this scope change. These may be investigator or implementation hours.

Actual Hours (Non-Task)

This is a field you can use to report actual hours spent looking at this scope change that are not going to be reported on timesheets (because no task was created).

Approval Section

Additional Approver

This is where the requester or project manager can select an additional person to be in the approval process that might not normally be included by the project policy.

Approval Process Initiated: (display)

This shows when the approval process started.

Approvals Requested: (display)

This shows who has been asked for approval but has not yet responded.

Approvals Obtained:(display)

This shows each approval, abstention or administrative override or assumed approval.

Approval still required: (display)

This shows whose approval is still required. In sequential approval these people may not have yet been asked.

Approval Process Completed: (display)

This shows the completion date of the approval process.

Actions on the Scope Change form

These are similar to the same actions on other forms except as noted.

Respond

Create a Scope Response document to offer comments on the proposed changed.

Add to Locator (Web Only)

Puts this document on your favorites list.

Associate

Change the project to which the change is owned.

Link

This will create one or more Scope Dependency documents to logically link this scope change to several projects. Links appear in the Connections section of the form.

Approve

This allows a required approver to Approve, Abstain, or Reject. If used by another, a polite message is generated.

Create Assignment

This allows an assignment (involving one or more participants) to be created and linked to the scope change. These linked assignments will show up in the Connections section.

Note

This sends a message to the Project Manger, Author or to your Journal about this change.

check responses (Web Only)

This link, which appears just below the title, will generate a report page listing all of the responses to this scope change.

The Scope Change Process

1. The Requester creates the scope change request and sets a due date. The status becomes "Requested".

If the project policy option "notify PM about each new issue, risk and scope change" is set, the project manager will receive an immediate notification on the creation of the new scope change request.

At this point, the scope change document becomes a locus for responses from interested parties. This response mechanism allows the project community to weigh in on the value and impact of the scope change.

2. Either the Requester or Project Manager assigns an investigator and changes the status to "Under Investigation." At this time the user has the choice of simply notifying the investigator by email (which is always done) or also creating a task assignment for this work. The investigator can be changed by modifying the scope document selection.

3. When the investigation is complete, the investigator should write down their findings and enter estimates for the impact this change would have on the project.

4. At this point either the requester, project leader or investigator will change the status to "To Be Approved." This initiates the approval process. After a time specified in the project profile policy section, the project manager will be notified if the request is not approved.

5. Approvers are contacted and their approval is solicited. At this time they can read the request document and its responses. They can respond by either approving, abstaining, or rejecting the request. The approval process can also be overridden by an administrator.

6. When the approval process is complete, the request is either approved, rejected or put back into a requested state awaiting revision.

If the request has been approved, the project manager is now responsible for integrating the required changes into the project plan and making any changes in the project targets that have been approved as part of the scope change. The project leader should report these changes in the Resolution and Update section of the scope change form.

If the request has not been approved, the request can be changed and resubmitted for approval.

The Scope Approval Process

When the request is marked as "To Be Approved" the system initiates the scope change approval process and changes the status to "Waiting for Approval". It will then construct the list of approvers and start contacting them.

Note: In the simple case where the only required approver is the project leader, and when the project leader initiates approval, the system immediately marks the scope change as approved.

Constructing the List of Required Approvers

The list of approvers is constructed as follows:

1. If an "Additional Approver" is specified on the scope change form itself, they are put onto the list.

2. The project profile is accessed. The set of approvers specified in the policy option "Required approvers" is added to the list. This is a combination of up to 5 items. a) the UserID for the project manager as

set in this project profile (this may be more than one person) b) the UserID for the Program Manager from the associated Program Profile, again this can potentially be several people, c) the UserID of the Requester (from the scope change document) d) the UserID's associated with any of the selected participants and e) the UserID's specifically entered in this item.

3. Now the scope change estimates and category code are tested against each of the escalation rules. If the escalation condition is met, then the names associated with that condition are added to the list of approvers. Note that none, either or both of the rules can be activated by one scope change.

4. Duplicate names are removed from the approver list.

5. The name of the person who initiated the approval is put into the "Approval obtained" list with a message that approval is assumed since they initiated the process.

6. If the project policy specifies Parallel approval an email will be sent to everyone in the approval list. If the policy is set to **Sequential**, then only the first name will be contacted. Subsequent emails will be sent when the first person has responded.

If any of these prove to be "bad" email addresses, they will be removed from the approvals required list and added to the approvals obtained list with a note describing the email problem. In other words, if you have a bad name in one of these lists, it will be skipped, but reported and will not stop approval.

Approver Actions

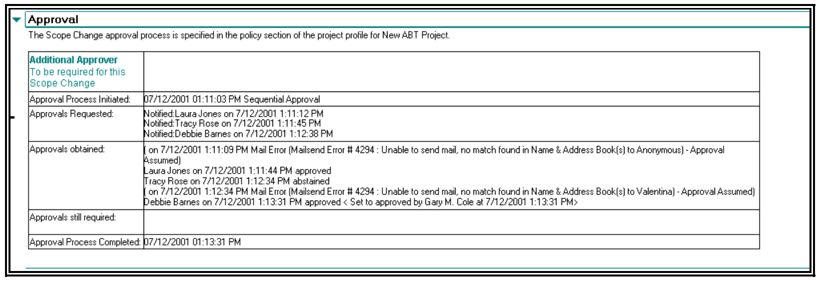
Whenever a person has been requested for approval they will be sent a message with a link to the scope change document. When that document appears an "Approval" button will be displayed.

When the approver selects the approval action, they will have three ways to respond. Approve, Abstain, or Reject. If they choose reject, they will be forced to enter a reason.

If the approver Approves or Abstains, this fact is noted in the list of approvals obtained along with the date and time. If Sequential approval is in effect, then the next approver will be notified. If that email address proves to be bad, then the system will continue down the list until a valid email address if found or until the list is empty.

Completing the Approval Process

Approval is declared when all of the required approvers have either approved or abstained. When this occurs, the scope change status is changed to Approved.



Approval

The Scope Change approval process is specified in the policy section of the project profile for New ABT Project.

Additional Approver To be required for this Scope Change	
Approval Process Initiated:	07/12/2001 01:11:03 PM Sequential Approval
Approvals Requested:	Notified:Laura Jones on 7/12/2001 1:11:12 PM Notified:Tracy Rose on 7/12/2001 1:11:45 PM Notified:Debbie Barnes on 7/12/2001 1:12:38 PM
Approvals obtained:	(on 7/12/2001 1:11:09 PM Mail Error (Mailsend Error # 4294 : Unable to send mail, no match found in Name & Address Book(s) to Anonymous) - Approval Assumed) Laura Jones on 7/12/2001 1:11:44 PM approved Tracy Rose on 7/12/2001 1:12:34 PM abstained (on 7/12/2001 1:12:34 PM Mail Error (Mailsend Error # 4294 : Unable to send mail, no match found in Name & Address Book(s) to Valentina) - Approval Assumed) Debbie Barnes on 7/12/2001 1:13:31 PM approved < Set to approved by Gary M. Cole at 7/12/2001 1:13:31 PM>
Approvals still required:	
Approval Process Completed:	07/12/2001 01:13:31 PM

If any required approver "Rejects" then the entire approval process is stopped immediately.

If emails have been already sent to others (Parallel approval) then new emails are sent telling them that the change was rejected and that they should ignore the previous request for approval.

Once a rejection has been obtained, the scope change status is changed to "Rejected."

Overriding the Approval Process

The project leader, or a person with the role of PGADMIN can override the approval process using the "Administrative Override" action button that appears in the Approvals section of the scope change document.

The administrative override is a comprehensive tool that can be used to make all possible corrections. Whenever an administrative action is taken the approvals obtained log will show what was done, when it was done, and who executed the command.

1. Force immediate approval or rejection, terminating the approval process.

2. Reinstate the approval process after a rejection without a complete restart.

3. Revise the existing recorded approval of some individual to be an abstention rather than an approval and vise versa.

4. Record the approval or abstention of anyone on the required approver's list (as a proxy for them). This is useful if someone has not gotten their email or has some difficulty accessing the database.