

Guidance on Approval to Build and Test a Change

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CD-doc-3568
Jan 7, 2010

Work to build and test the change will be authorized to proceed when the Change Manager has confidence that the change is motivated by business need, and the risk associated with the change is reasonable. Because change is a governance process, the change requester has the burden of convincing the change manager.

In this documentation, we outline the materials that must be submitted, and explain the rationale for them. Because the burden is on you to convince the change manager, you are always free to submit additional materials with your change request. Any lengthy additional material needs to be accompanied by a one-paragraph synopsis.

1 Business Justification

Business Justification is used to show that Fermilab has a valid reason for wanting the change.

The Business Justification for a change should be supplied in the WORK_INFO tab in the BMC/REMEDY tool. The Business Justification can be simple plaintext in remedy, a URL to a controlled data repository, or an attached file in a format anyone can read (e.g. PDF, RTF, ascii). If the documentation you are submitting contains more than the business justification, we require that a person scrutinizing the change be able to quickly locate the Business Justification by searching for the text "Business Justification".

The essential components of a Business Justification are:

- A plain language statement describing the change and business benefit.
- The relationship to the division's work plan and budget.
- Any requests that the change is directly responsive to.

1.1 Discussion:

By “plain language statement...”, we mean a statement that can be understood by a senior person in an oversight role. For most minor changes, the statement is expected to be one or two sentences. A paragraph is expected for a major change. In any case, if more than one paragraph is submitted, the first paragraph must summarize the business Justification.

By “Requests that the change is directly responsive to...”, we mean people, groups or organizations, or events that primarily motivate the change. In some cases, this information will be well represented in other parts of the BMC/Remedy system. For example, if this is well modeled in incident tickets linked to change request, you do not have to repeat this in a document attached to work-info. Simply indicate where we can find it.

1.2 Business Justification Examples:

Simple, straightforward change

Example: We are Patching Oracle because security of the servers and ORACLE support for our database requires us to be at a current release of Oracle. The work will be done under activity code xxx/yyy.

Example: We are replacing the router blade because CMS has demanding transfer needs and there is insufficient port buffering in the current blade. We expect this will deal with packet drops. The work will be done under activity code xxx/yyy.

Major Change

Example: These are a basket of changes that are part of a release to support the Configuration Module in Remedy, and are necessary for the division’s ITIL certification. The changes mainly provide for documents becoming Configuration Items, but also rely on changes in the division’s document database and web content system. The comprehensive plan is here: <https://cd.docdb/docid=xxxx>. It lists relevant activity codes.

2 Change Risk Statement

The change risk statement should help us understand:

- 1) The risk that the scope of the change is wrong, or is not optimal.
 - Will the change leave the system in a consistent or improved state?
 - What will the change affect?
 - What constrains the change, and are the constraints considered?
 - What convinces us that the change will address the business need?

2) The risk that the change has a defective implementation.

- What will be done to make sure the change is free of defects?
- What will be done to verify the change once it's put into the live environment?
- What will it take to back the change out, if it cannot be left in place?

2.1 Discussion:

The change requester's job is to convince the change manager and the change manager's advisors that these risks are understood and appropriately mitigated.

A change requester might submit a variety of materials, but there are three required data items that must be clearly marked:

- One or more comparable changes.
- A high level plan (statement of the tasks/milestones needed)
- The list of relevant CI's or other entities that the change will affect, and any change constraints.

Until the BMC/Remedy tool is configured to have a "work info type" of "Risk Statement", provide this information on the "requirements" work info type.

2.2 Comparable Changes:

The change requester should supply **any** of three kinds of information.

1) Name at least one previous RFC that is reasonably comparable to the proposed changes, with a note on the most salient differences.

Example: This change is very much like CRQ83, except that it will be implemented by a contractor, and not a staff system administrator.

2) Provide a paragraph describing at least one comparable change that is not accounted for in the Change Management system, along with the outcomes of the change, and a brief note on salient differences.

Example: This change is quite like the change implemented last year, where person X moved the web pages from machine Y to machine Z. The pages for this move involve php code while the previous pages were python. We have dealt with php before.

3) Provide a short paragraph indicating there are no reasonably comparable changes known, along with a brief statement about the capabilities of the staff anticipated to work on the change.

Example: While we are experienced with Apache, we have never dealt with Zope. This change involves dealing with a technology that is new to us, so I feel there are no reasonably comparable changes.

2.3 High Level Plan (statement of tasks/milestones needed)

This is best supplied in a table format. The table must provide a model of the kinds of different staff or skills envisioned as needed to build and implement the change, along with an indication of the schedule, with comments that address risk concerns which you feel might arise.

At some point, as the Fermilab ITIL implementation matures, it may very well be possible to model these activities with tasks or similar constructs in the remedy tool. When this is done, you do not have to supply the information in a table; just indicate how the data is represented in Remedy.

Example:

Task	Resource	Target Finish	Note
Develop	Carin	Jan 15	
Test screens	Mike	Jan 18	
Update training	Joe	Jan 19	
Package release/test backout	Carin	Jan 20	A
Develop Communication Materials	Don	Jan 20	
Install in live systems	Carin	Feb 5	
Verify live system	Mike	Feb 5	

Notes:

A: the backout plan will be difficult to develop, as part of the conversion involves an outside vendor changing their database schema.

2.4 List of Relevant CI's and Change Constraints....

List all the things **that will be changed or created** (or for large changes a summary of the changes). By “things”, we mean software, hardware, procedures, training, and the like.

Example: The following CI's will change

- CI000123 – EBSDEV oracle database
- CI000124 – EBSOTL oracle database
- CI000125 – EBSQA oracle database
- CI000126 – EBSPRD oracle database

We are also interested in “things” that **represent constraints to your planning**. Examples include, computer security plans, policies and procedures, contracts, and types of specifications.

Example: The disaster recovery plan constrains us to also update the Argonne disaster recovery site nearly simultaneously. If disaster should strike before updating the Argonne site, the effect would be xxxx.