

CHM Exercise 1/2 – NI4OS VMs



- You are a service provider that has been on-boarded to the NI4OS pre-production environment.
- You are offering different types of VMs to the EOSC customers
- A customer can choose a VM flavor using the following parameters
 - OS (Ubuntu LTS, CentOS, FreeBSD, Kali Linux)
 - CPU cores (2 – 8)
 - RAM size (16 GB – 64 GB)
 - Disk size (512 GB – 2 TB)
 - Network (private / public / both)

CHM Exercise 2/2 – NI4OS VMs service provider



- What are typical examples of changes that need to be managed within the NI4OS VMs service provider?
 - Standard changes?
 - Non-standard (“normal”) changes?
 - Emergency changes?



Standards for lightweight
IT service management

Service Operation & Control

Advanced training in service operation and
control according to FitSM

Version 2.5



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Standards for lightweight
IT service management

Change Management (CHM)

Objective

To ensure changes to CIs are planned, approved, implemented and reviewed in a controlled manner to avoid adverse impact of changes to services or the customers receiving services

CHM: Important terms & concepts



Definition following FitSM-0:

Request for change:

Documented proposal for a *change* to be made to one or more *configuration items (CIs)*

Definition following FitSM-0:

Change:

Alteration (such as addition, removal, modification, replacement) of a *configuration item (CI)* that contributes to providing one or more *services*

CHM: Requirements according to FitSM-1



PR12 Change Management

REQUIREMENTS

- PR12.1 All changes shall be registered and classified in a consistent manner.
- PR12.2 All changes shall be assessed and approved in a consistent manner.
- PR12.3 All changes shall be subject to a post implementation review and closed in a consistent manner.
- PR12.4 There shall be a definition of emergency changes and a consistent approach to managing them.
- PR12.5 In making decisions on the acceptance of requests for change, the benefits, risks, potential impact to services and customers and technical feasibility shall be taken into consideration.
- PR12.6 A schedule of changes shall be maintained. It shall contain details of approved changes, and proposed deployment dates, which shall be communicated to interested parties.
- PR12.7 For changes of high impact or high risk, the steps required to reverse an unsuccessful change or remedy any negative effects shall be planned and tested.

CHM: Initial process setup



Initial activities	Typical results
<p>Set up a tool (e.g. ticket / workflow tool) supporting the recording and handling (including classification, evaluation, approval, implementation, post implementation review) of requested and approved changes.</p>	<p>Initial (empty) RFC / change recording system</p>
<p>Define a standardized and repeatable way of recording requests for changes (RFCs) and resulting approved changes that specifies the sources and channels through which RFCs may be raised, the required format of an RFC, and the way in which the RFC is recorded in the recording system.</p>	<p>Generic template(s) for change records; procedure for recording requests for changes</p>

CHM: Initial process setup



Initial activities	Typical results
<p>Define the criteria for identifying emergency changes, as well as a standardized and repeatable way of dealing with emergency changes from recording to closure, including an emergency change review.</p>	<p>Criteria for identifying a emergency changes, emergency change procedure</p>
<p>Identify well-known and recurring changes (standard changes), and for each of them describe, where required, the concrete steps to be carried out in order to manage the respective change effectively from recording to closure (including the steps for implementing the change and ensuring adequate traceability and documentation).</p>	<p>List of standard changes; templates and / or procedures for handling them</p>

CHM: Inputs & outputs



Inputs

Requests for changes (RFCs)
Information on planned releases and deployments

Outputs

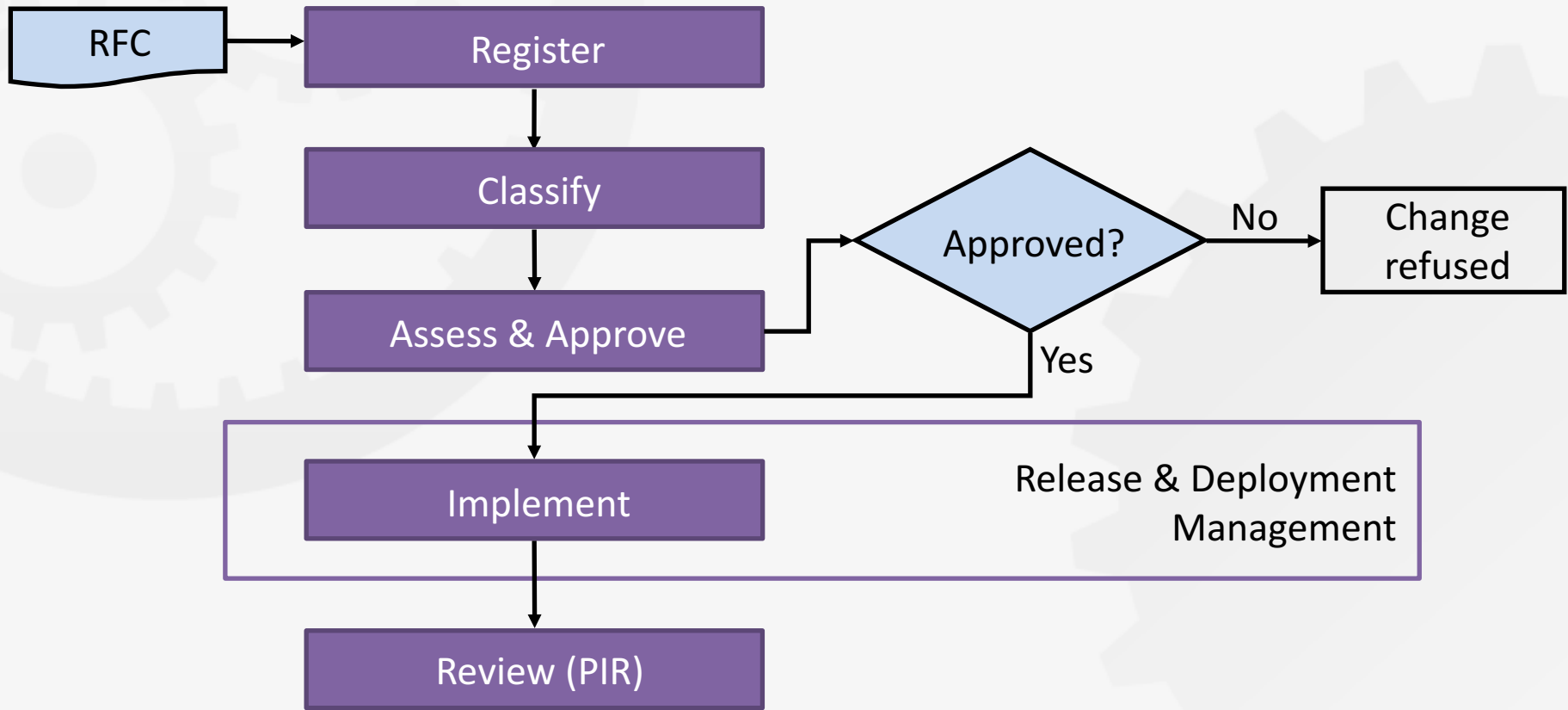
Change records
Up-to-date schedule of changes
Post implementation review reports
Up-to-date list of (pre-defined) standard changes and step-by-step-workflows for handling them

CHM: Ongoing process activities



- Manage changes (including emergency changes)
 - Record an RFC
 - Classify an RFC
 - Evaluate an RFC
 - Approve a change
 - Implement a change
 - Perform a post implementation review
- Maintain the list, descriptions and step-by-step workflows for well-known and recurring changes (standard changes)
- Maintain the schedule of changes

CHM: Workflow



CHM: Roles



Role	Tasks	Ca. number of persons performing this role
Process owner CHM	<i>Generic tasks of a process owner applied in the context of CHM</i>	1 in total
Process manager CHM	<i>Generic tasks of a process manager, plus:</i> <ul style="list-style-type: none">• Plan, schedule, prepare and moderate change advisory board (CAB) meetings• Maintain the list and descriptions of standard changes, together with relevant technical experts• Ensure that all requests for changes are processed effectively, and in a timely manner• Monitor the overall progress of change evaluation, approval and implementation• Review the change records in regular intervals, to identify trends or nonconformities or poor documentation / traceability	1 in total

CHM: Roles



Role	Tasks	Ca. number of persons performing this role
Change requester	<ul style="list-style-type: none">• Raise a request for change• If necessary, provide additional information to the change manager and represent the change during a CAB meeting	1 per request for change
Change owner	<ul style="list-style-type: none">• Control and coordinate all activities in the lifecycle of a specific change• Monitor the progress of change evaluation and implementation for this change• Ensure that the change record is complete and up-to-date at any time from recording the request for change to completion of the post implementation review• As applicable, communicate with the release owner of the release containing this change	1 per change

CHM: Roles



Role	Tasks	Ca. number of persons performing this role
Change advisory board (CAB)	<ul style="list-style-type: none">• Evaluate non-standard changes, taking into account at least:<ul style="list-style-type: none">• Benefits• Risks• Potential impact• Technical feasibility• Effort / cost• Decide on the approval of non-standard changes, based on the evaluation results <p><i>Important notes:</i></p> <ul style="list-style-type: none">• <i>The CAB should be composed of (all) relevant stakeholders of the changes that are currently subject to evaluation and approval.</i>• <i>CAB meetings should take place in regular intervals, although the specific composition of the CAB may / will vary.</i>	1 board for a certain number of changes

CHM: Critical success factors & KPIs



Critical success factors	Key performance indicators (KPIs)
All changes to CIs are under the control of the change management process	<ul style="list-style-type: none">• Number / percentage of (identified) changes that bypassed the change management process
The majority of low-risk, low-complexity, and high-frequency changes is handled as (pre-defined) standard changes, which are clearly defined.	<ul style="list-style-type: none">• Number / percentage of standard changes versus the overall number of changes