HPS

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Best Practices for Administrators

How to make RTFM and RTFD your standard responses

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What is a best practice?

"A best practice is a method or technique that has been generally accepted as superior to other known alternatives because it often produces results that are superior to those achieved by other means or because it has become a standard way of doing things, e.g., a standard way of complying with legal or ethical requirements."

— https://en.wikipedia.org/wiki/Best_practice

Why do we need best practices?

- Why re-invent the wheel, if there is a *working* solution at hand?
- Ease transitions and communication in teams
- Save you a lot of time in the long run

Where do best practices come from?

Depending on the field, you will find different requirements for best practices:

- Project Management
  - ISO 21500, ISO 9000, PRINCE2, HERMES (Switzerland), PM^2 (EU)
- Software Development / Software Lifecycle Management
  - Waterfall or Spiral Model, Scrum, Kanban
- Quality Management
  - ISO 9000, ISO 9001, (ITIL)
- Information Security Management (Systems)
  - ISO 27001, ITIL
- IT-Service Management
  - ITIL, COBIT, eTOM, FitSM, ISO 20000

Information Technology Infrastructure Library (ITIL)

- Set of detailed practices for IT activities (e.g., ITSM and ITAM)
  - incident management
  - asset management
  - event management
  - IT security management
  - change management
  - service management
- De-facto-standard $\rightarrow$ certification for individuals
- Describes processes, procedures, tasks, checklists

It’s all about the documentation

Different types of documentation necessary

- User documentation
- Network documentation
- Software documentation
- Hardware documentation
- Process documentation
- Change documentation (logging)

What and how you will need to document, depends on your systems, your team, your employer and your responsibilities

→ **Documentation is extremely individual.**

Attention to the audience!

User-faced

- Different levels of expertise
- Mainly focussed on how to *use* the system
  - Tutorials and how-tos
  - FAQ
  - Code examples

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Admin-faced

- Documents workflows and responsibilities
- Explains how to *run* the system
  - Where to find what
  - How to do what
  - What the admin did and **why**

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User-faced

- Different levels of expertise
- Mainly focussed on how to *use* the system
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  - Code examples

This saves you from spending too much time on easy user support questions and makes the customer happy. (=RTFM)

Admin-faced

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  - How to do what
  - What the admin did and **why**

This saves you from lengthy training of new team members and from calls from your team mates during your vacation. (=RTFD)

Requirements for good documentation

- Write documentation that is inviting and clear
- Write documentation that is comprehensive, detailing all aspects
- Write documentation that is skimmable, easy to navigate
- Write documentation that offers examples of how to use the software
- Write documentation that has repetition, when useful
- Write documentation that is up-to-date
- Write documentation that is easy to contribute to
- Write documentation that is easy to find

https://www.oreilly.com/content/the-eight-rules-of-good-documentation/

Change documentation (ITIL)

- **Change**: The addition, modification or removal of anything that could have an effect on IT services. The scope should include changes to all architectures, processes, tools, metrics and documentation, as well as changes to IT services and other configuration items.
- **Change Record**: The Change Record contains all the details of a Change, documenting the lifecycle of a single Change. It is usually created on the basis of a preceding Request for Change (RFC).
- **Change Schedule**: A Document that lists all approved Change Proposals and Changes and their planned implementation dates. A Change Schedule is sometimes called a Forward Schedule of Change (FSC).

https://wiki.en.it-processmaps.com/index.php/Change_Management

Recall and document - 10 minutes

Recall what you have already set up and installed in this course. In your group, choose one and document your steps from your memory. Also include, what you would have documented on the go, even if you don’t remember what exactly you did right now. In the end, you should have a list of things, you would expect in a change record.

- Do you remember every step?
- Are you having difficulties remembering everything?
- Could you explain to a colleague what exactly he*she has to do?

Compare to change record - 10 minutes

You have created a list of things you would document - compare this to the ITIL change record checklist here [1]. Think about the elements on the list, their necessity and the difference to your list from the exercise before.

- Where are the differences? Did your list cover all these things?
- Why are the items, that were not on your list, useful or necessary?
- Are there elements, which are unclear, i.e. why they appear in the change record?

[1] https://wiki.en.it-processmaps.com/index.php/Checklist_Change_Record

If you have time left...

How would the according process for your change look like?

Plenary discussion

- Open questions?
- What were your findings?
- What would you do differently?

ITIL Change Record (1/4)

- Unique Change ID
- Initiator of the RFC
- Date of submission
- Short description of the Change being applied for
- Reason for the Change to be implemented (Business Case)
- Priority (urgency)
- Category (effects)
- Predicted/suggested time schedule for the implementation
- Review comments from the clearance process
- Constraints (i.e. restrictions, which arise due to the evaluation of the Change by the CAB)

ITIL Change Record (2/4)

- Effects upon:
  - Business areas on the client-side
  - IT Services
  - IT Infrastructure components (CIs)
  - Technology spectrum (is a new technology being introduced?)
- Risks during the implementation of the Change
  - Types of risk
  - Counter-measures (e.g. reversion procedure)

ITIL Change Record (3/4)

- Resources for the implementation
  - Required personnel resources (from which areas?)
  - Estimated work effort for the required personnel resources
  - Necessary training measures
    - Users on the client-side
    - IT Employees
  - Cost estimate
  - Statement as to whether the costs are included in the planning of the budget

ITIL Change Record (4/4)

- History of events
  - Date of submission of the RFC
  - Date of the receipt of the RFC by the Change Manager
  - Date of the acceptance or rejection of the RFC
  - Date of the clearance or rejection of the Change
  - Date of transferal to Release Management
- History of decisions

Change record, as suggested here:

https://wiki.en.it-processmaps.com/index.php/Checklist_Change_Record

References