

Introduction to technical writing

The fundamentals of technical writing | BUT 2024

The Red Hat Customer Content Services team



Šárka Jana Janderková

cat lover & Linux enthusiast

former marketing specialist, lecturer, manager



Jiří Herrmann

A long-time Technical Writer at Red Hat, a language enthusiast, proud servant of two cats, and a shameless nerd



Jan Fiala

Senior Technical Writer, at Red Hat for 4+ years. Previously, a translator to and from English for 10 years.

Organization of the *Fundamentals of technical writing* course:

Information about the course is available in [GitHub](#)

- Slides after each lecture

Goal of the course

Communication channels

- Email, Discord

Discord

<https://discord.gg/S35m7AX6gy>



Homework and grading

nr	Homework	Deadline	How to submit	Max points	Grading
1	Introduction & Style I	May 27 10:00 PM	Send to jafiala@redhat.com	30	Minimal requirement to pass: 60 % of the total amount of points (90 points out of 150)
2	Style II + III	May 28 10:00 PM	Send to jafiala@redhat.com	30	
3	Tools I + II	May 29 10:00 PM	Pull request to repository	30	
4	Hard skills + Soft skills	May 30 10:00 PM	Send to gfialova@redhat.com	30	
5	LLMs + Usability	June 31 10:00 PM	Send to jafiala@redhat.com	30	

What we'll discuss today

- What is technical writing?
- Types of technical documentation
- Role of technical writers
- Life of a technical writer
- It is all about users!
- In-class assignment
- Using AI
- Career paths in technical writing

Instructions unclear, got stuck in washing machine.



What is technical writing for?

What is technical writing like?



What is technical writing?

- Helps readers achieve their goal (learning or doing)
- Writes *about* the product, but *for* the user
- Technical information is accurate, clear, and effective
- Forms of tech writing:
 - Manuals, guides
 - Solutions, troubleshooting
 - Release notes, patch notes



The importance of technical writing

- Users understand the product better and use it more effectively.
- Devs understand code quicker than parsing or experimenting.
- Customers make better decisions about buying the right product.
- Better knowledge-sharing

“How hard can it be?”



EXERCISE 1: Tea

- Describe the process of making
1 cup of loose-leaf tea



Types of technical documentation

Manuals, guides	Solutions, troubleshooting	Release notes, patch notes
<ul style="list-style-type: none">• “How do I do XY?, “What is XY?”• Conceptual, procedural, referential• Longer, more detailed, focused on a use case	<ul style="list-style-type: none">• “XY is not working”, “How to fix the XY error?”• Sometimes integrated into the product itself• Focused on a specific problem, often curated by customer support	<ul style="list-style-type: none">• “What changed in version XY?”, “What’s new in the latest XY?”• Simple structure, brief, focused on a software version

Types of technical documentation

Chapter 20. Installing and managing Windows virtual machines

To use Microsoft Windows as the guest operating system in your virtual machines (VMs) on a RHEL 9 host, Red Hat recommends taking extra steps to ensure these VMs run correctly.

For this purpose, the following sections provide information on optimizing Windows VMs on the host, as well as installing and managing these VMs.

20.1. Installing Windows virtual machines

You can create a fully-virtualized Windows machine on a RHEL 9 host using the graphical Windows installer inside the virtual machine (VM), a Windows guest operating system (OS).

To create the VM and to install the Windows guest OS, use the `virt-manager` command or the RHEL 9 web console.

Prerequisites

- A Windows OS installation source, which can be one of the following:
 - An ISO image of an installation medium
 - A disk image of an existing VM installation
- A storage medium with the KVM `virtio` drivers.

To create this medium, see [Preparing virtio driver installation media](#).

Unable to SSH to new Virtual Machine after upgrading the template to RHEL 8.7 or 9

SOLUTION VERIFIED - Updated November 29 2022 at 9:49 PM - [English](#) ▾

Environment

- Red Hat Enterprise Linux (RHEL) 9
 - `cloud-init-22.1-5` or higher (9.1)
 - `cloud-init-21.1-10` or higher (9.0)
- Red Hat Enterprise Linux (RHEL) 8
 - `cloud-init-22.1-5` or higher (8.7)
- Configuration file `cloud.cfg` originally created on RHEL 8.4 with `cloud-init-20.3-10` or lower
- Red Hat Virtualization 4
- Red Hat OpenStack Platform 16
- Red Hat OpenShift Container Platform 4
- Amazon AWS
- Microsoft Azure
- Google Cloud Platform

Issue

- Unable to SSH to a Virtual Machine after upgrading it to RHEL 8.7, 9 or higher versions.
- During first boot, `sshd` fails to start on new Virtual Machines:

```
Nov 29 08:49:18 rhe18 systemd[1]: Starting OpenSSH server daemon...
Nov 29 08:49:18 rhe18 sshd[2946]: Unable to load host key: /etc/ssh/ssh_host_rsa_key
Nov 29 08:49:18 rhe18 sshd[2946]: Unable to load host key: /etc/ssh/ssh_host_ecdsa_key
Nov 29 08:49:18 rhe18 sshd[2946]: Unable to load host key: /etc/ssh/ssh_host_ed25519_key
Nov 29 08:49:18 rhe18 sshd[2946]: sshd: no hostkeys available -- exiting.
Nov 29 08:49:18 rhe18 systemd[1]: sshd.service: Main process exited, code=exited, status=1/FAILURE
Nov 29 08:49:18 rhe18 systemd[1]: sshd.service: Failed with result 'exit-code'.
Nov 29 08:49:18 rhe18 systemd[1]: Failed to start OpenSSH server daemon.
```

Resolution

Chapter 1. Overview

1.1. Major changes in RHEL 9.1

Installer and image creation

Following are image builder key highlights in RHEL 9.1 GA:

- Image builder on-premise now supports:
 - Uploading images to GCP
 - Customizing the `/boot` partition
 - Pushing a container image directly to a registry
 - Users can now customize their blueprints during the image creation process.

For more information, see [Section 4.1, "Installer and image creation"](#).

RHEL for Edge

Following are RHEL for Edge key highlights in RHEL 9.1-GA:

- RHEL for Edge now supports installing the services and have them running with the default configuration, by using the `fdo-admin` CLI utility

For more information, see [Section 4.2, "RHEL for Edge"](#).

Security



The role of technical writers

- Understand the subject, and describe it well enough to save work for the readers.



Who can be a technical writer **ANYONE!**

(...with some effort)

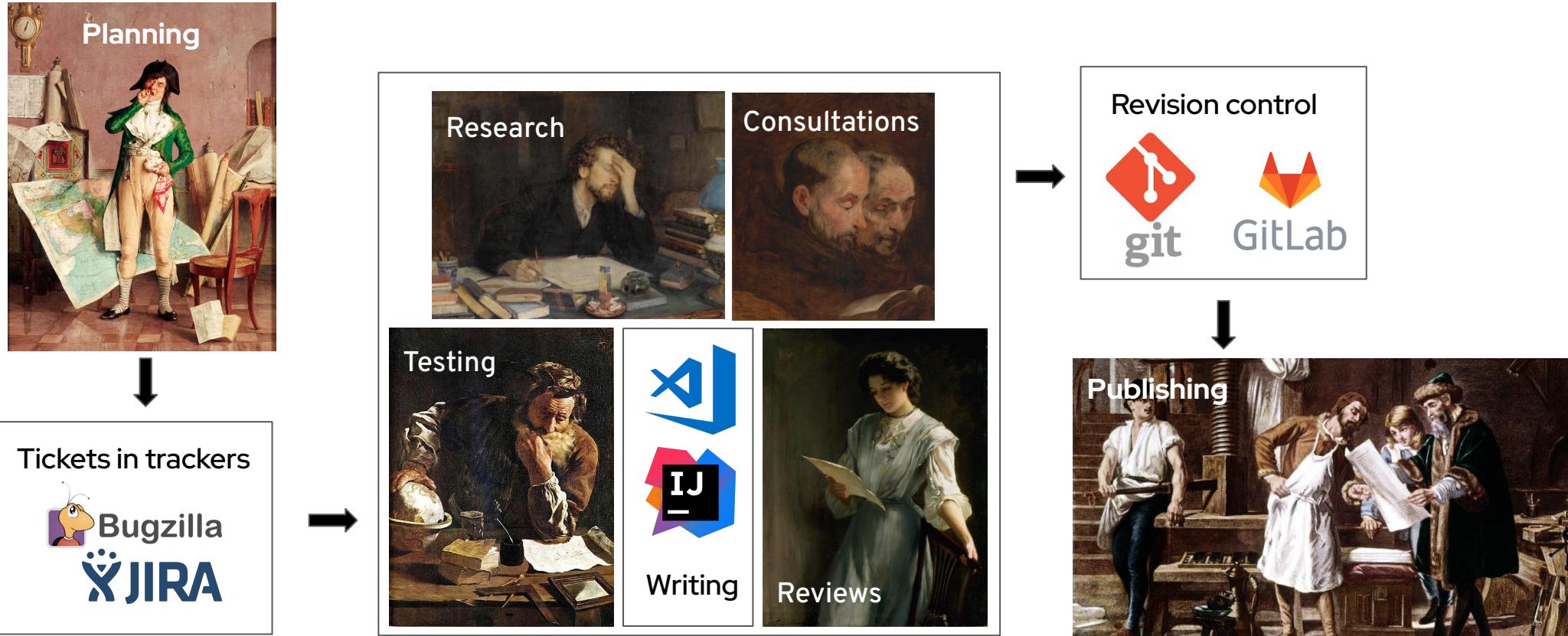
However, it helps to have experience with:

- Written composition in English
- The related subject matter (such as IT)
- Teamwork

What people think I do
when I tell them that I am a technical writer:



How documentation actually happens



Credits:

- The Passion of Creation by Leonid Pasternak; wikimedia Commons, PD-Russia-expired, edited
- Domenico Fetti - Archimedes, Wikimedia Commons, PD-US, edited
- Anonymous, a Copy after a painting traditionally attributed to Van Dyck of Two Monks Reading, Wikimedia Commons, PD-US, edited
- Thomas Kennington - Reading the letter, Wikimedia Commons, PD-US, edited
- Giovanni Batista Quadrone - The Cartographer, Wikimedia Commons, PD-US, edited
- ClassicStock



QUICK TIP



Get acquainted with the concept of [user personas](#). While not a technical writing concept, personas can help you customize your content to best suit your target audience.

The user

The user is the focus of your writing. Make sure you know who your target audience is and tailor your content accordingly.

Best practices for user-focused content:

- Use second person.
- Make the content action-oriented.
- Ask for user feedback.
- See what I did there?

User story

User stories help plan new features and functionalities in Agile development. They focus on what the user wants and how the proposed feature/functionality can help them reach their goal:

“As a [type of user], I want to [goal], so that [benefit].”

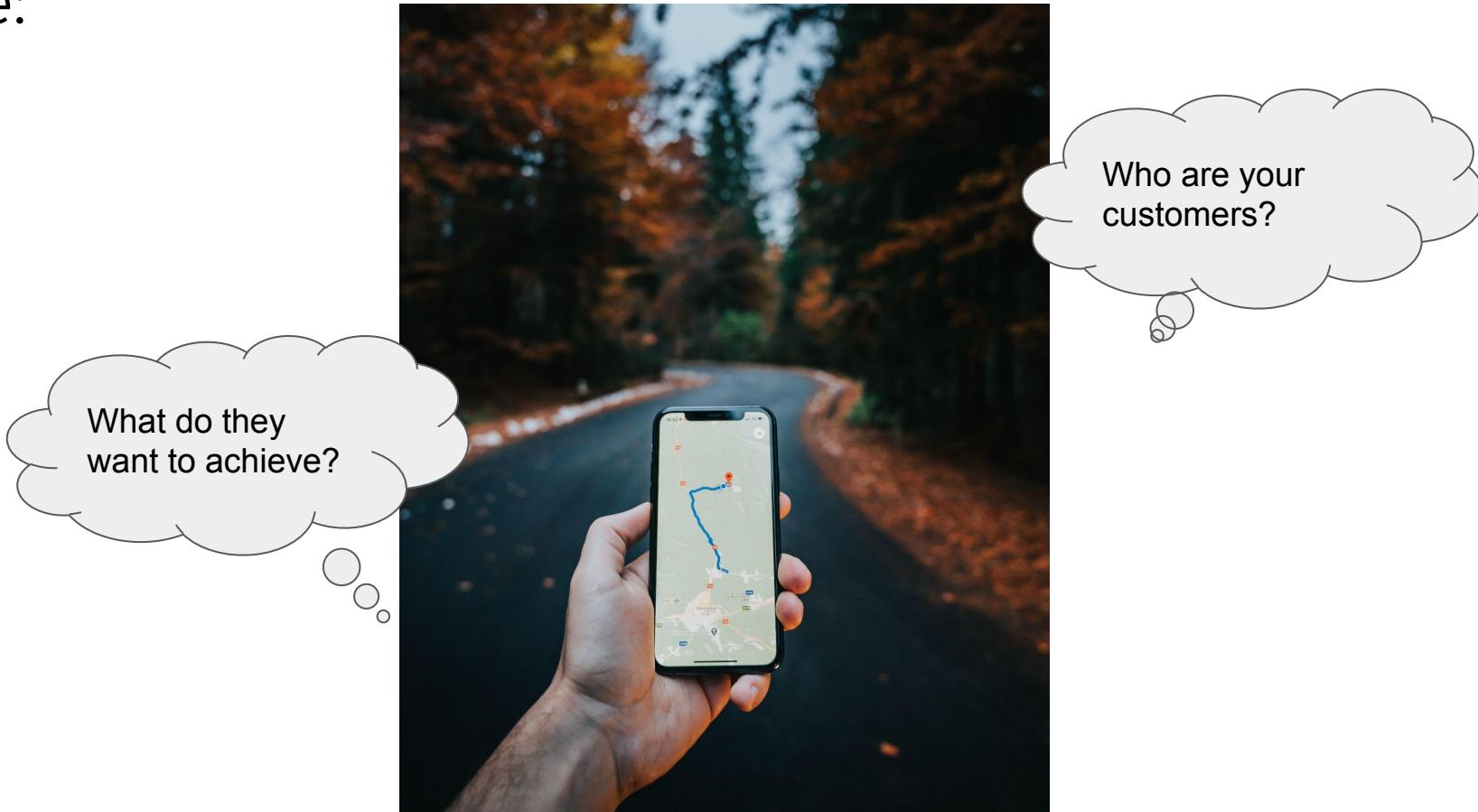
User stories are visualized as maps that capture each step the user takes when using the proposed feature/functionality to achieve their goal.

User story map elements:

- Activities
- Steps
- Details

EXERCISE 2: What do users want

Online maps and navigation - try to think of as many user stories as possible:



Summary



- DOCUMENTATION
 - Technical writing
 - Types of documentation
- WRITER
 - The role of technical writers
 - What tech writers usually do
- USER
 - = king, target audience, user stories

How (not) to use AI tools (LLMs)



- AI tools produce output that seems great but usually isn't.
- Use it for:
 - Brainstorming
 - Overcoming writer's block
 - Initial research into well-known areas
- Don't use it for:
 - Homeworks :)
 - Writing documentation
 - Research into obscure or recent areas

Career paths in technical writing



****DO NOT
FORGET
DEVELs & QEs**

Career paths	Job roles	Responsibilities
Technical documentation	Technical writer, Technical author, Technical communicator	Writing user manuals, installation guides, and other technical documentation for software, hardware, and other products.
Technical editing	Technical editor, Technical proofreader, Technical reviewer	Reviewing and revising technical documents to ensure accuracy and clarity.
Content development	Technical eLearning developer, Technical trainer, Technical instructional designer	Creating instructional and training materials for technical products and processes.
Content strategy	Content strategist	Auditing and analyzing existing content, developing strategy, measuring and analyzing content performance.
Management	Docs program manager	Managing the documentation process, releases, coordinates with other departments.
Consulting	Technical communication consultant	Advising companies on how to effectively communicate technical information to their customers and employees.



IN-CLASS ASSIGNMENT

[Click here to create a copy of the assignment doc]

Send to jafiala@redhat.com

Thank you