



# abapGit for Beginners



December 2021

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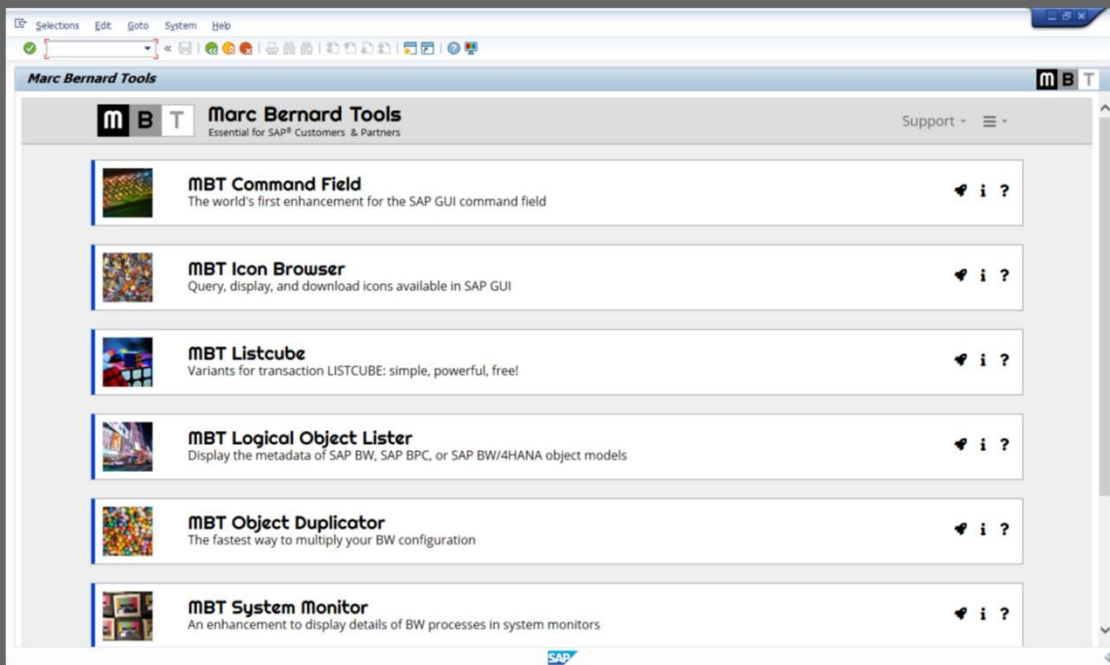
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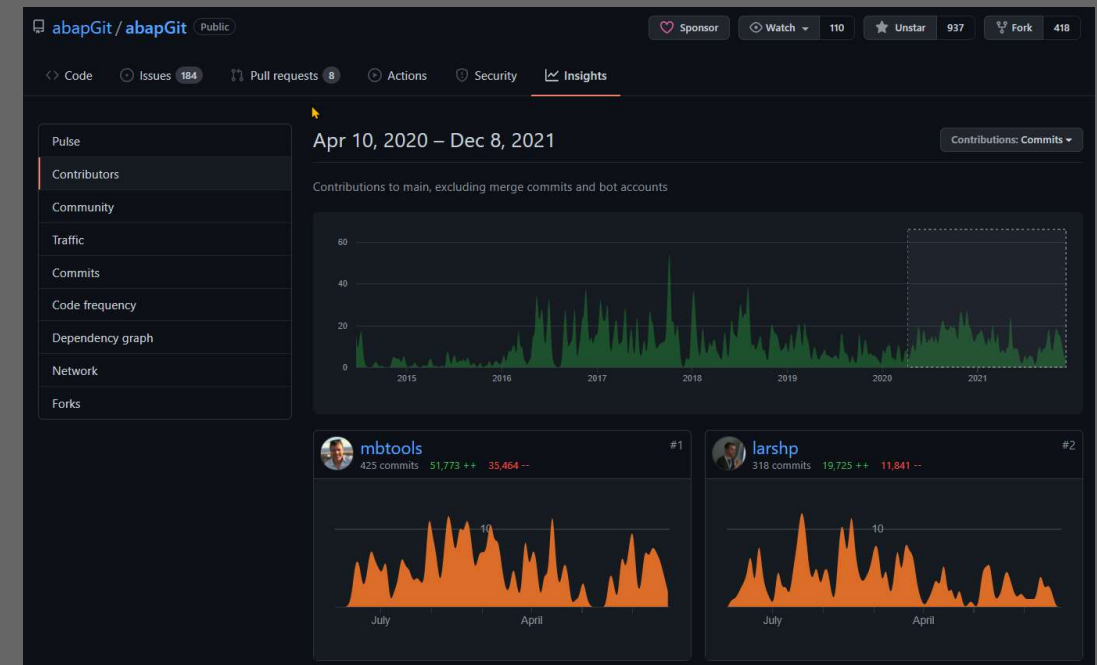
# Marc Bernard



Building awesome open-source tools  
for SAP customers, partners, and developers



Bootstrapping  Marc Bernard Tools 

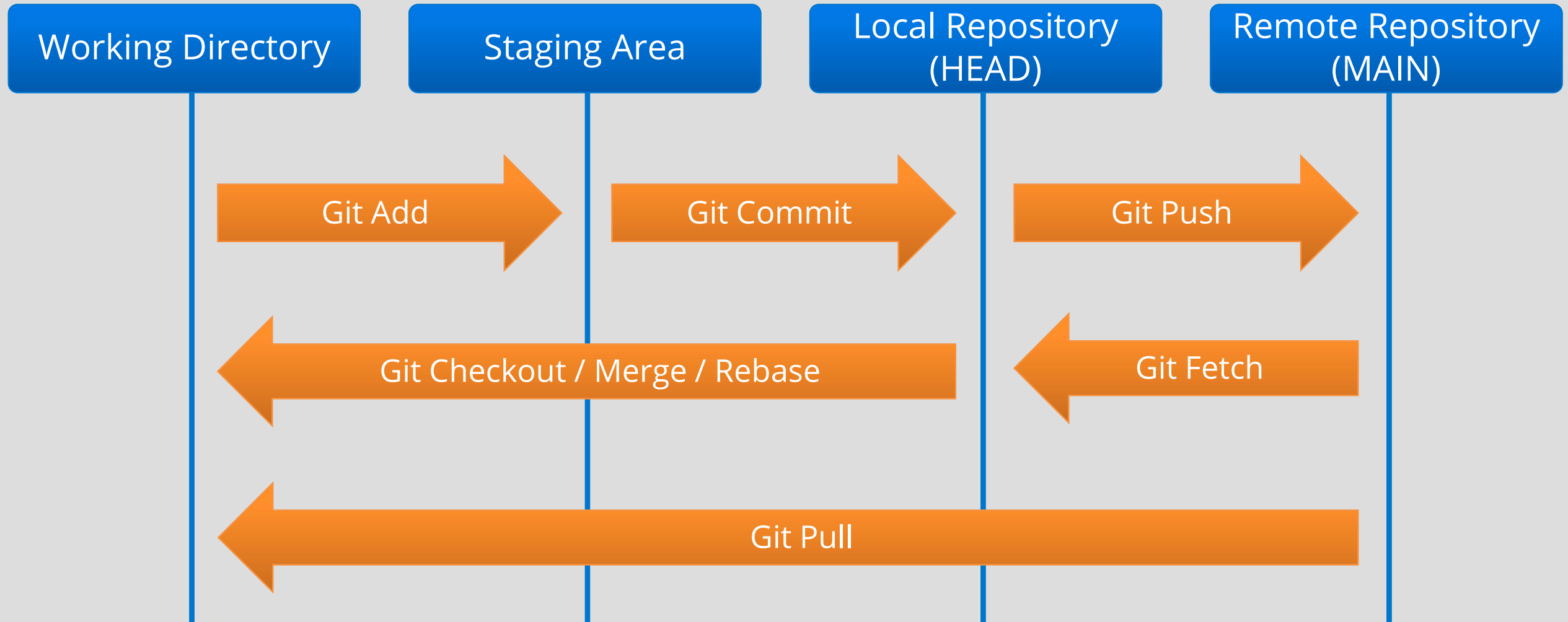


#1 Contributor to  **abapGit**

# What is git ?

- Git is a high-quality version control system
- Installed and maintained on your local system (rather than in the cloud)
- Specially designed to work well with text files
- Has a sophisticated branching model
- Is **free** and open source

# Basic Git Workflows



# What is GitHub ?

- GitHub is a hosting service for Git repositories (many similar services but abapGit is hosted on GitHub)
- Exclusively cloud-based
- Intuitive, graphically represented user interface
- Built-in control and task-management tools
- Is for-profit but offers a **free** tier

# What is abapGit ?

- Git client for ABAP (started in 2014 by Lars Hvam)
- Works with GitHub, GitLab, Assembla, Bitbucket, abapGit-Server, AWS, TFS, Azure DevOps and more
- ABAP version 7.02 or higher
- Recommended to use SAP GUI for Windows but also works with SAP GUI for Java
- It's **free** and open source

# Demo: abapGit on GitHub



## Welcome

abapGit is an open source git client for ABAP, maintained and built by the community.

Documentation



GitHub



Latest build



Eclipse plugin

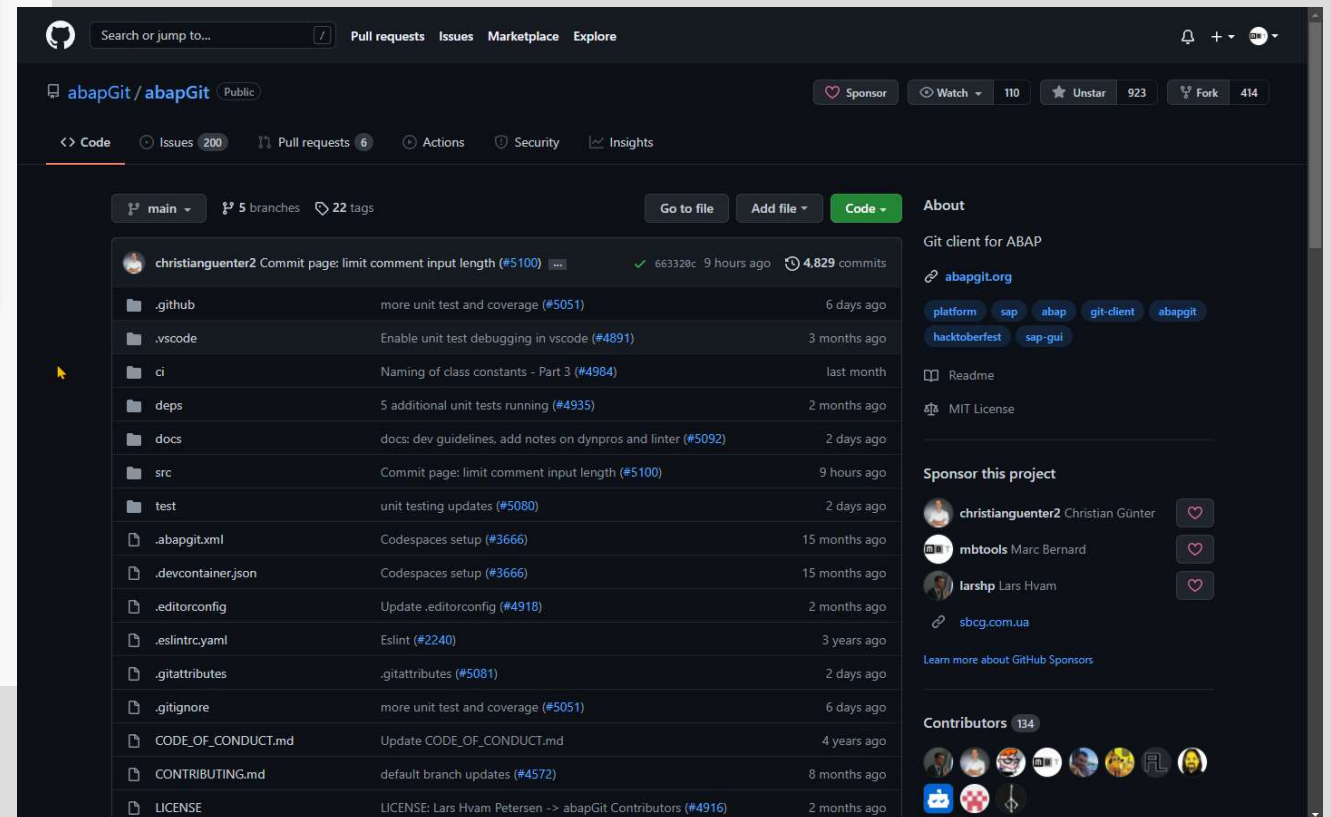


dotabap.org



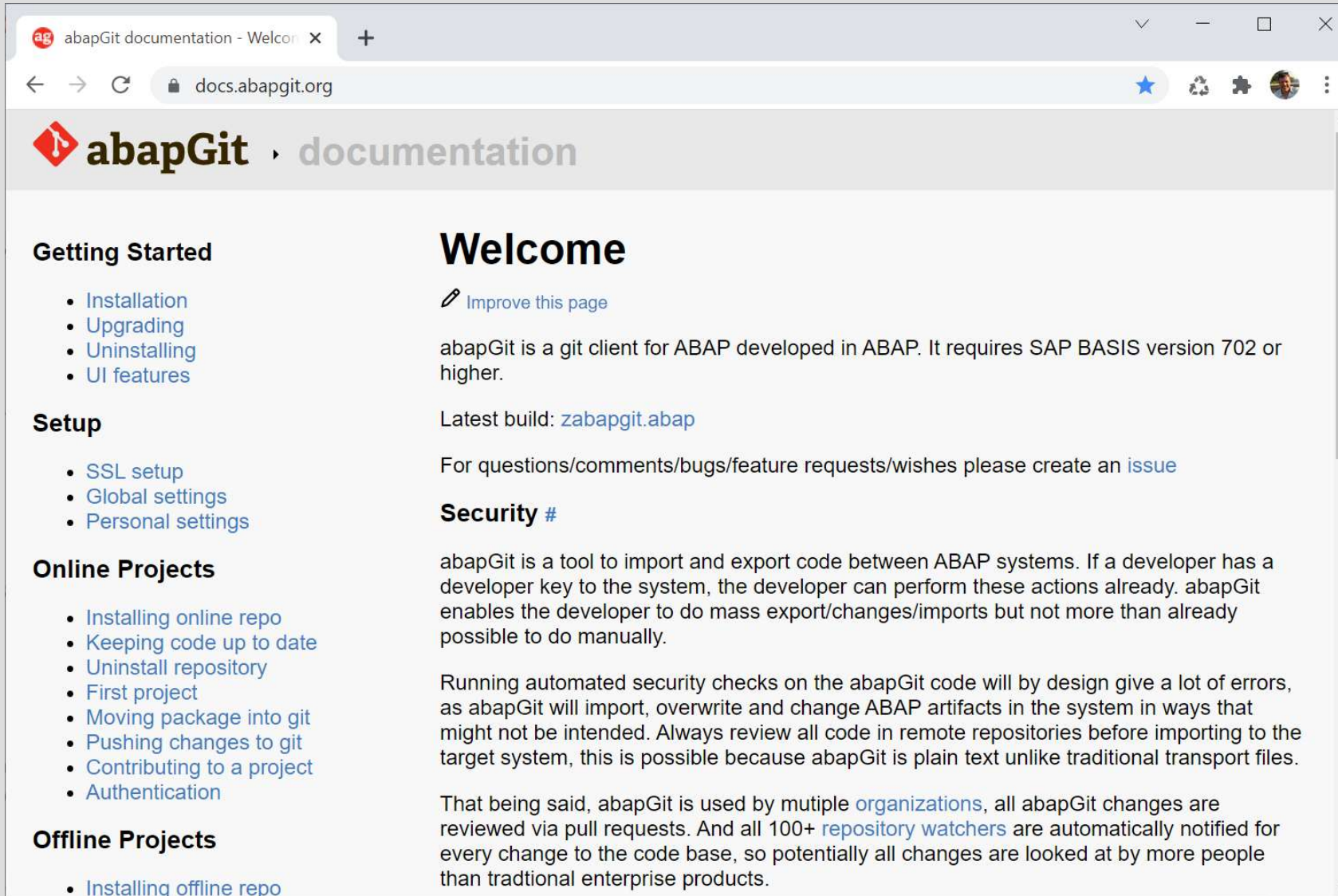
<https://abapgit.org>

<https://github.com/abapGit/abapGit>






# Demo: abapGit Documentation



The screenshot shows a web browser window with the address bar displaying 'docs.abapgit.org'. The page title is 'abapGit documentation - Welcome'. The main content area has a header with the 'abapGit' logo and the word 'documentation'. The left sidebar contains a table of contents with sections: 'Getting Started' (Installation, Upgrading, Uninstalling, UI features), 'Setup' (SSL setup, Global settings, Personal settings), 'Online Projects' (Installing online repo, Keeping code up to date, Uninstall repository, First project, Moving package into git, Pushing changes to git, Contributing to a project, Authentication), and 'Offline Projects' (Installing offline repo). The main content area has a 'Welcome' heading with an 'Improve this page' link. Below this, it states 'abapGit is a git client for ABAP developed in ABAP. It requires SAP BASIS version 702 or higher.' and 'Latest build: [zabapgit.abap](#)'. It also says 'For questions/comments/bugs/feature requests/wishes please create an [issue](#)'. The 'Security #' section explains that abapGit is a tool to import and export code between ABAP systems, and that running automated security checks will give a lot of errors because abapGit is plain text. It concludes that abapGit is used by multiple organizations, all changes are reviewed via pull requests, and all 100+ repository watchers are automatically notified for every change to the code base.

abapGit documentation - Welcome x

docs.abapgit.org

 **abapGit** › documentation

## Getting Started

- [Installation](#)
- [Upgrading](#)
- [Uninstalling](#)
- [UI features](#)

## Setup

- [SSL setup](#)
- [Global settings](#)
- [Personal settings](#)

## Online Projects

- [Installing online repo](#)
- [Keeping code up to date](#)
- [Uninstall repository](#)
- [First project](#)
- [Moving package into git](#)
- [Pushing changes to git](#)
- [Contributing to a project](#)
- [Authentication](#)

## Offline Projects

- [Installing offline repo](#)

## Welcome

[Improve this page](#)

abapGit is a git client for ABAP developed in ABAP. It requires SAP BASIS version 702 or higher.

Latest build: [zabapgit.abap](#)

For questions/comments/bugs/feature requests/wishes please create an [issue](#)

### Security #

abapGit is a tool to import and export code between ABAP systems. If a developer has a developer key to the system, the developer can perform these actions already. abapGit enables the developer to do mass export/changes/imports but not more than already possible to do manually.

Running automated security checks on the abapGit code will by design give a lot of errors, as abapGit will import, overwrite and change ABAP artifacts in the system in ways that might not be intended. Always review all code in remote repositories before importing to the target system, this is possible because abapGit is plain text unlike traditional transport files.

That being said, abapGit is used by multiple [organizations](#), all abapGit changes are reviewed via pull requests. And all 100+ [repository watchers](#) are automatically notified for every change to the code base, so potentially all changes are looked at by more people than traditional enterprise products.



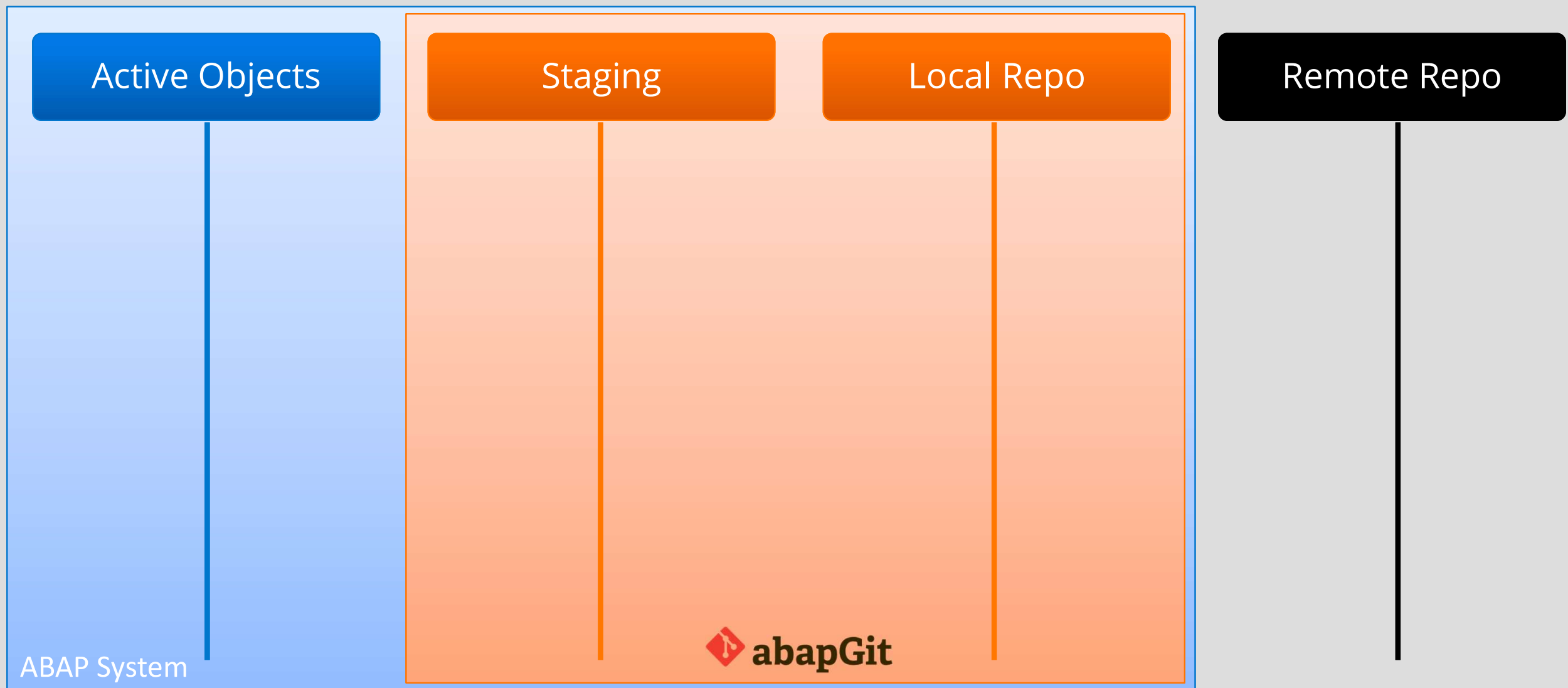
**abapGit**

# Step-by-Step

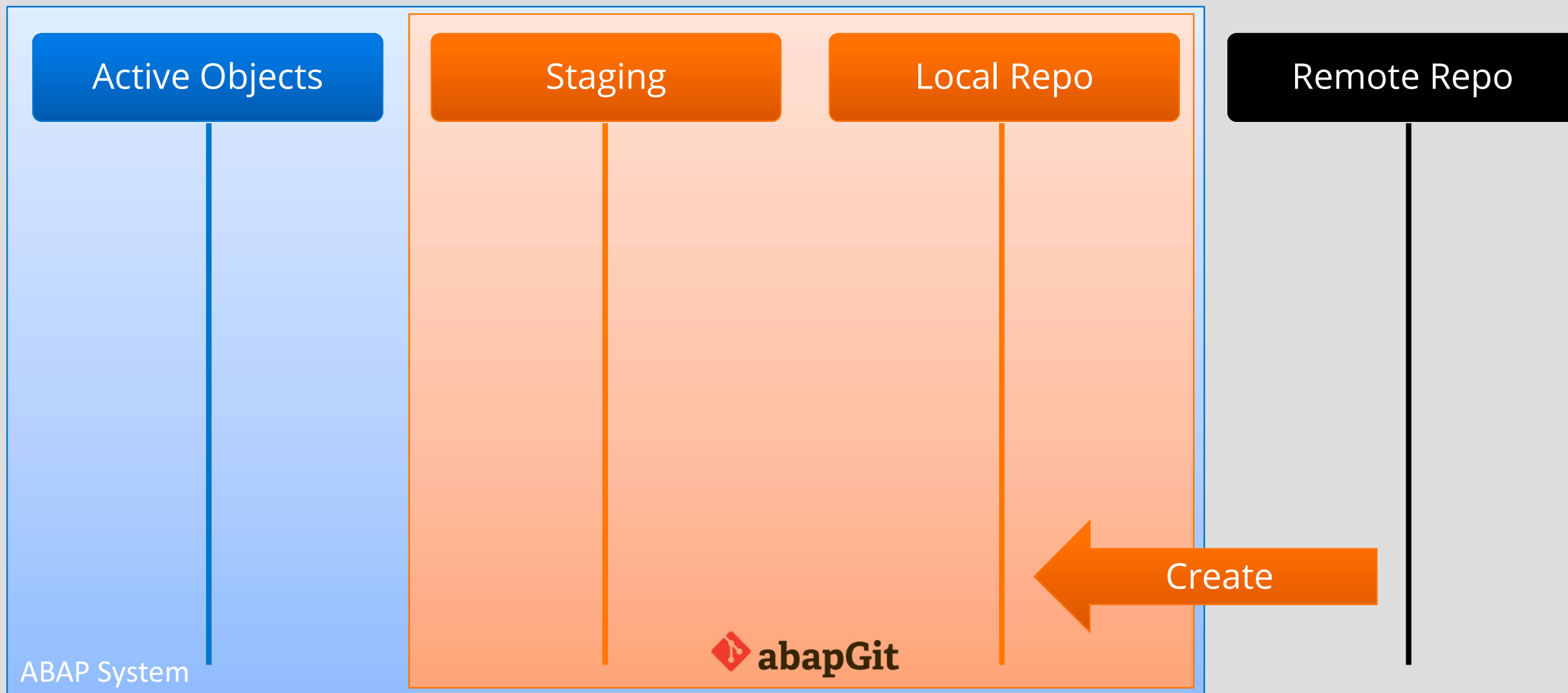
Active Objects

ABAP System

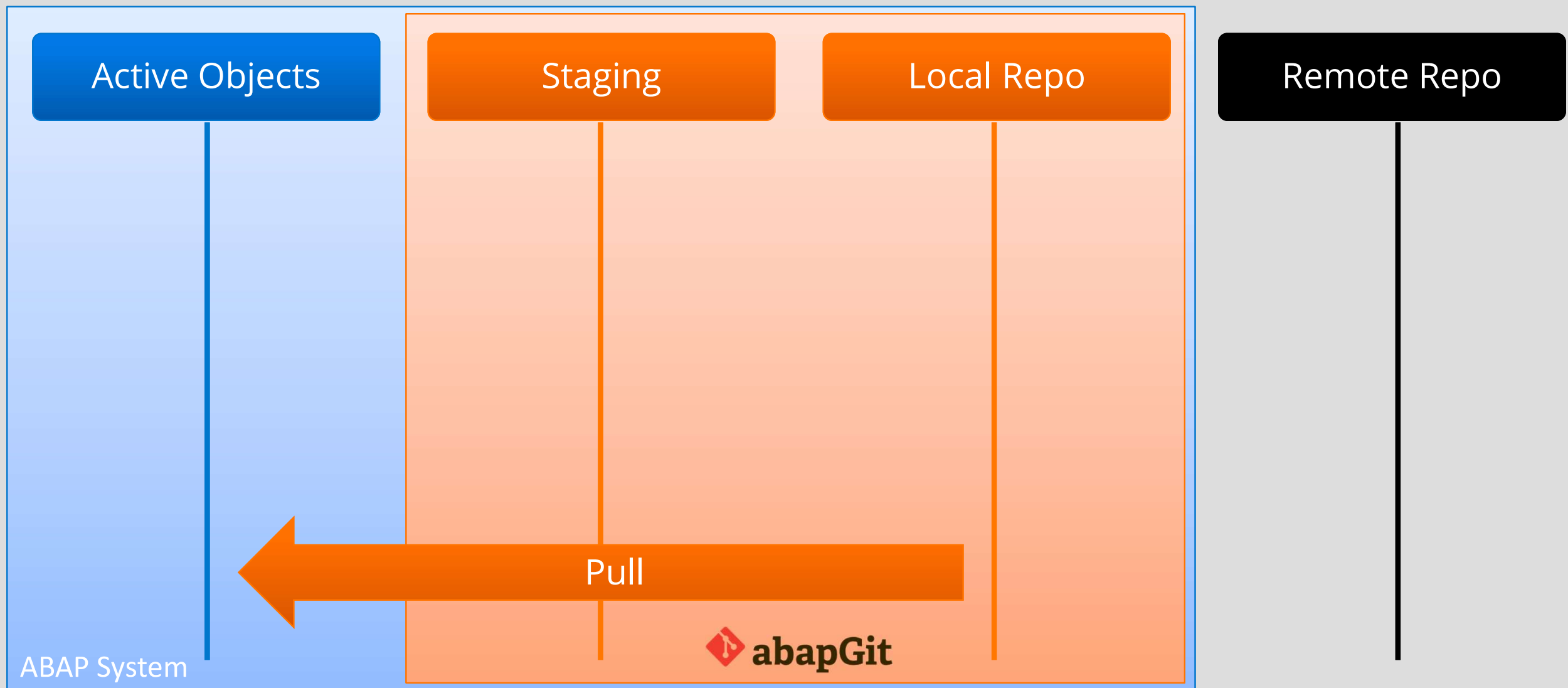
Remote Repo

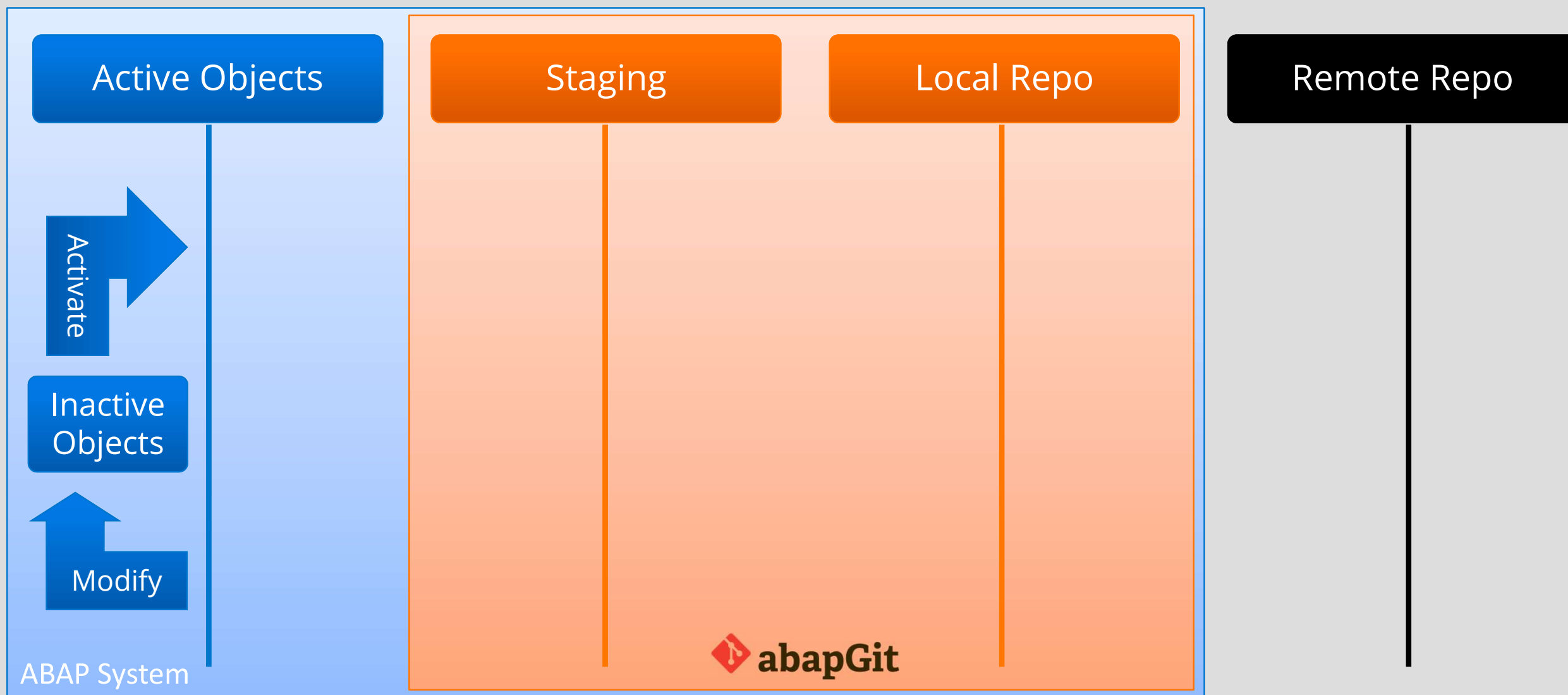


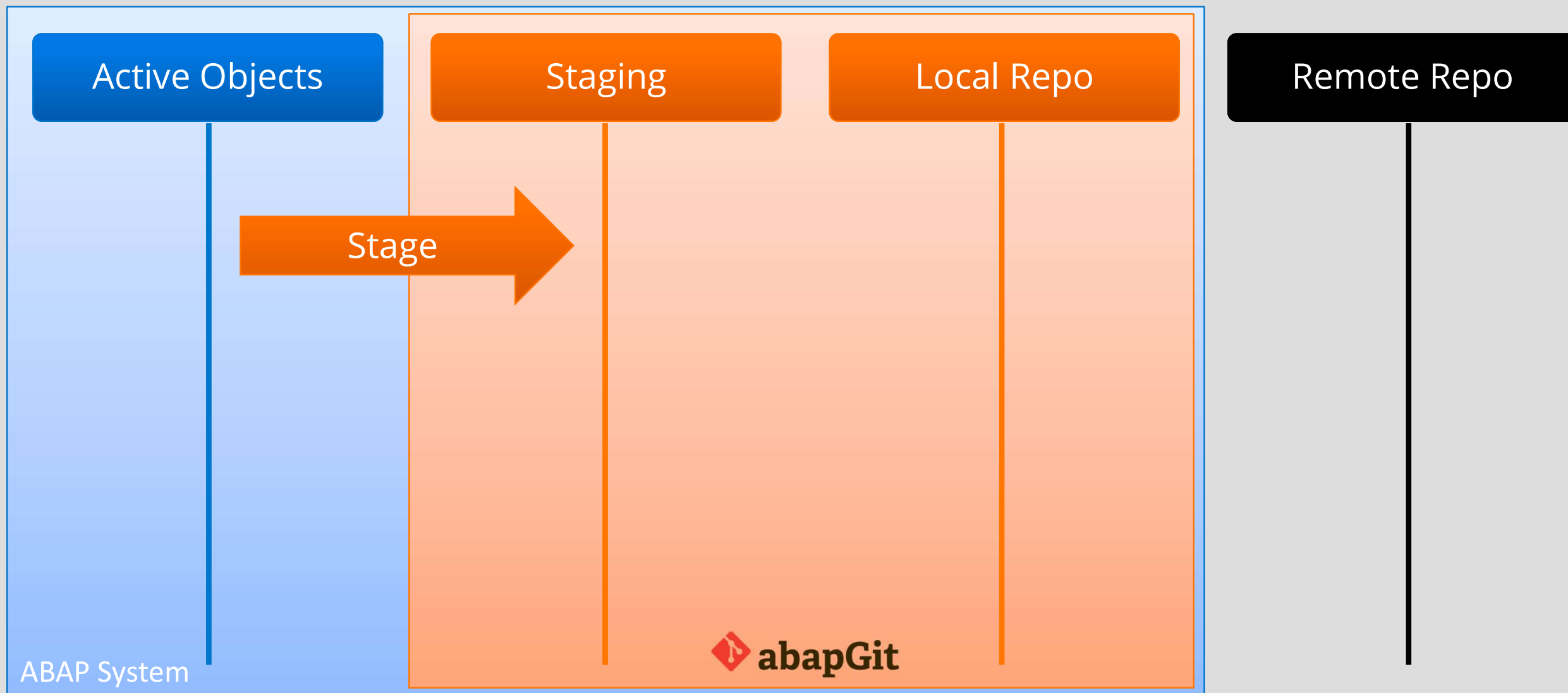
# Create Repository



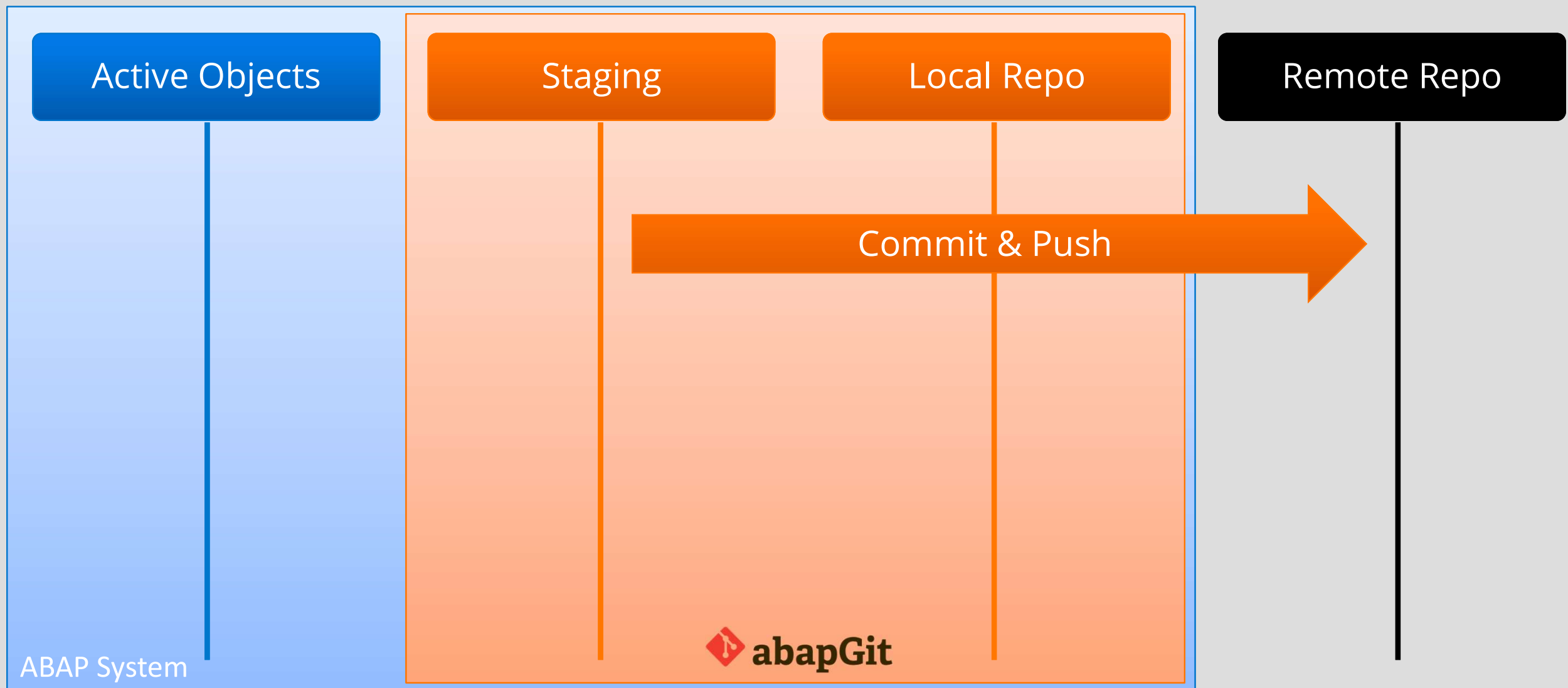
# Pull Objects





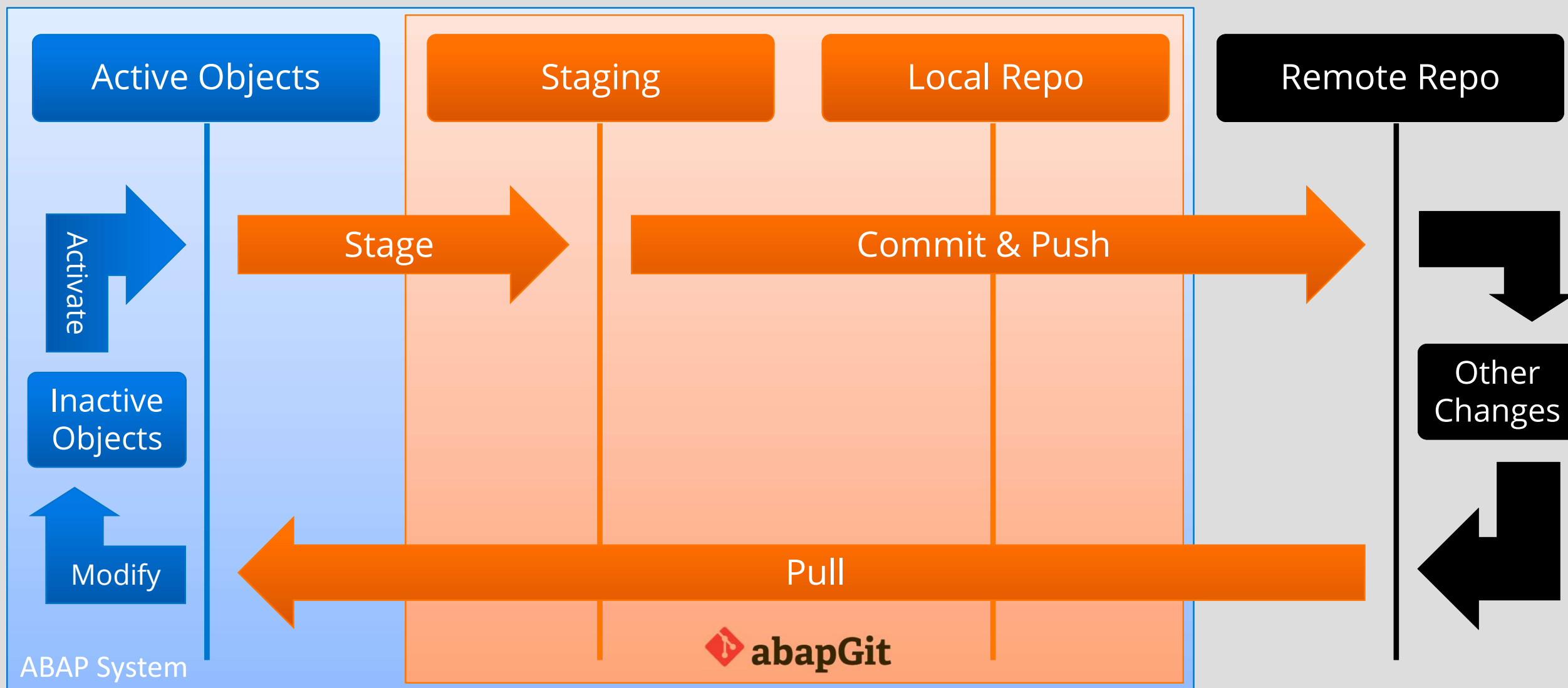






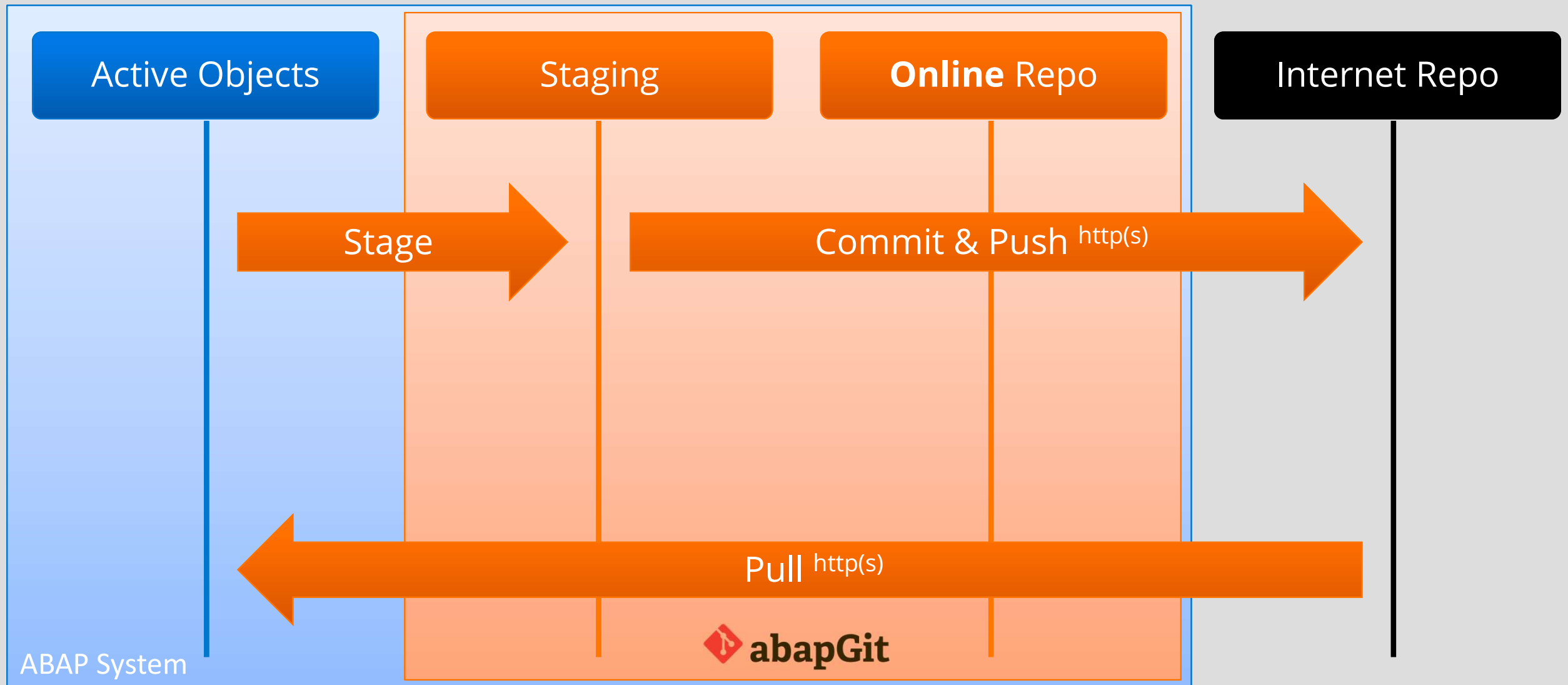


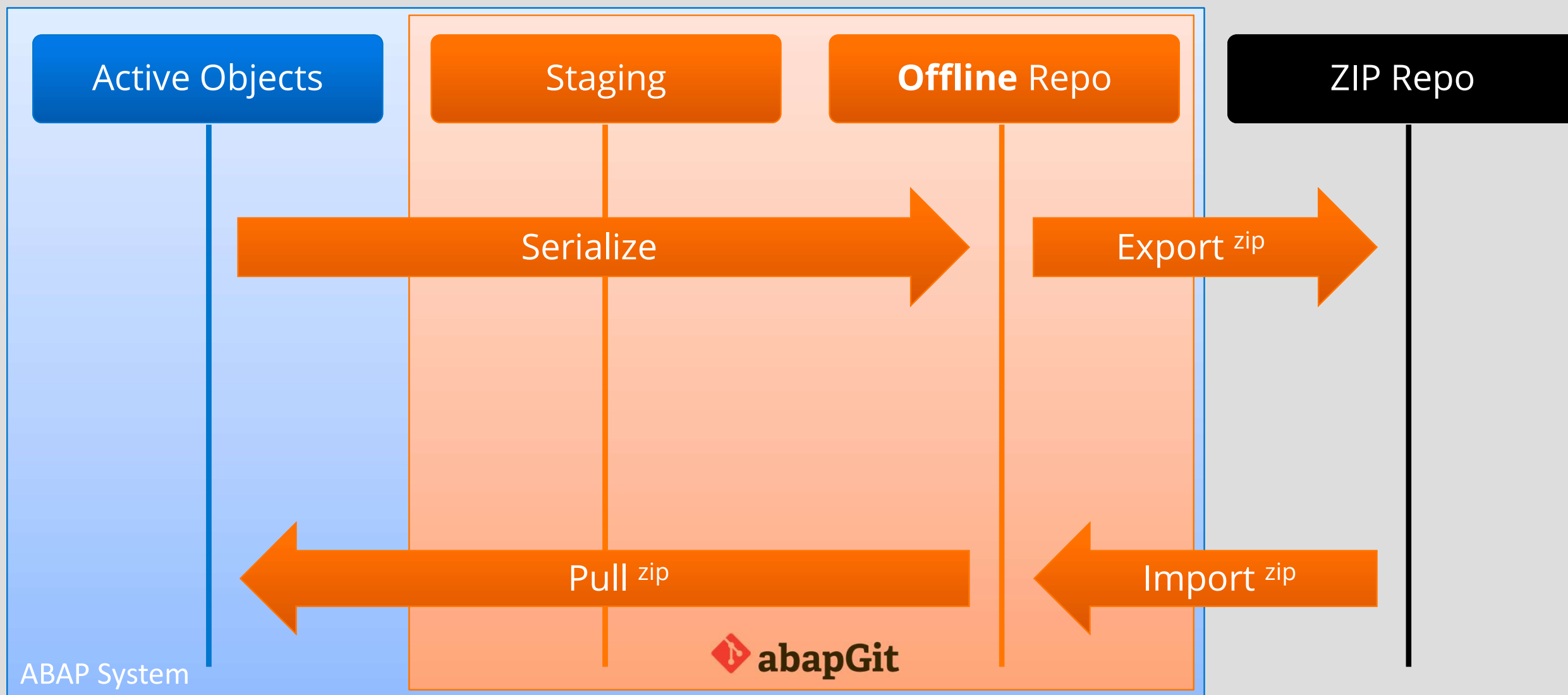
# Continuous Development





**Online & Offline**







# What's Next For You?

- Download and **install abapGit** (setup SSL)
- Read the **abapGit documentation**
- Pick a **Git hosting service**
- **Create a repository** for your project in abapGit
- **Stage and commit** all objects to the remote repository
- **Play:** Make changes, view diffs, stage, pull, branch...
- Check out **open-source ABAP** projects at [dotabap.org](https://dotabap.org)
- **Promote abapGit!**



# Thank You!

Contact Information

**Marc Bernard**

Founder and CEO of Marc Bernard Tools

[marc@marcbernardtools.com](mailto:marc@marcbernardtools.com)

[@marcfbe](#)



**Learn More**

Things to learn about next

- Understanding the GitHub flow
- Global, personal, and repository settings in abapGit
- Working with branches
- Running code inspector
- Forking repos and contributing to other projects

RTFM <https://docs.abapgit.org/>

## Advanced topics

- abapGit developer version (contributions welcome!)
- Patching objects
- Background mode
- Linting code with abaplint

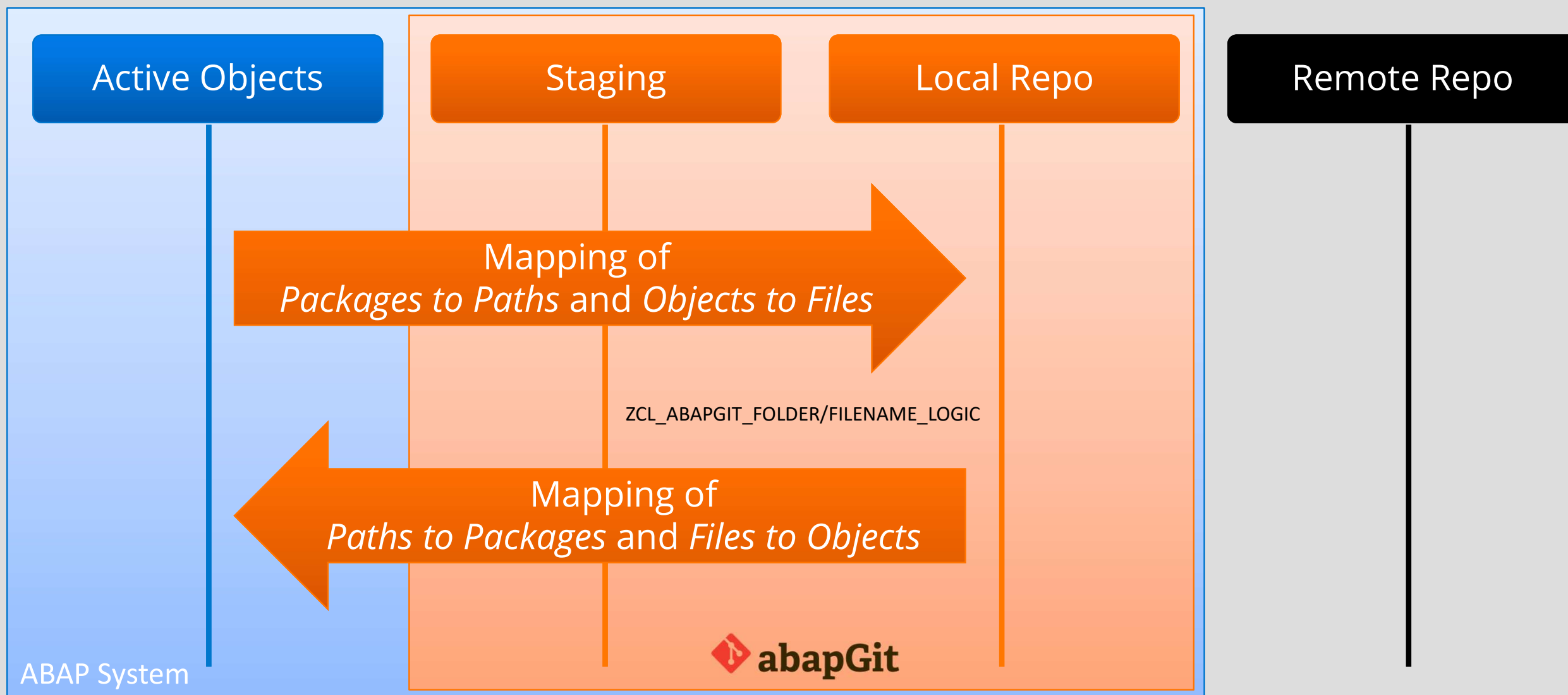
RTFM <https://docs.abapgit.org/>

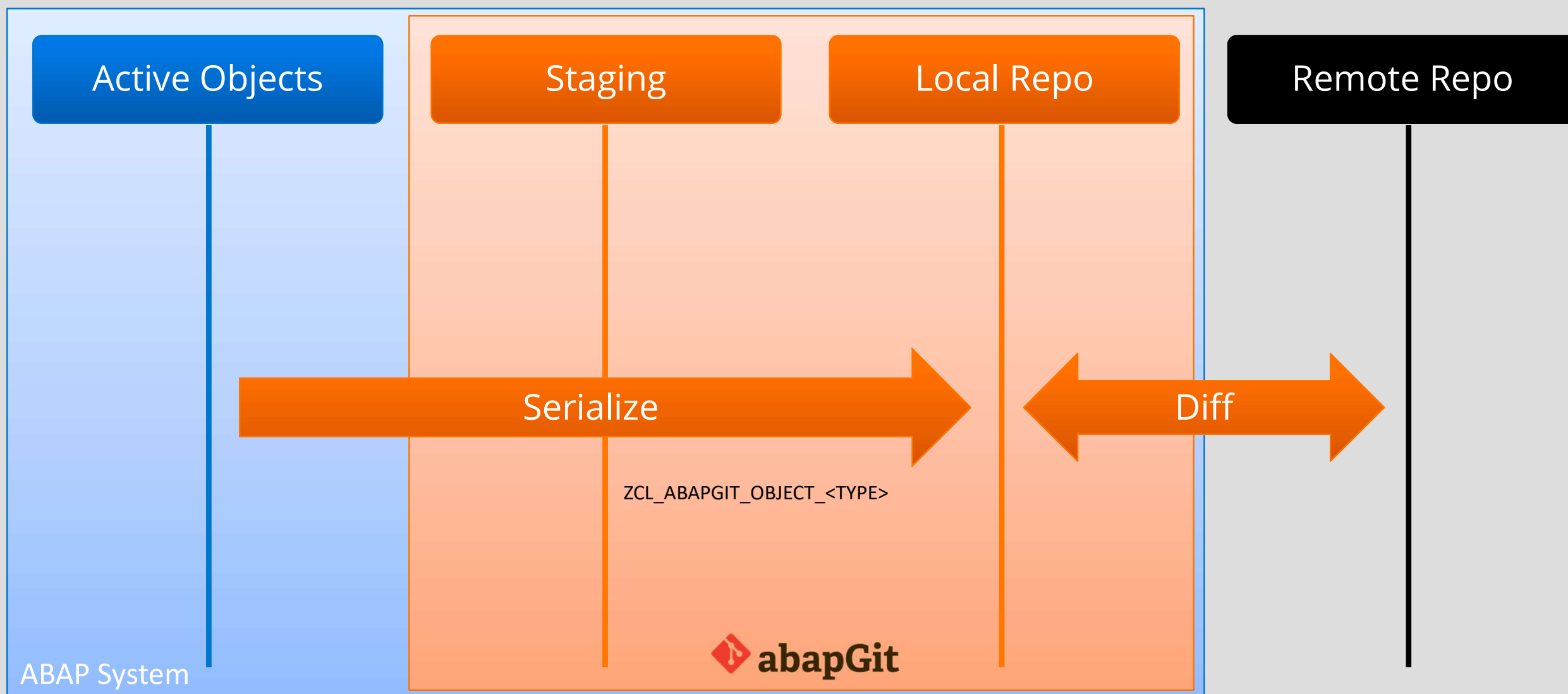
# Resources

- <https://abapgit.org/>
- <https://dotabap.org/>
- <https://abaplint.org/>
- <http://www.git-scm.com/>
- <https://github.com/>
- <https://skyline.github.com/>
- [Understanding the Difference between Git and GitHub](#)
- [Understanding the GitHub Flow](#)

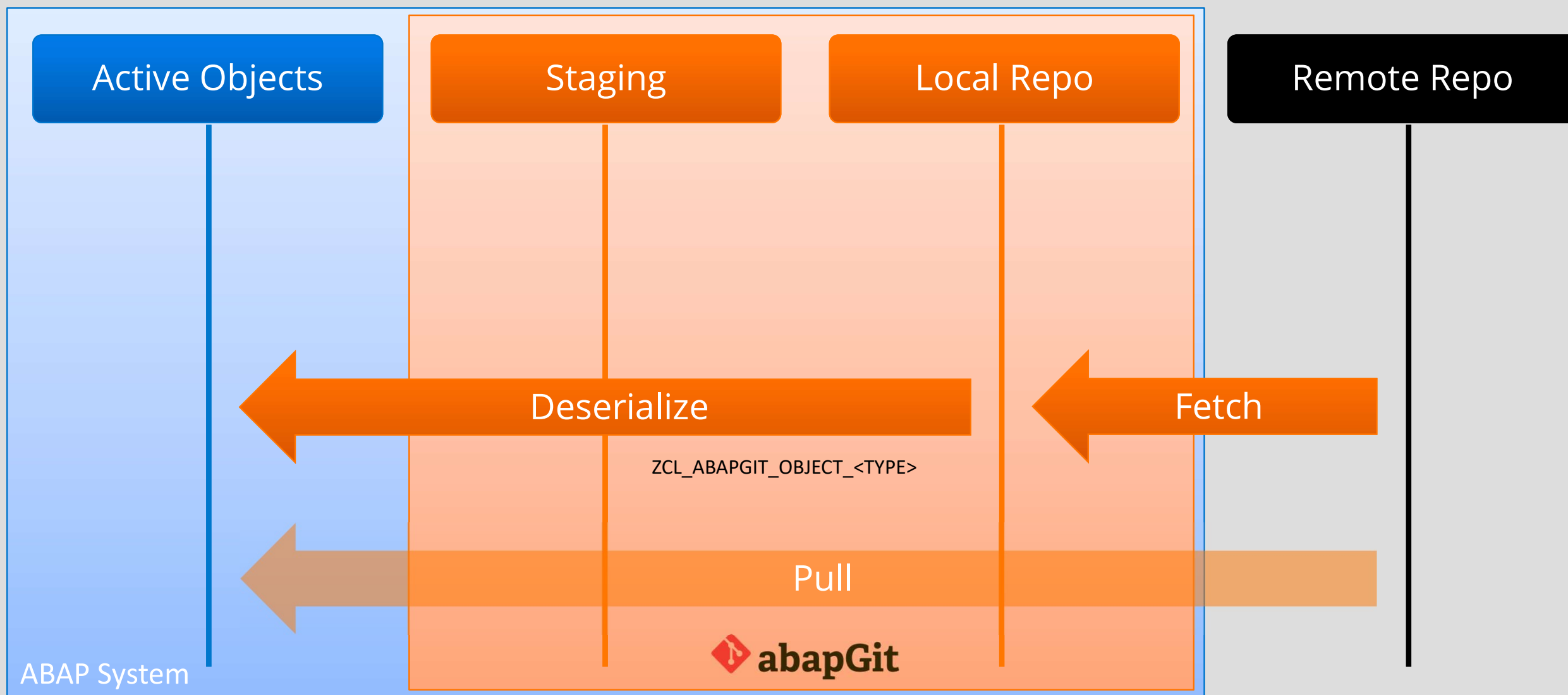


# Behind the Scenes











# Demo Repository

# The 2048 Game running in SAP GUI

<https://github.com/mbtools/ABAPConf-2021-Demo>

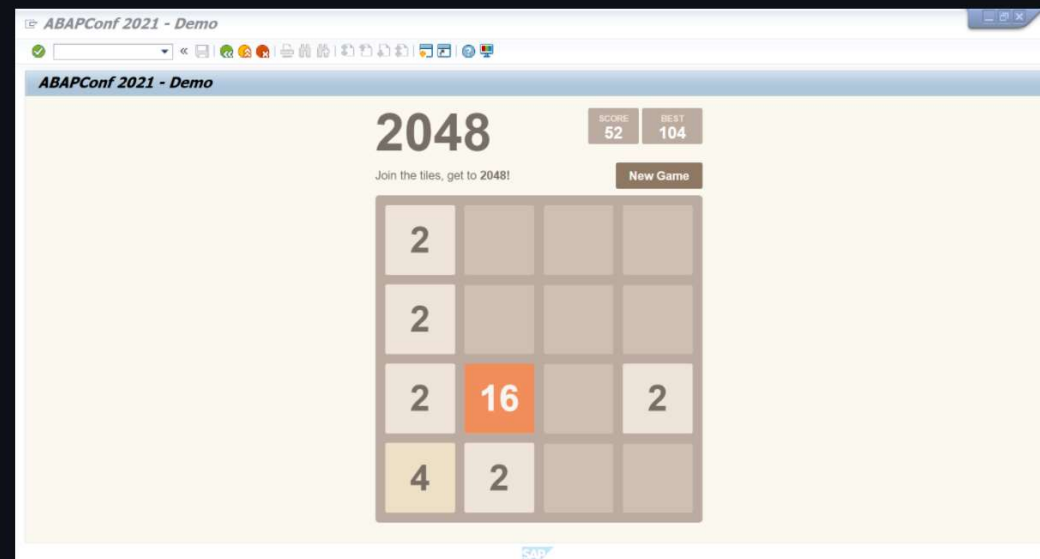
## ABAPConf-2021-Demo

Demo Repository for ABAPConf 2021: The 2048 Game running in SAP GUI

"ABAP Port" (c) Marc Bernard 2021 <https://marcbernardtools.com/>

REQUIRES SAP GUI 7.70 WITH CHROME BROWSER CONTROL

2048 game created by Gabriele Cirulli. Based on 1024 by Veewo Studio. <https://play2048.co/>



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