for Beginners

December 2021

Marc Bernard Tools
Essential for SAP® Customers & Partners

Public

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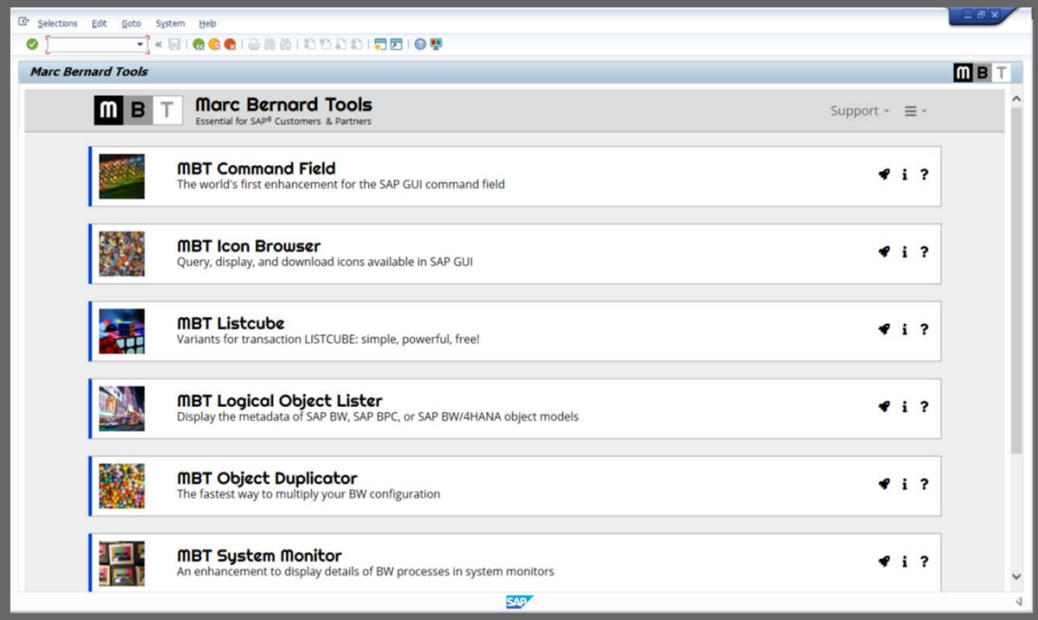
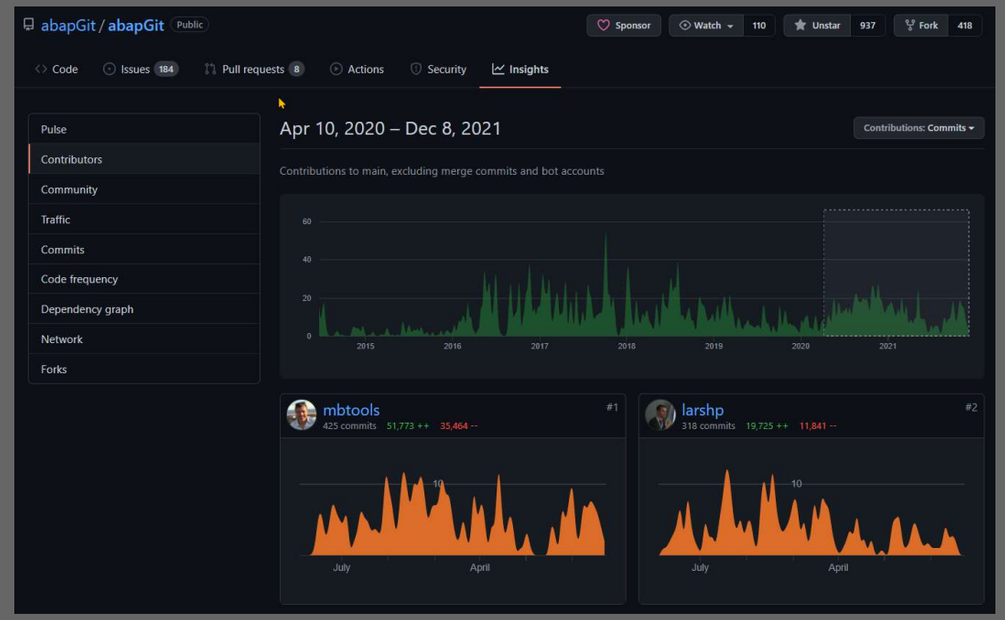
Marc Bernard

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



Bootstrapping Marc Bernard Tools



#1 Contributor to abapGit

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What is ?

- 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

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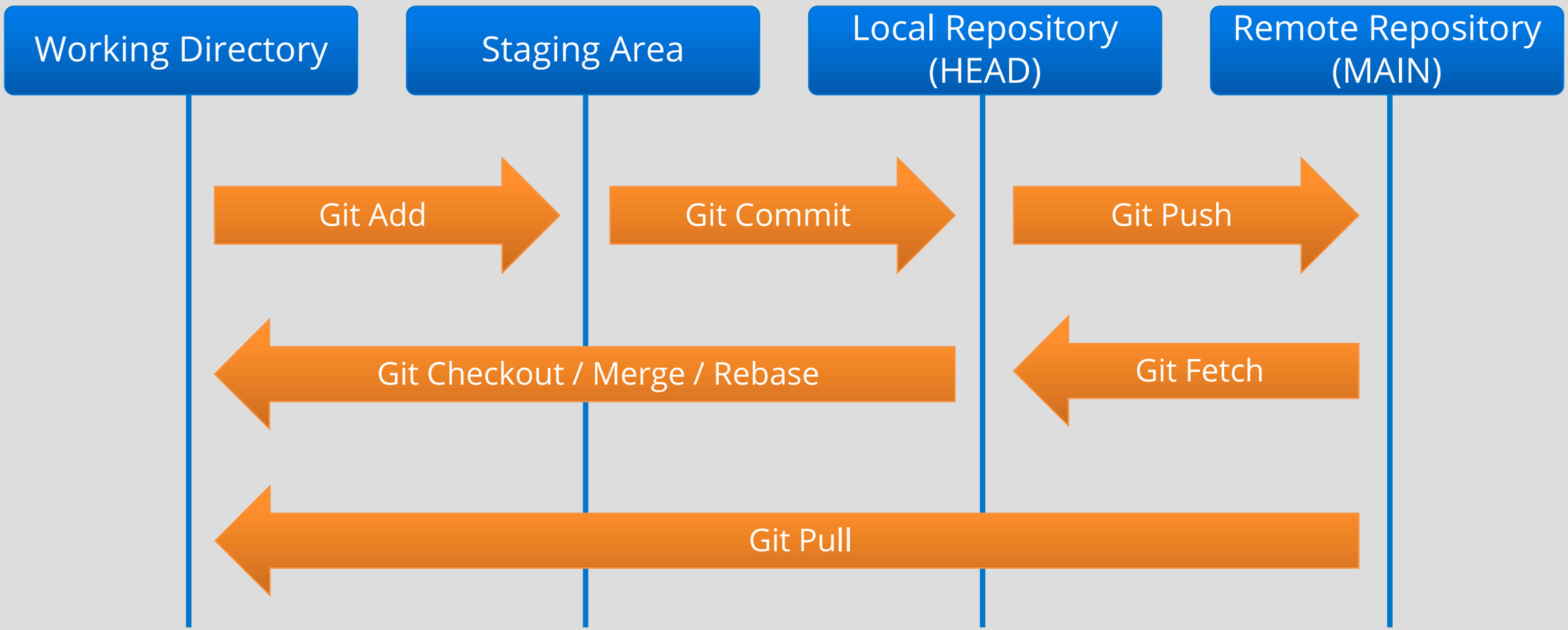
Basic Git Workflows



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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

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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

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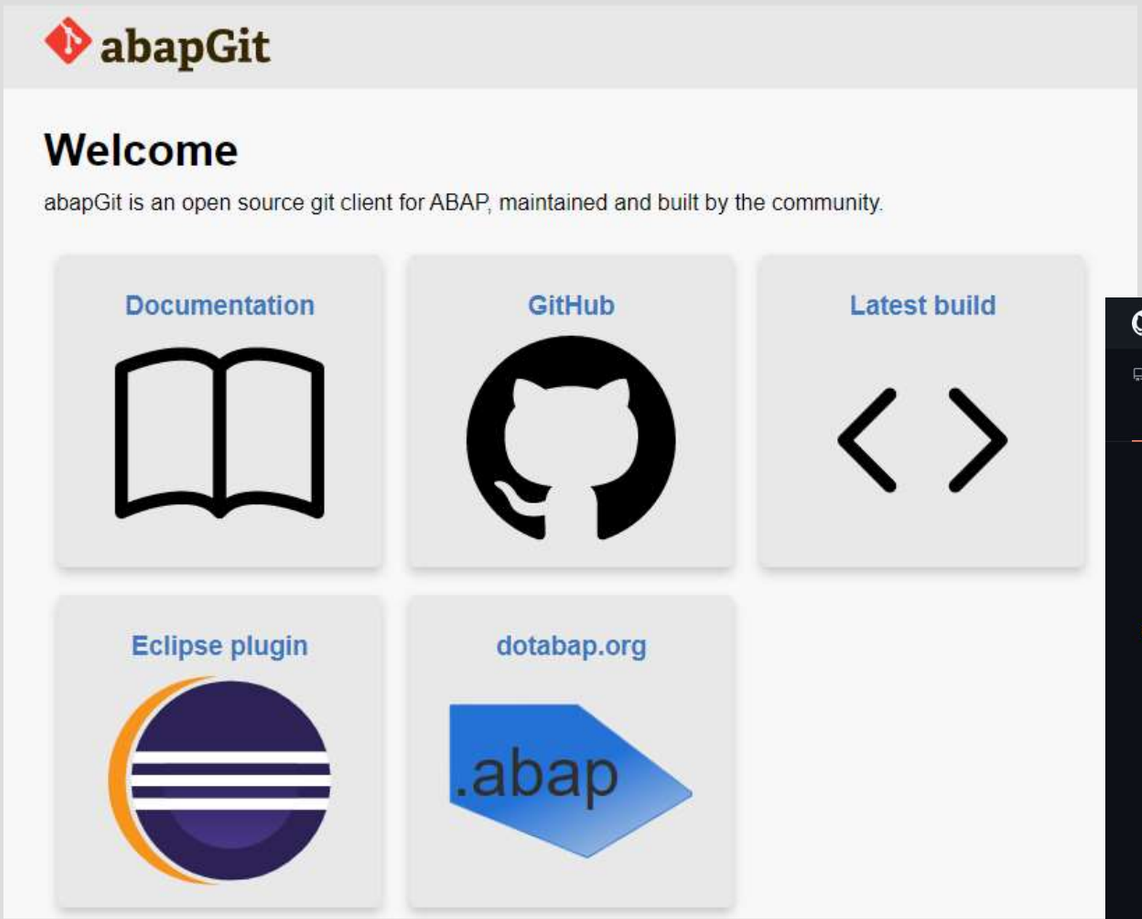
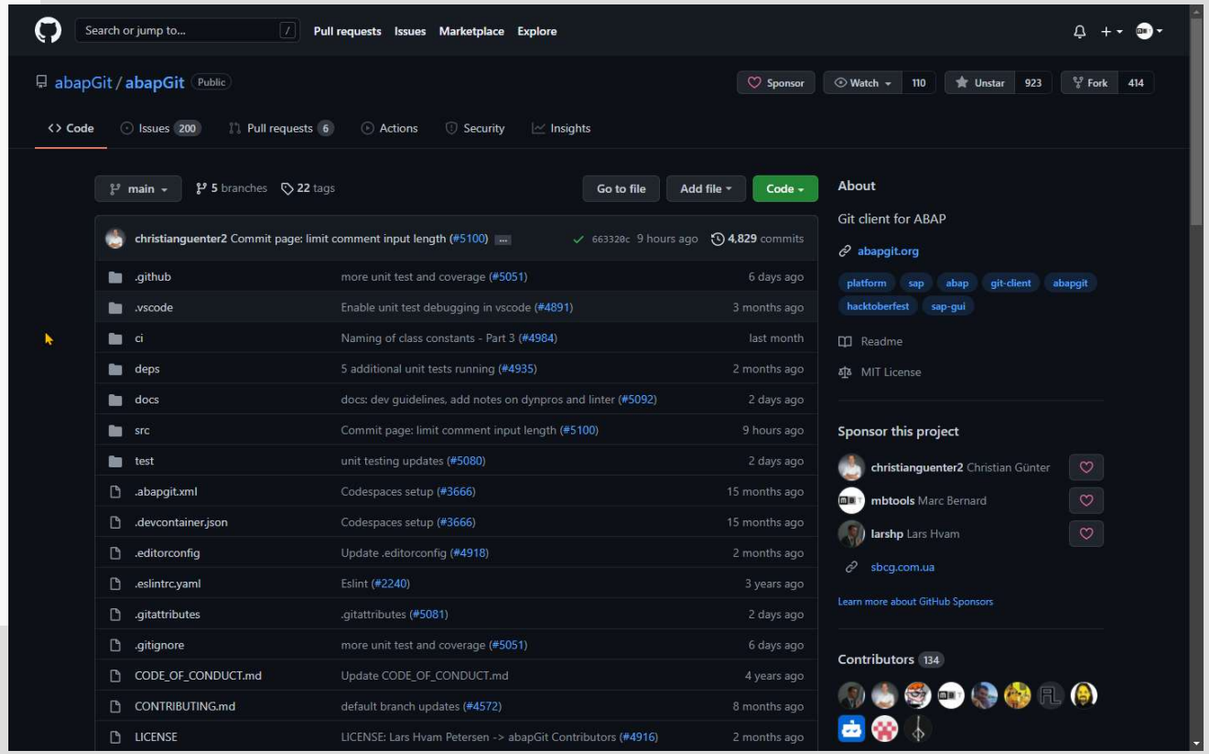
Demo: abapGit on GitHub



https://abapgit.org

https://github.com/abapGit/abapGit



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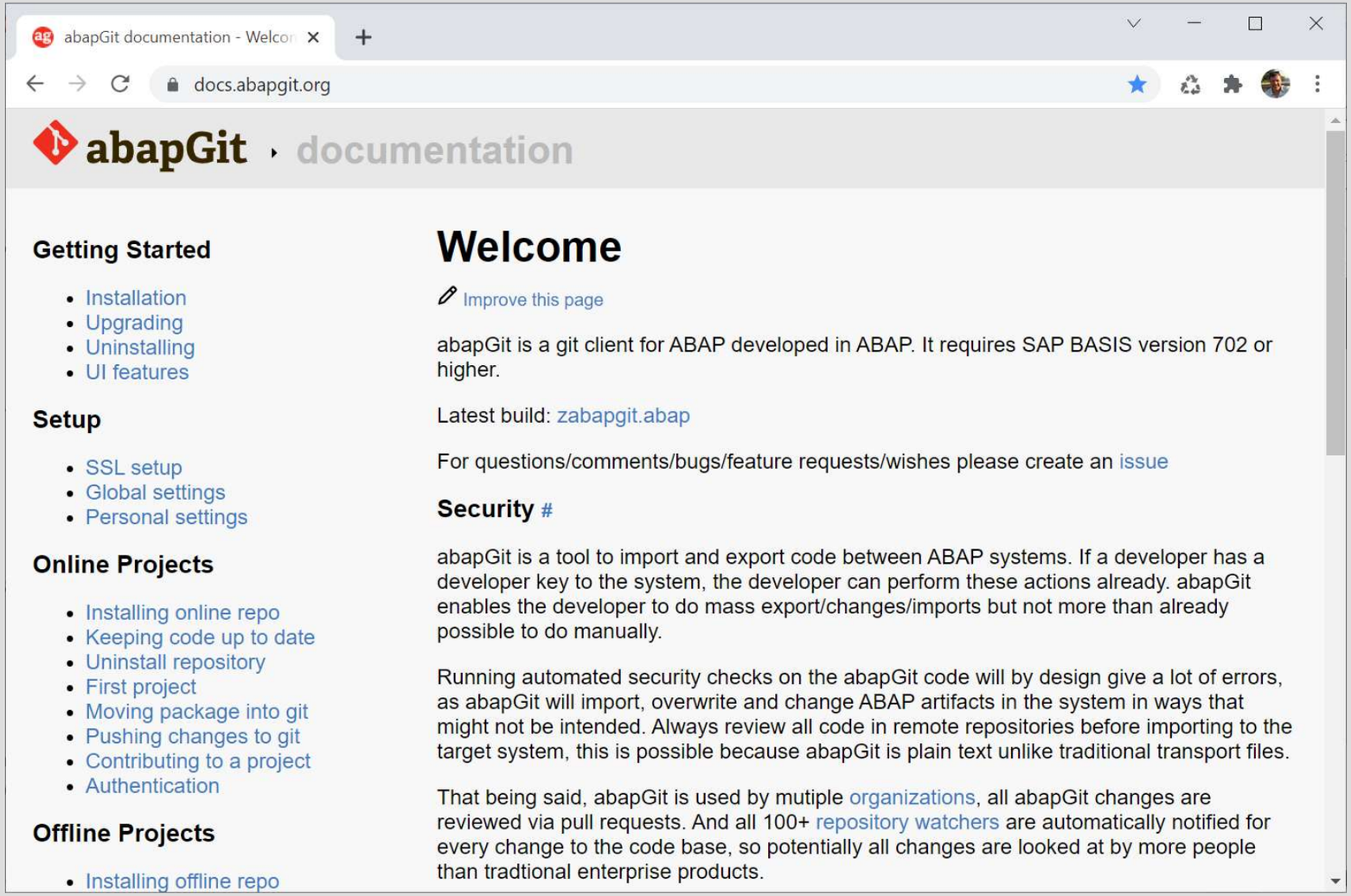
Demo: abapGit Documentation



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Step-by-Step

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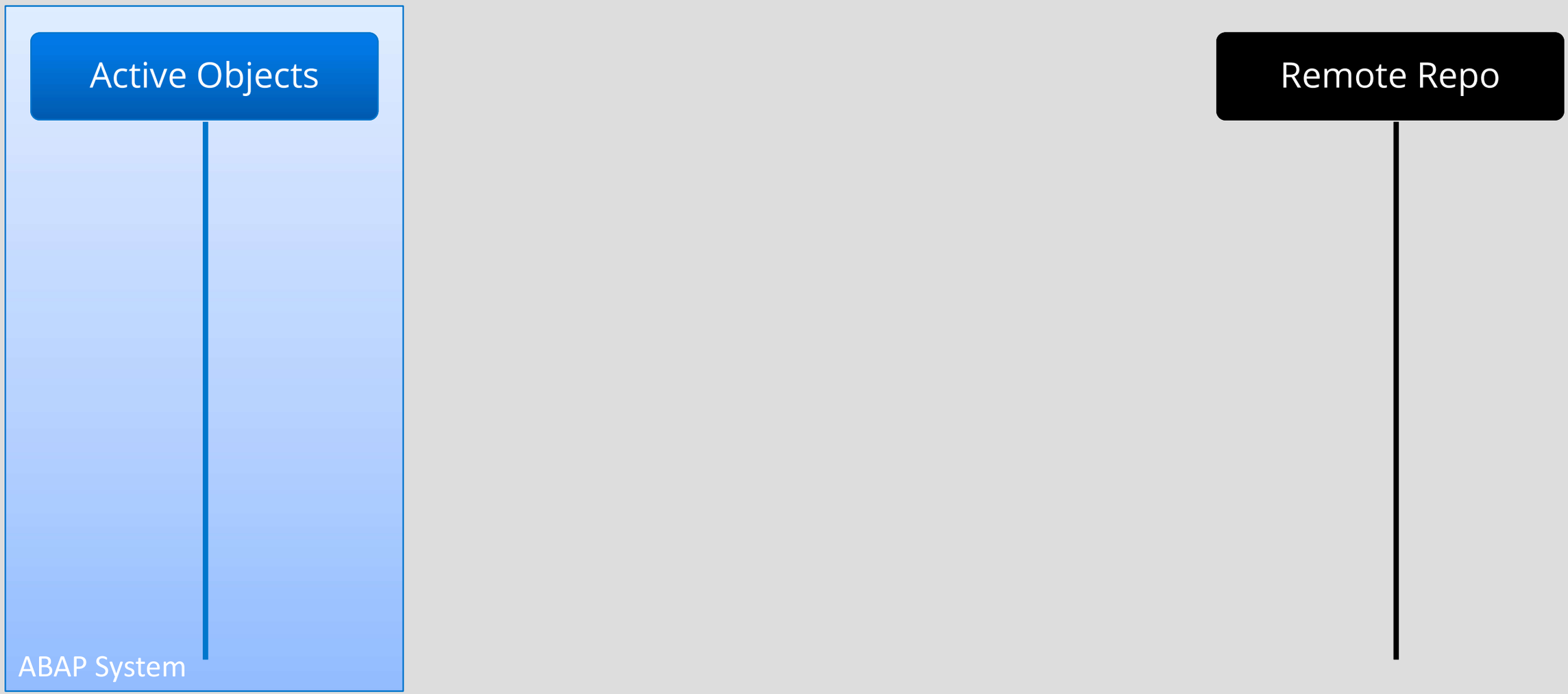
Start Here



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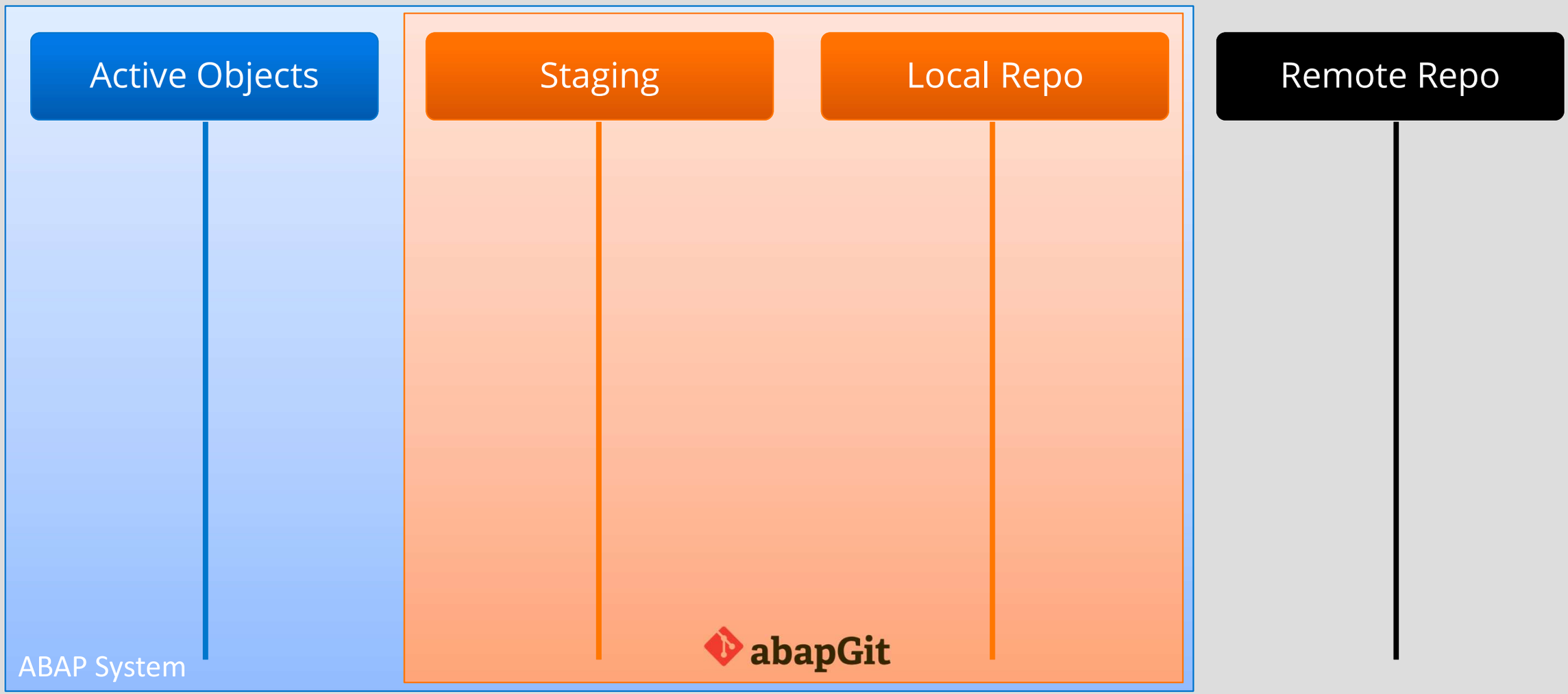
Installation



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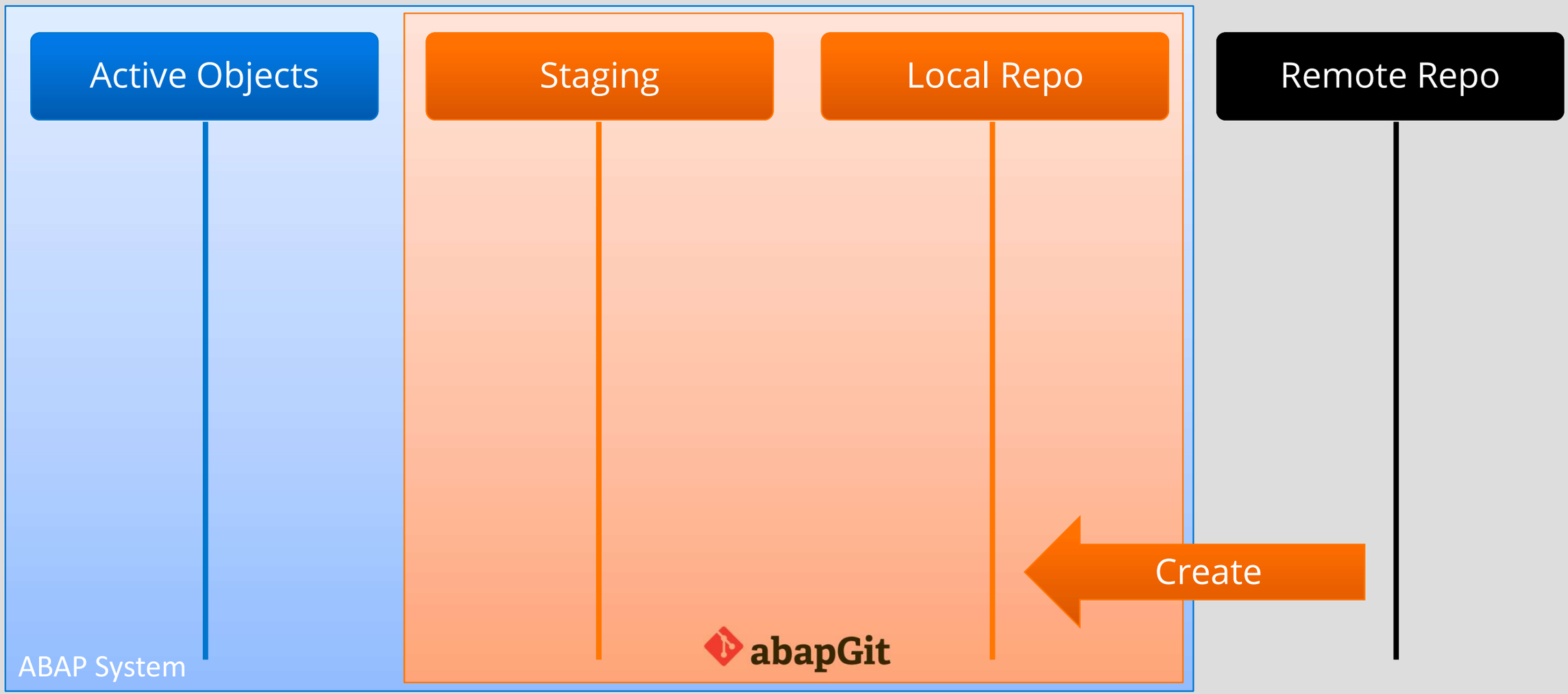
Create Repository



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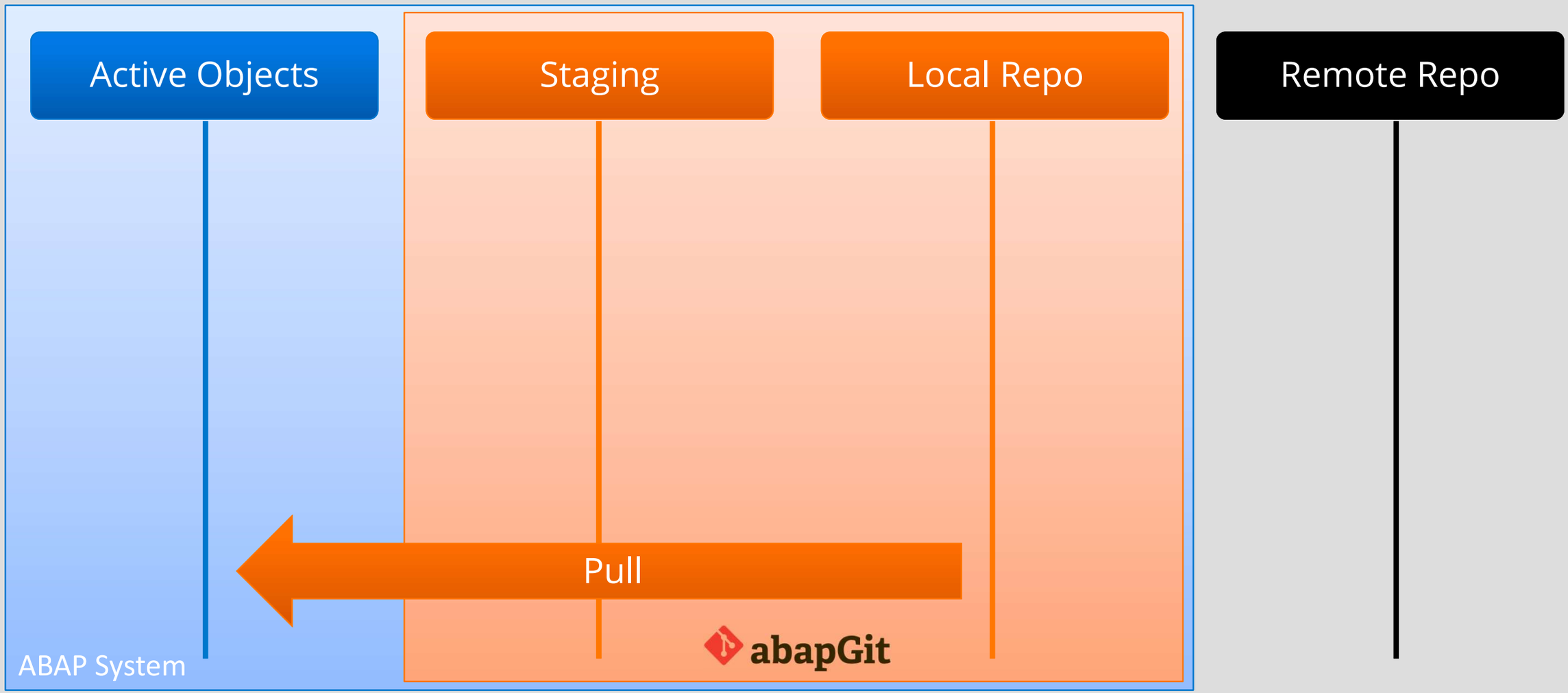
Pull Objects



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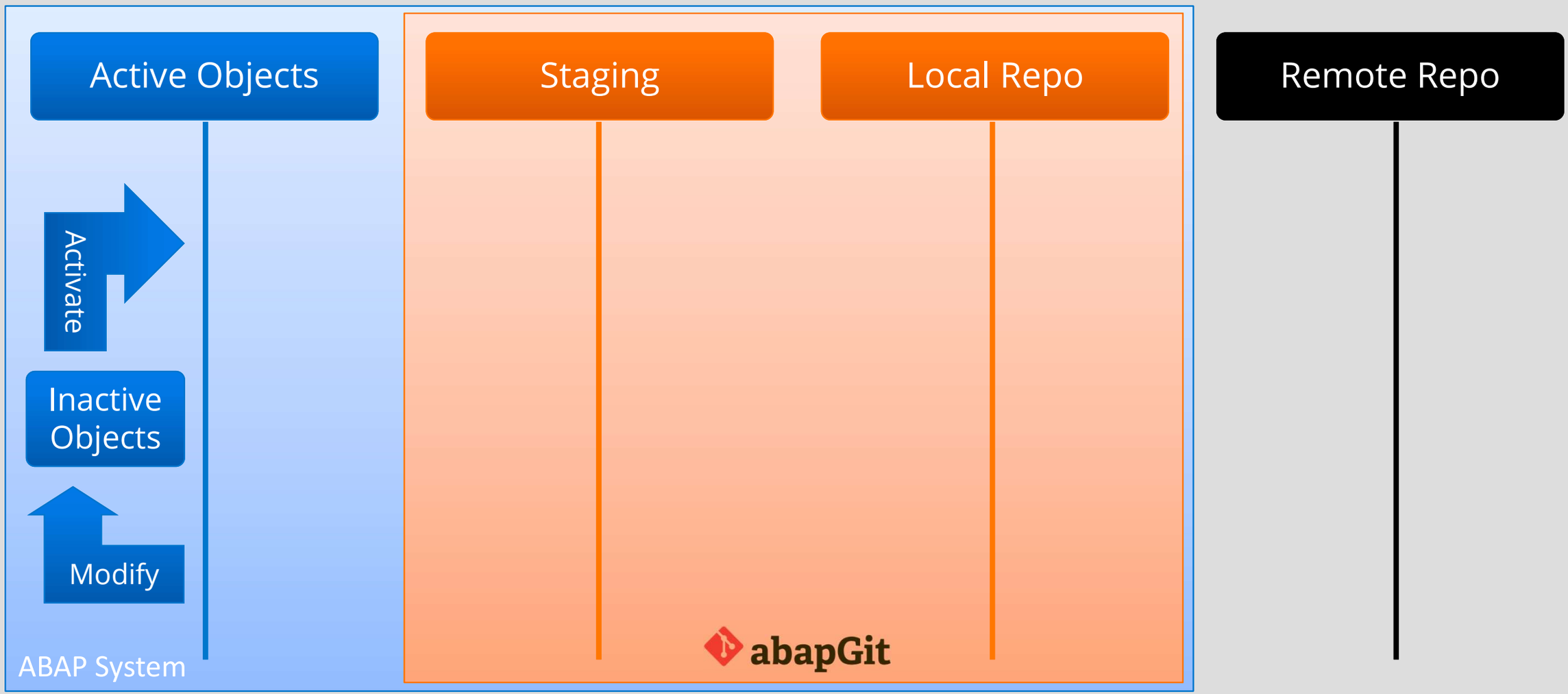
Change Objects



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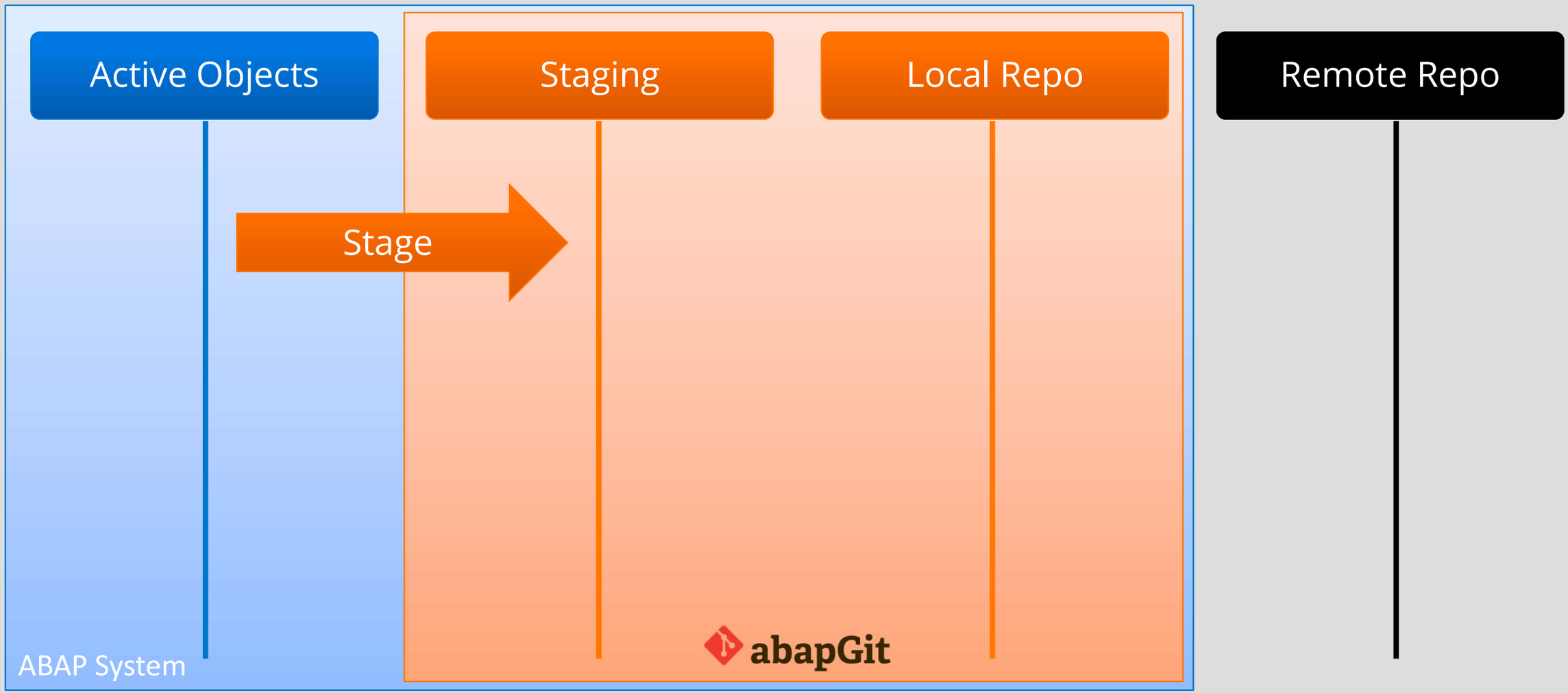
Stage Objects



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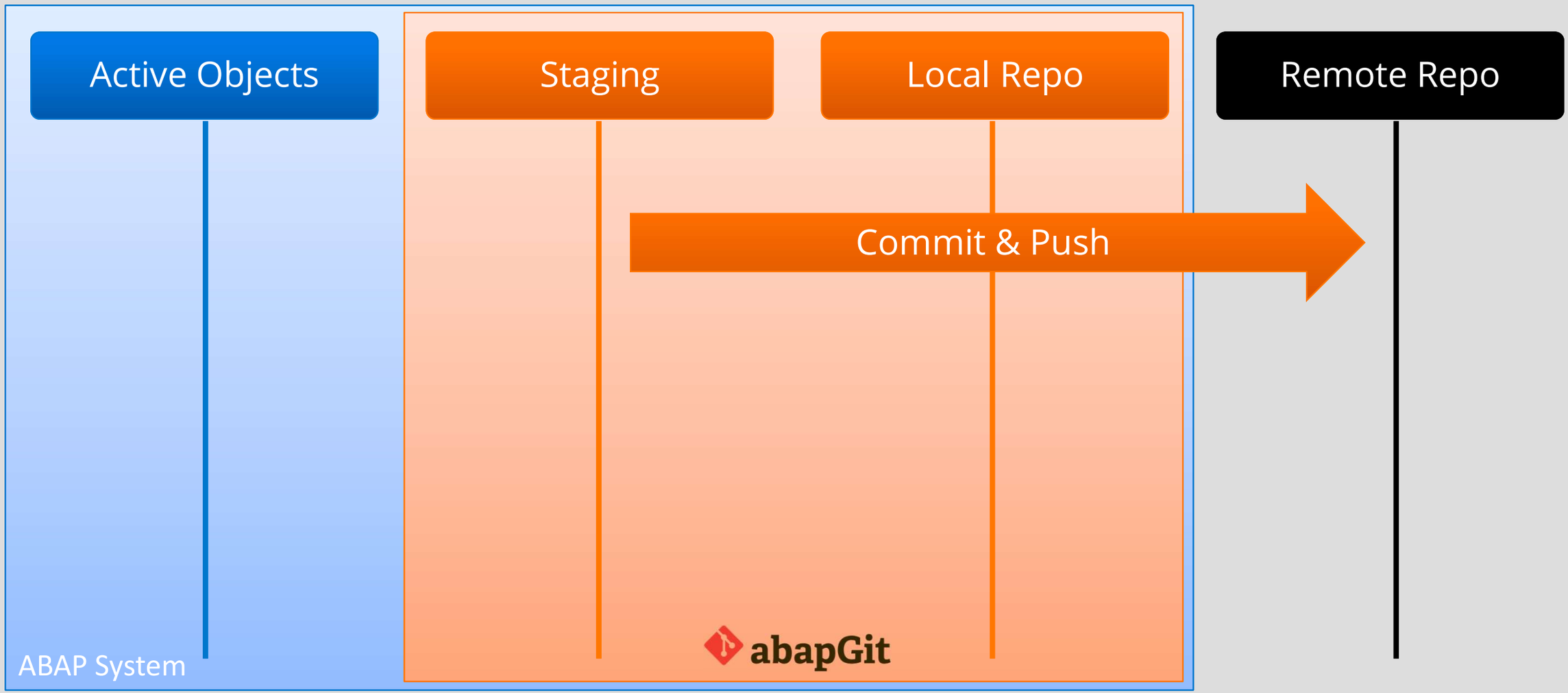
Commit Objects



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Continuous Development

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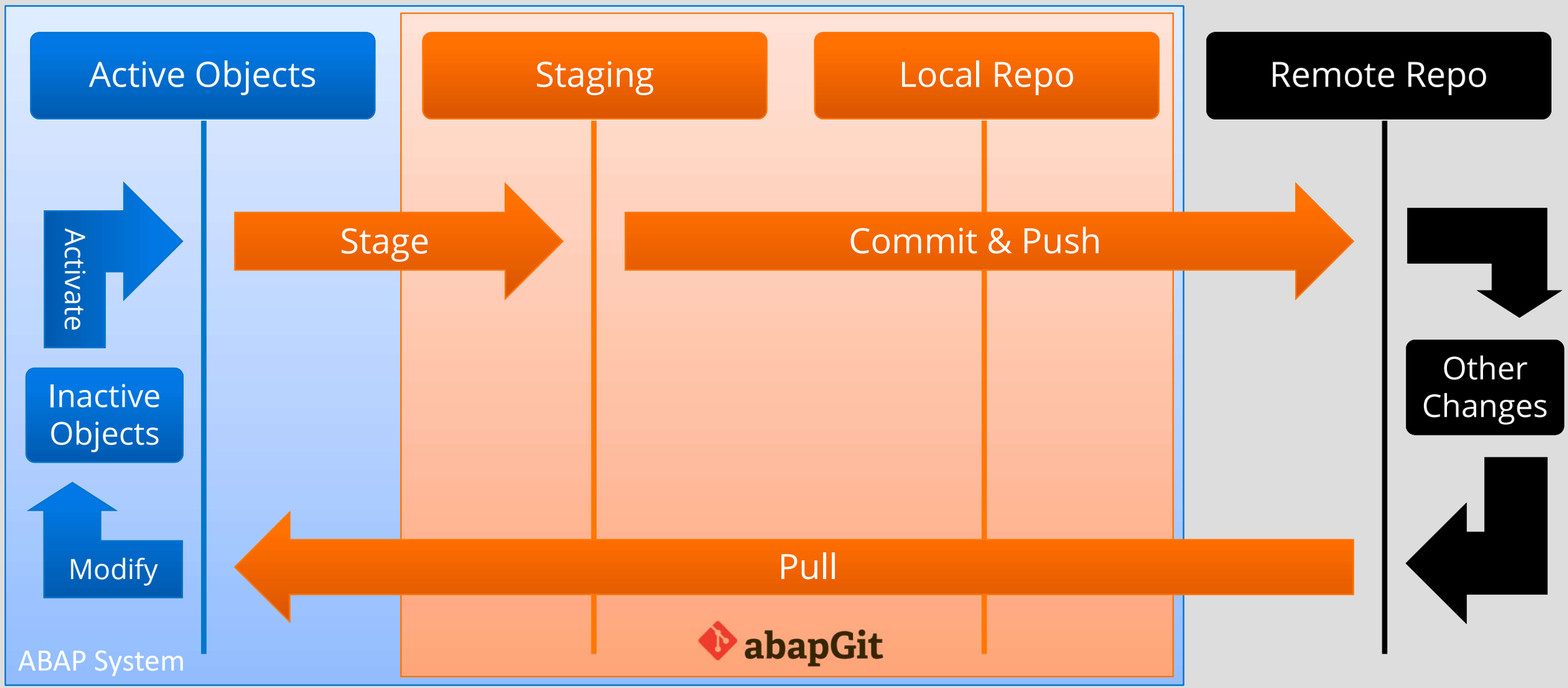
Development Cycle



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Online & Offline

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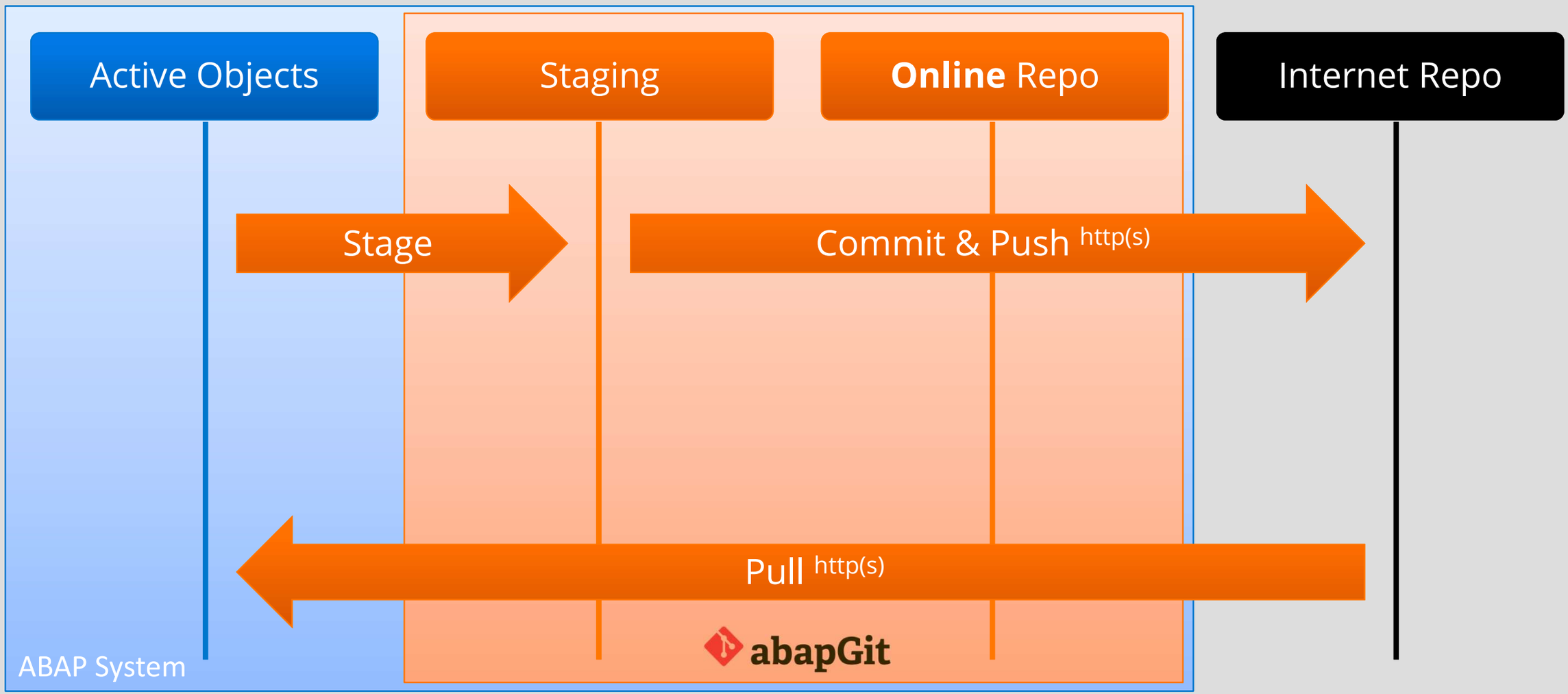
Online Mode



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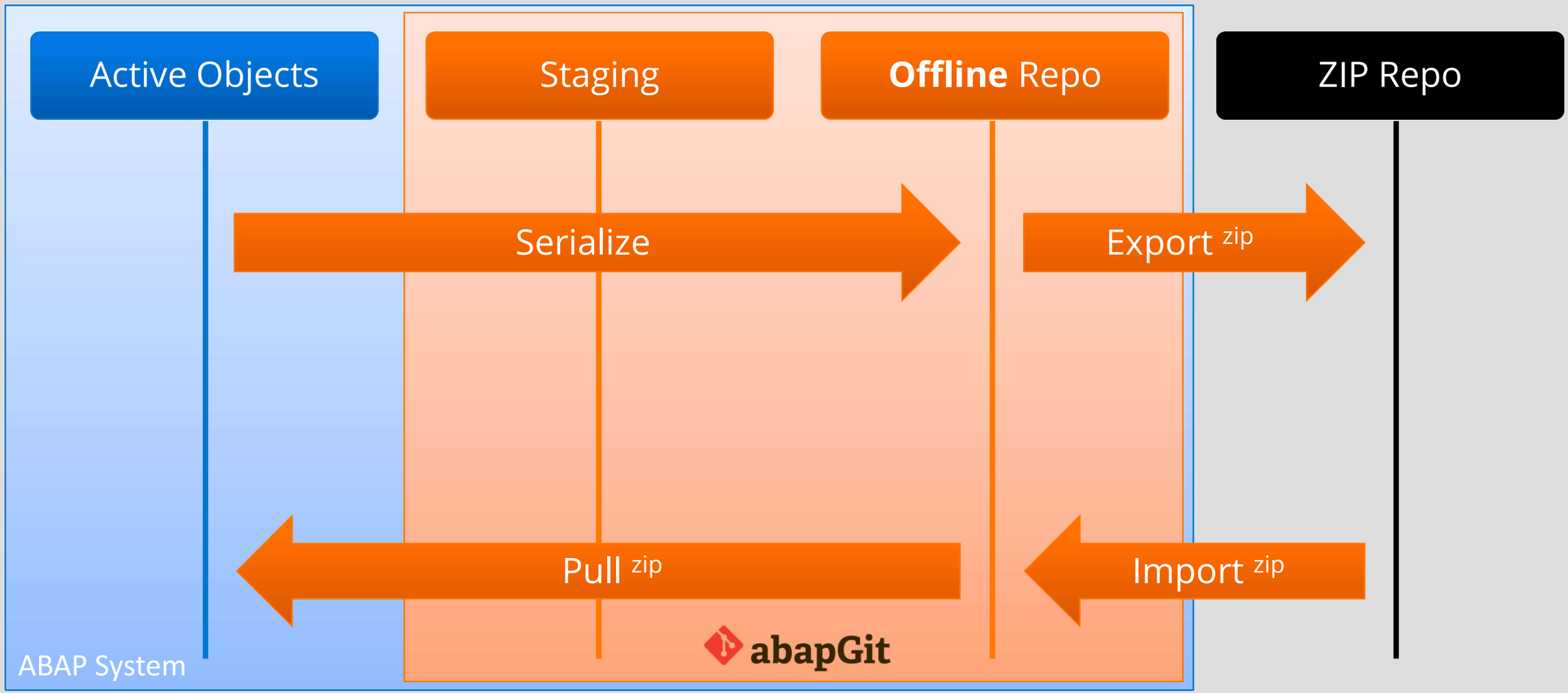
Offline Mode



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What's Next For You?

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Call to Action

- 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
- **Promote abapGit**!

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Thank You!

Contact Information

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Learn More

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Anything Else?

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/

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And Then?

Advanced topics

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

RTFM https://docs.abapgit.org/

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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

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Behind the Scenes

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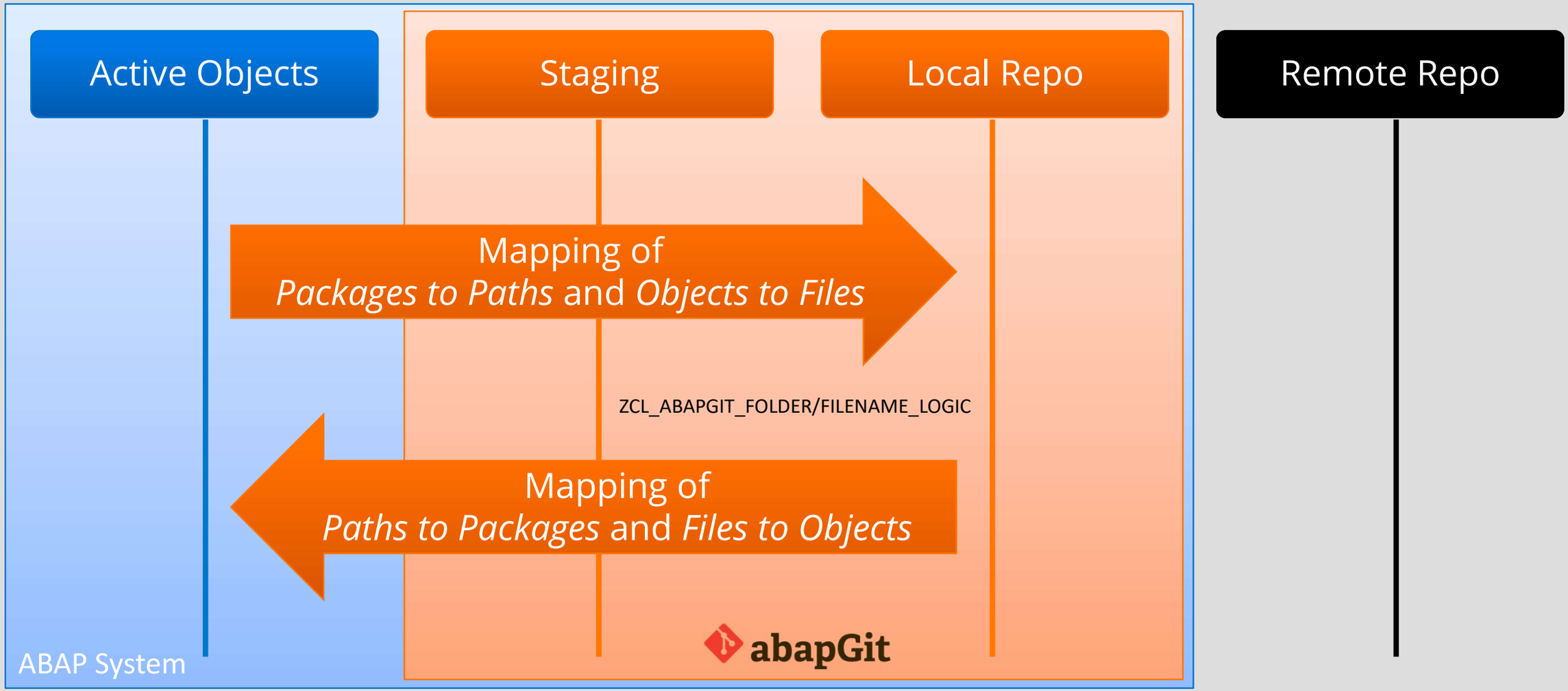
Packages and Objects

abapGit maps every supported object type to one or more files. The files are virtual and not persisted anywhere.



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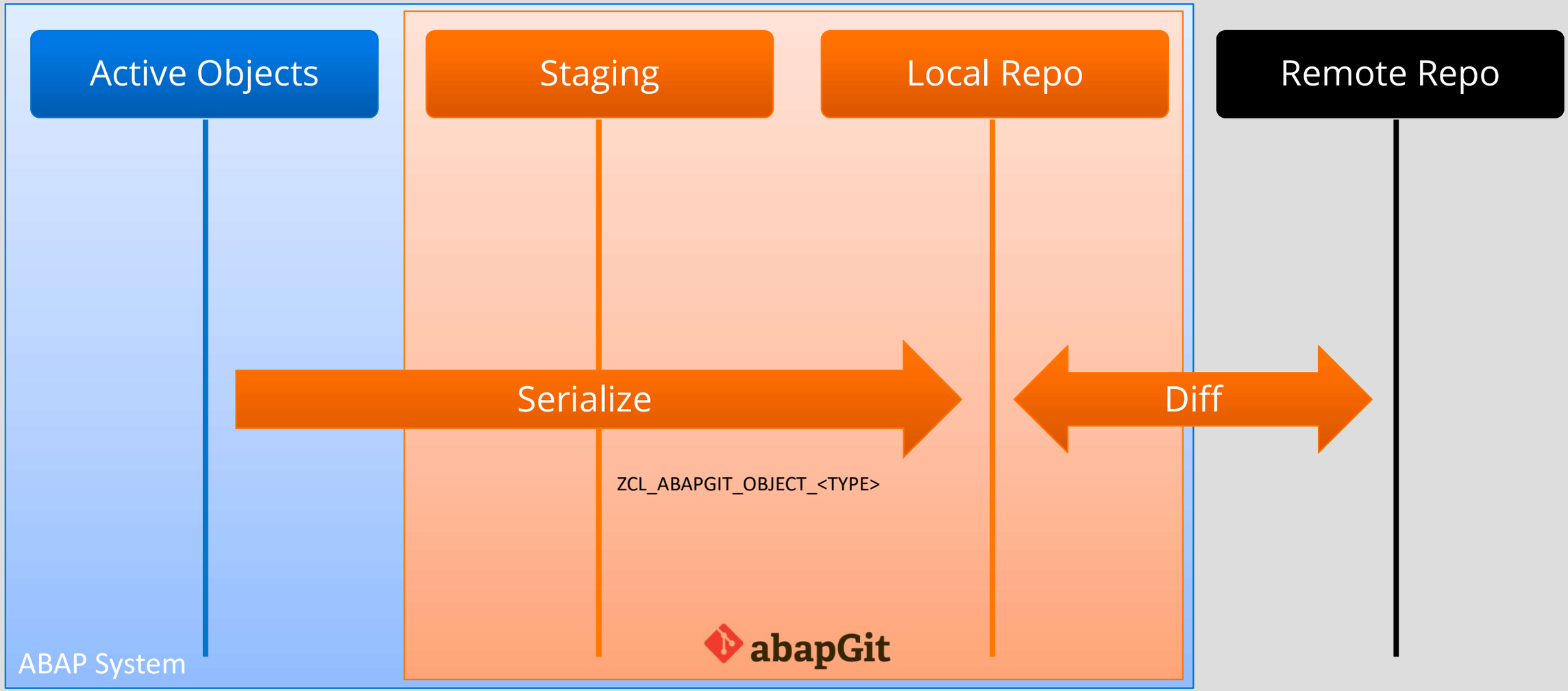
Serializing Objects

Behind the scenes, abapGit will serialize objects into virtual files and allow you to see the differences to the remote files.



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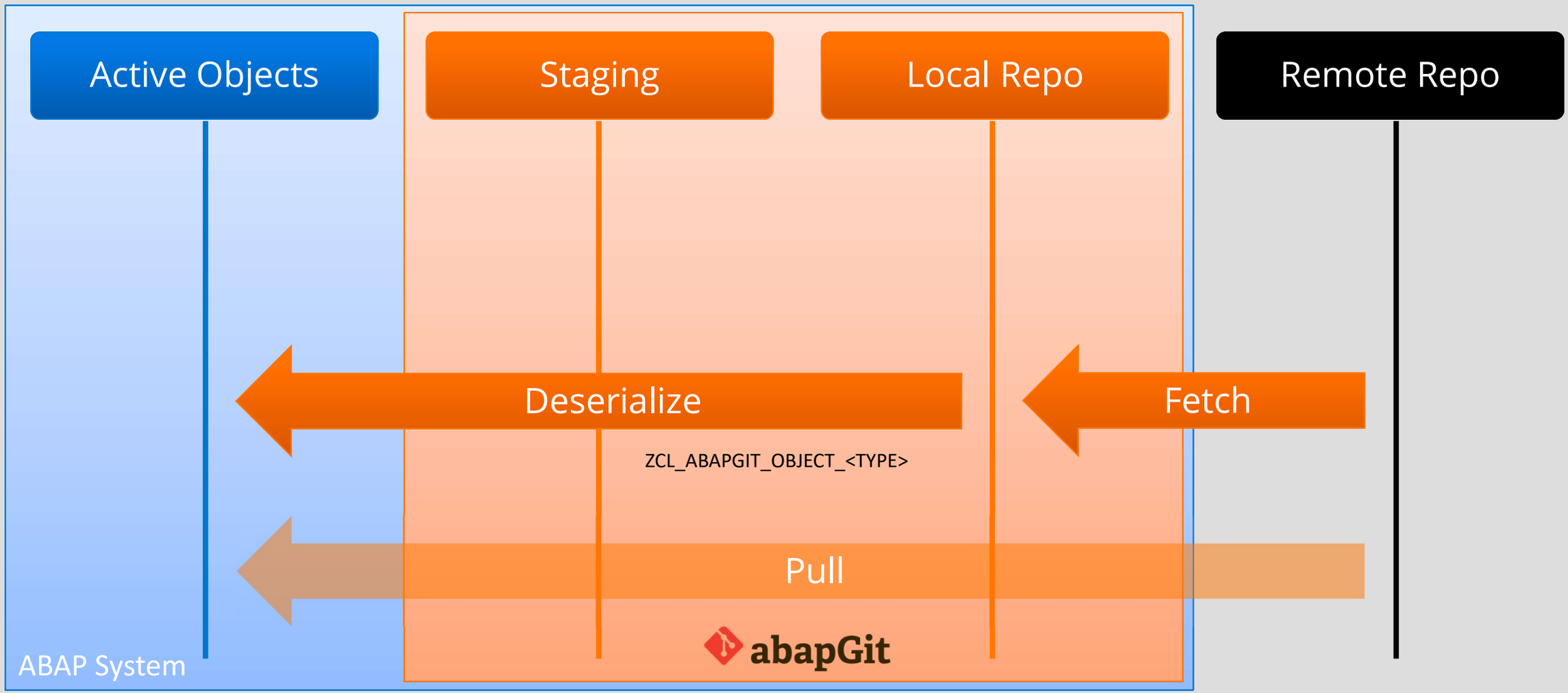
Deserializing Objects

During a pull, abapGit will deserialize the remote files and create or update the corresponding objects. It then performs a mass activation.



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Demo Repository

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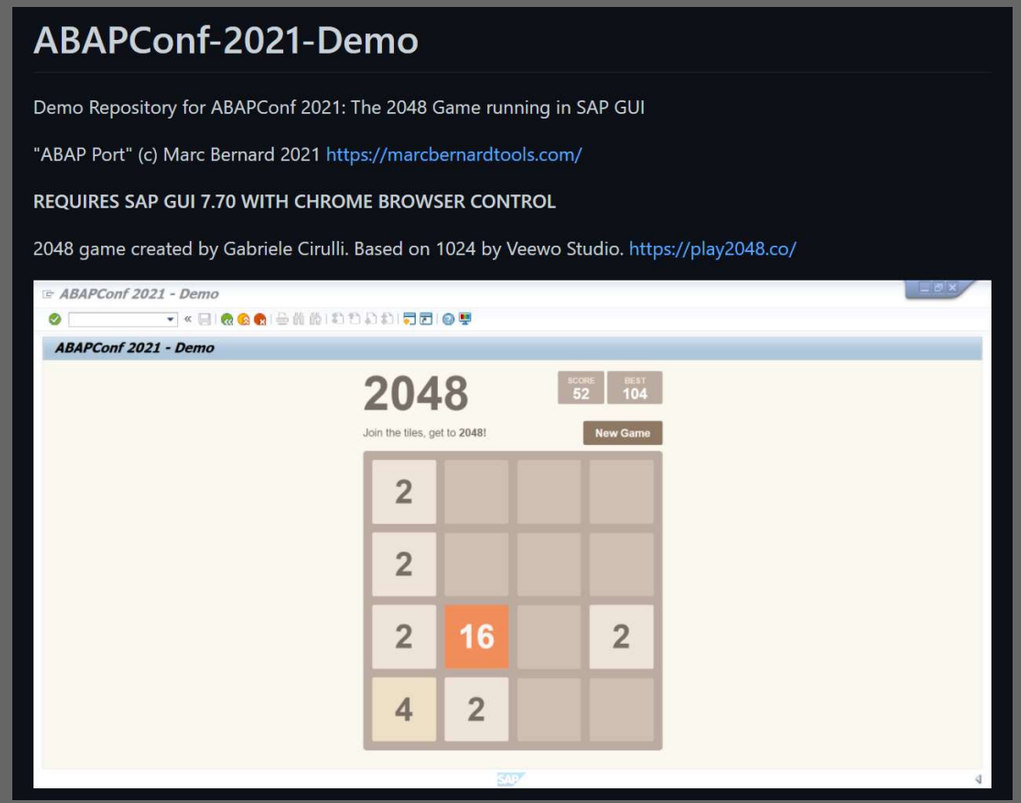
The 2048 Game running in SAP GUI

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



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