

Understanding Source Control in Xcode

Session 414

Kevin Lindeman

Xcode Software Engineer

These are confidential sessions—please refrain from streaming, blogging, or taking pictures

More Information

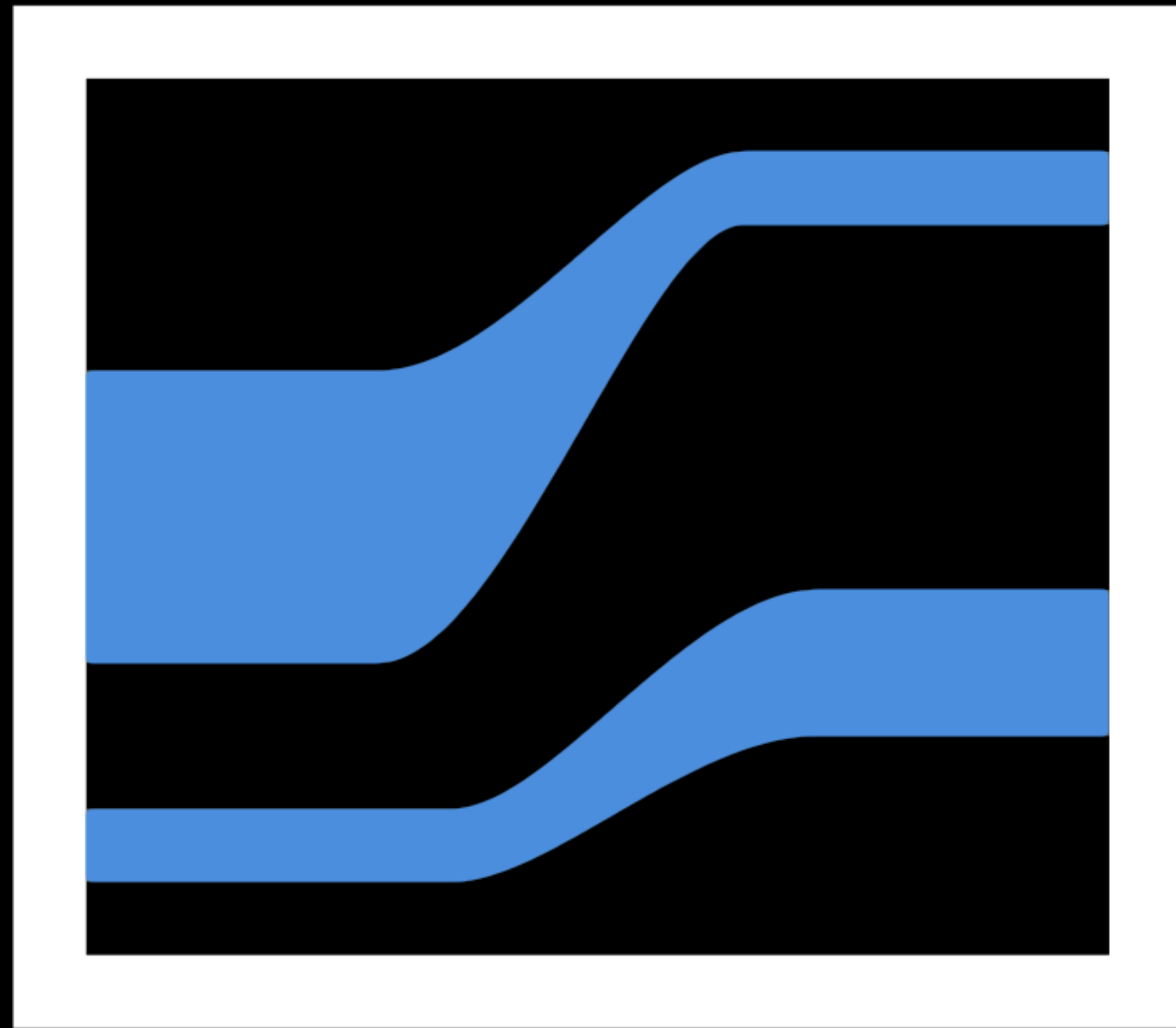
WWDC 2012 Session

- Source Control Management in Xcode



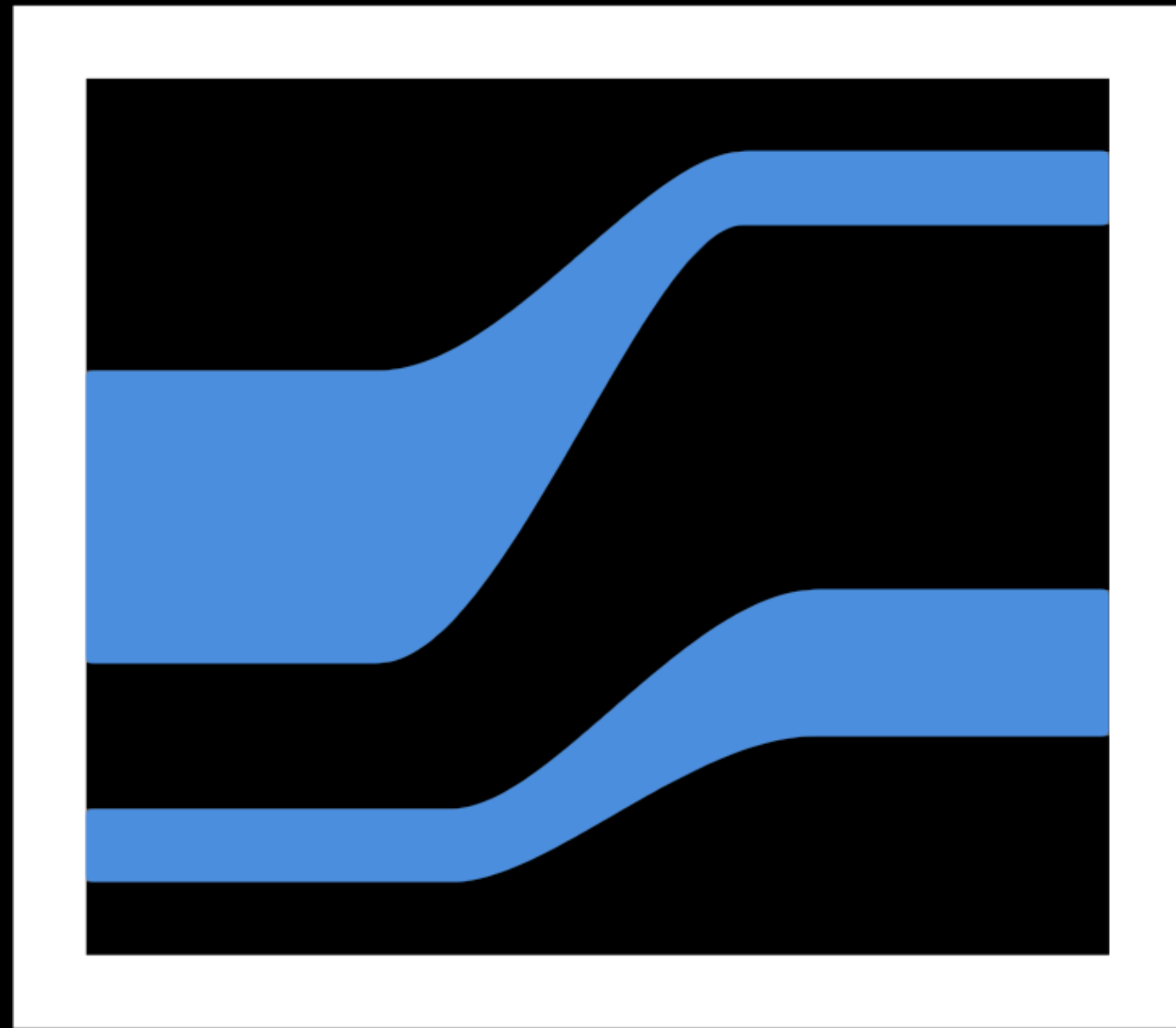
The Three Cs of Source Control

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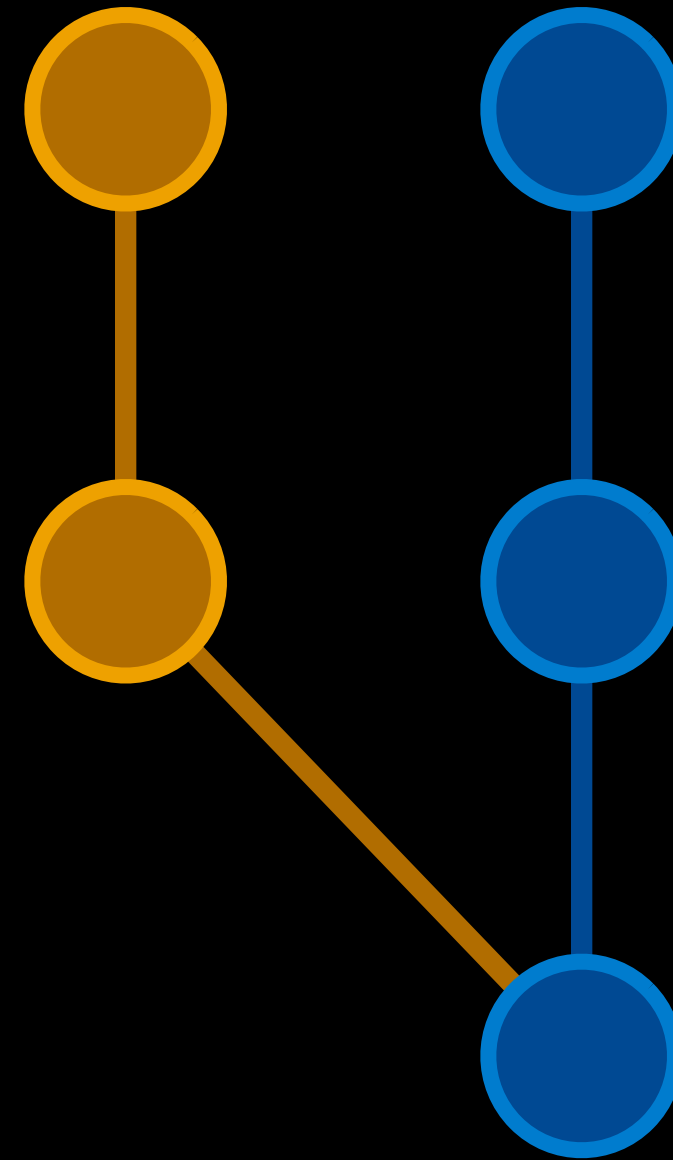


Confidence

The Three Cs of Source Control

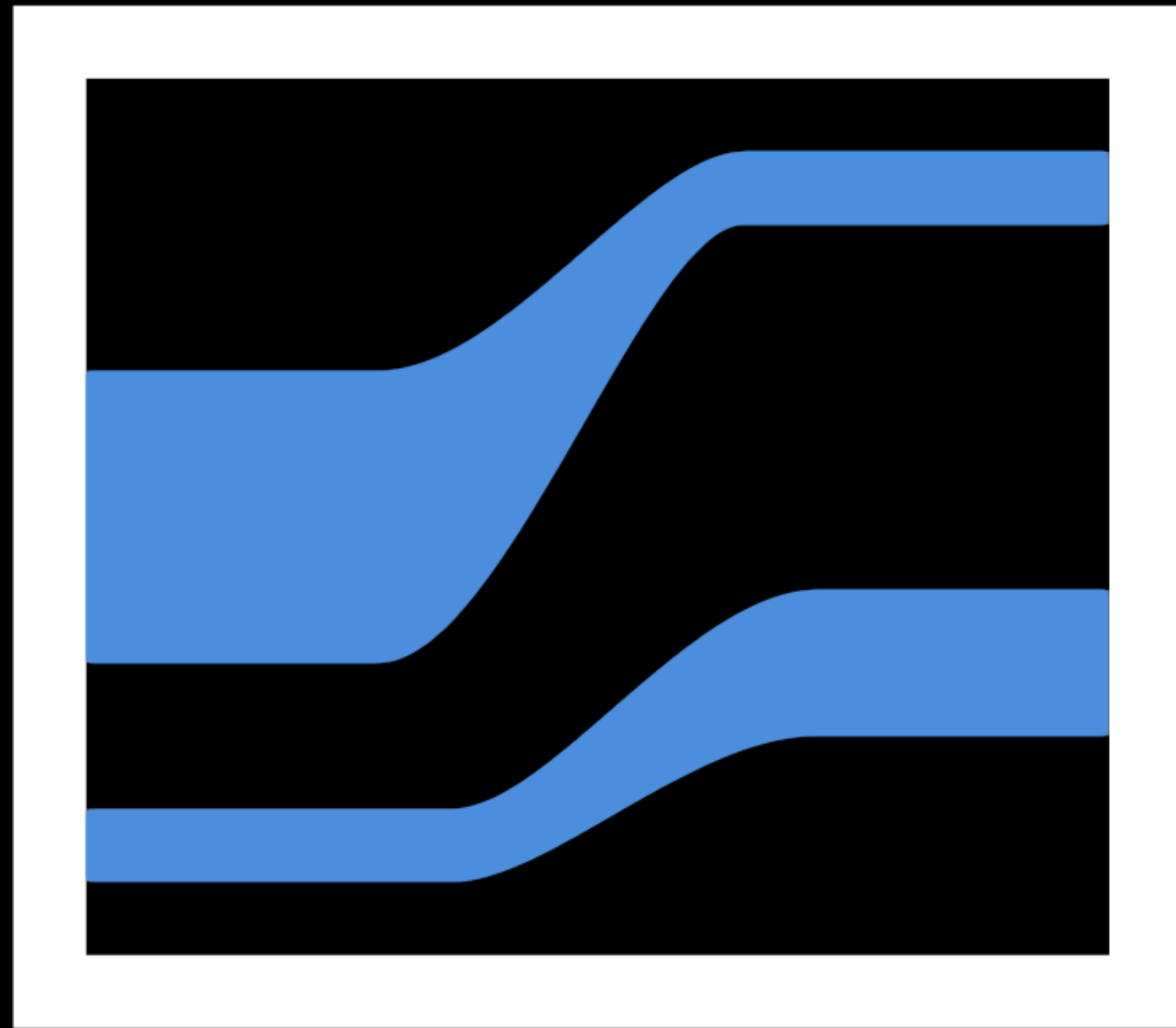


Confidence

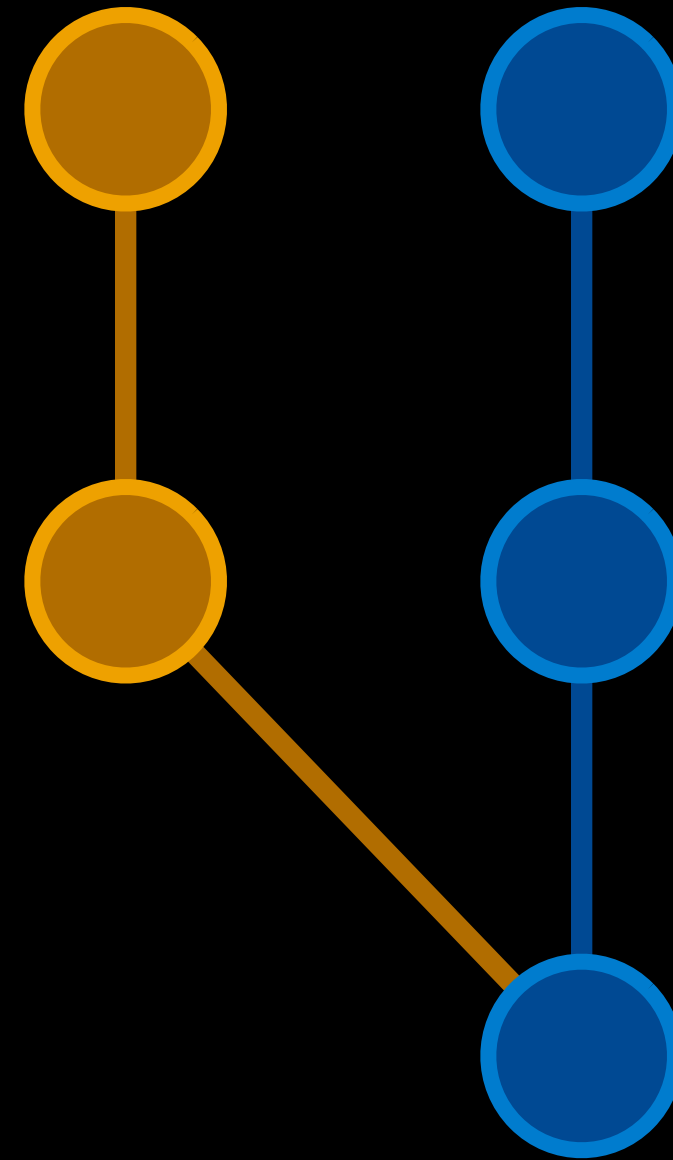


Compartmentalization

The Three Cs of Source Control



Confidence



Compartmentalization



Collaboration

What's New in Source Control

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- Latest Subversion client (1.7)

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- Improved Check Out

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- Improved Check Out
- Workspace-centric workflows

What's New in Source Control

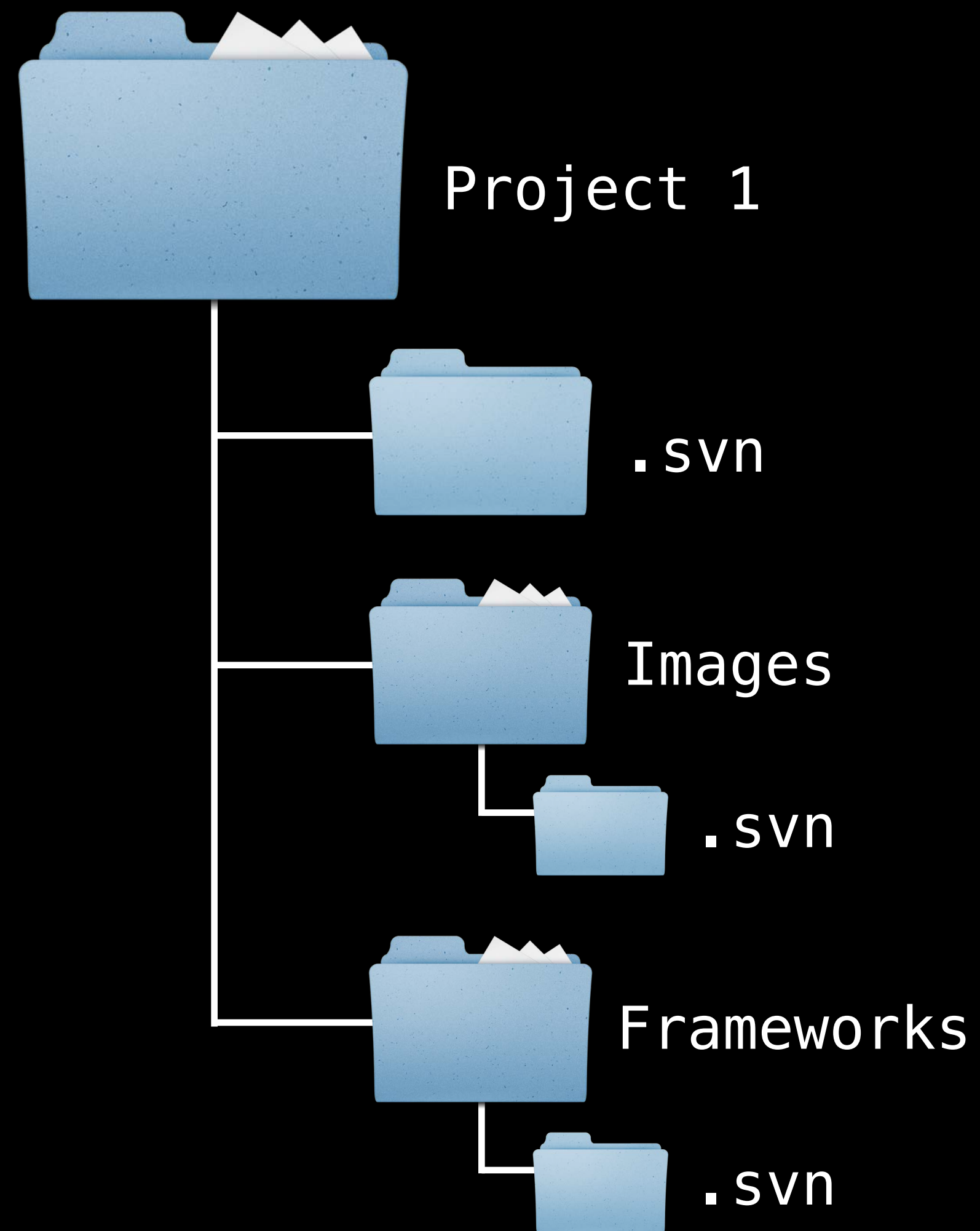
- Latest Subversion client (1.7)
- Improved Check Out
- Workspace-centric workflows
- Deep integration with Xcode Service on OS X Server

What's New in Source Control

- Latest Subversion client (1.7)
- Improved Check Out
- Workspace-centric workflows
- Deep integration with Xcode Service on OS X Server
- Greater customization

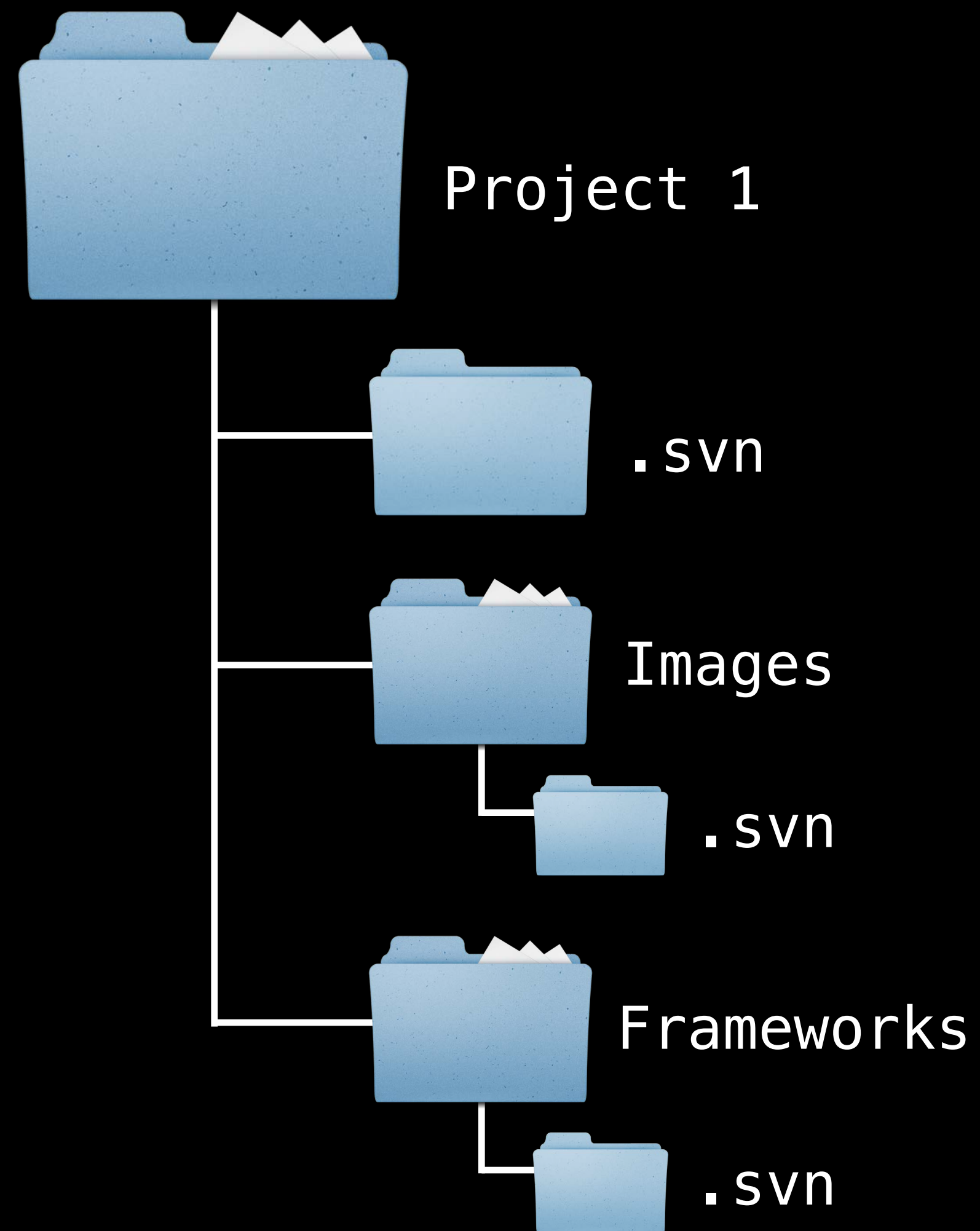
Subversion 1.7 Structure

Key differences



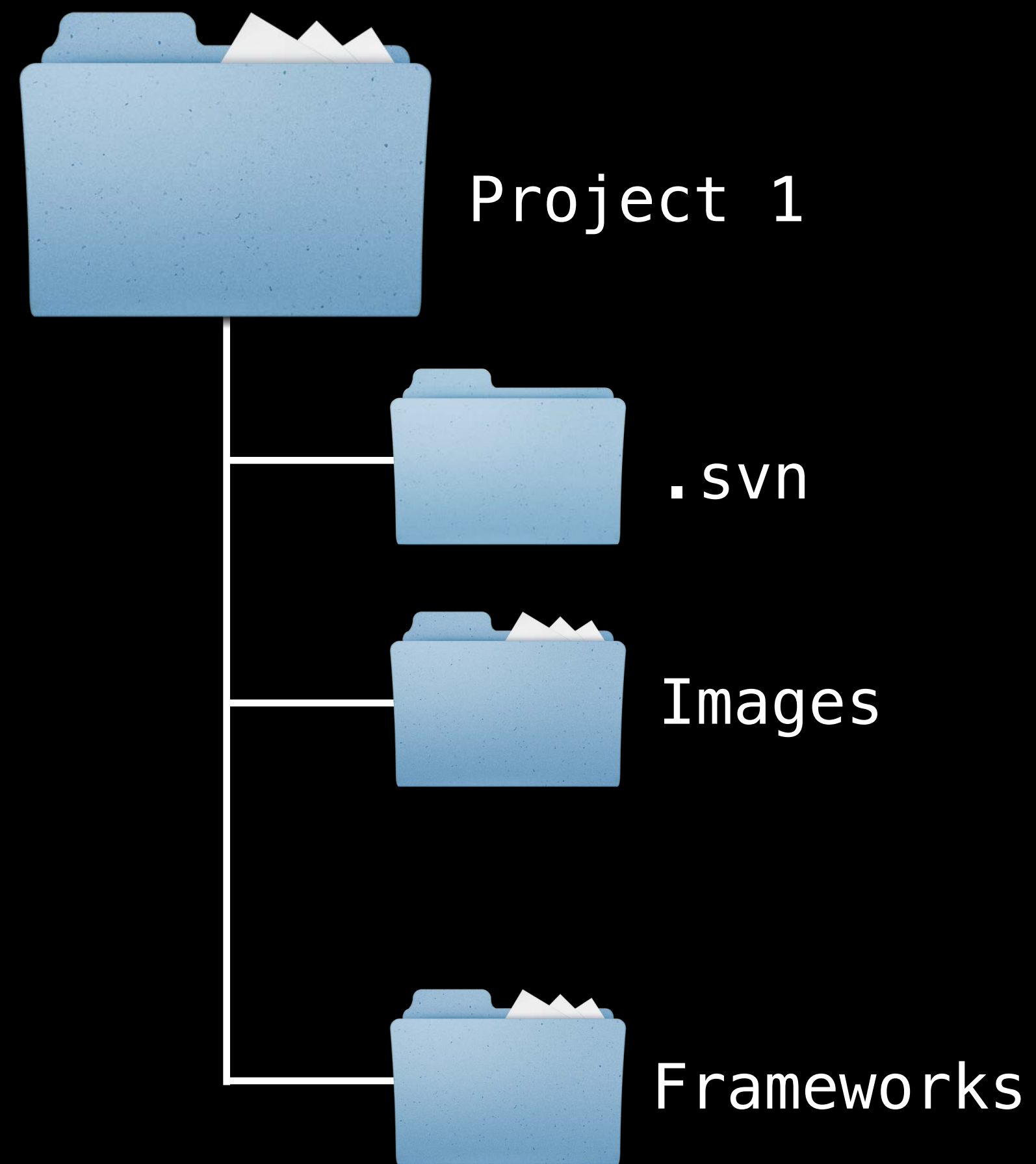
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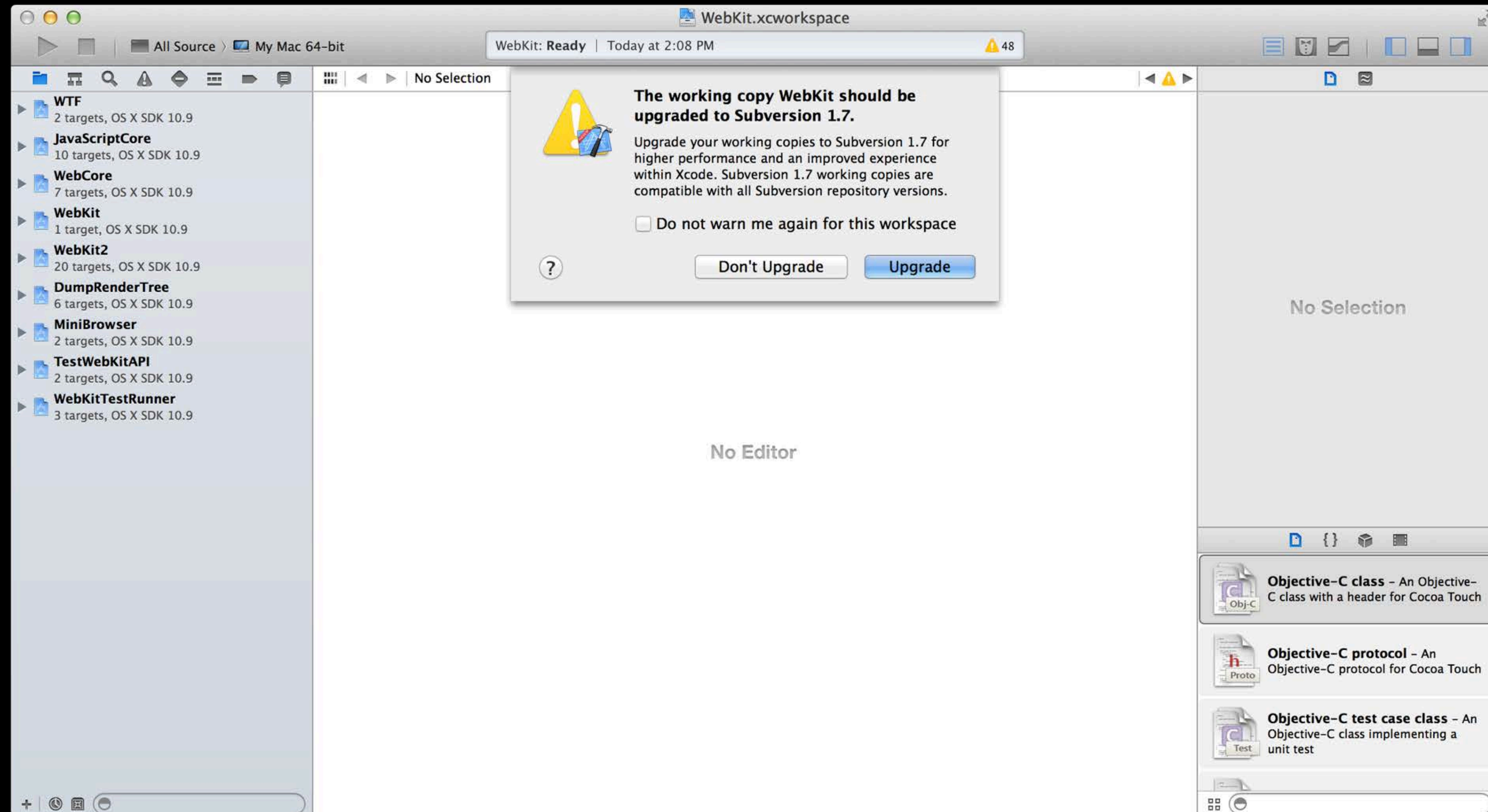


Subversion 1.7 Structure

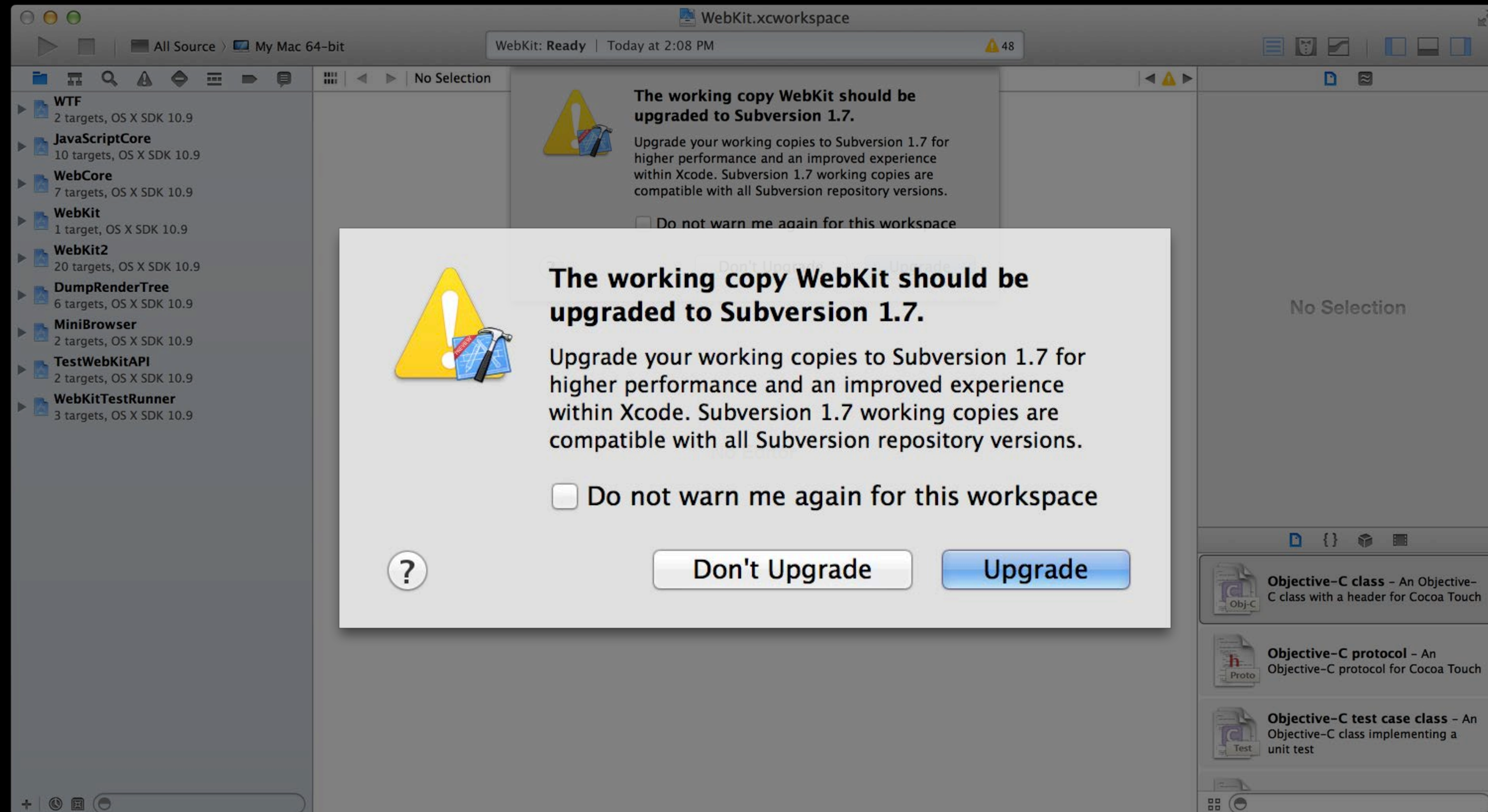
Key differences



Subversion 1.7



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Subversion 1.7

Enhancements in Xcode

Subversion 1.7

Enhancements in Xcode

- Improved performance



Subversion 1.7

Enhancements in Xcode

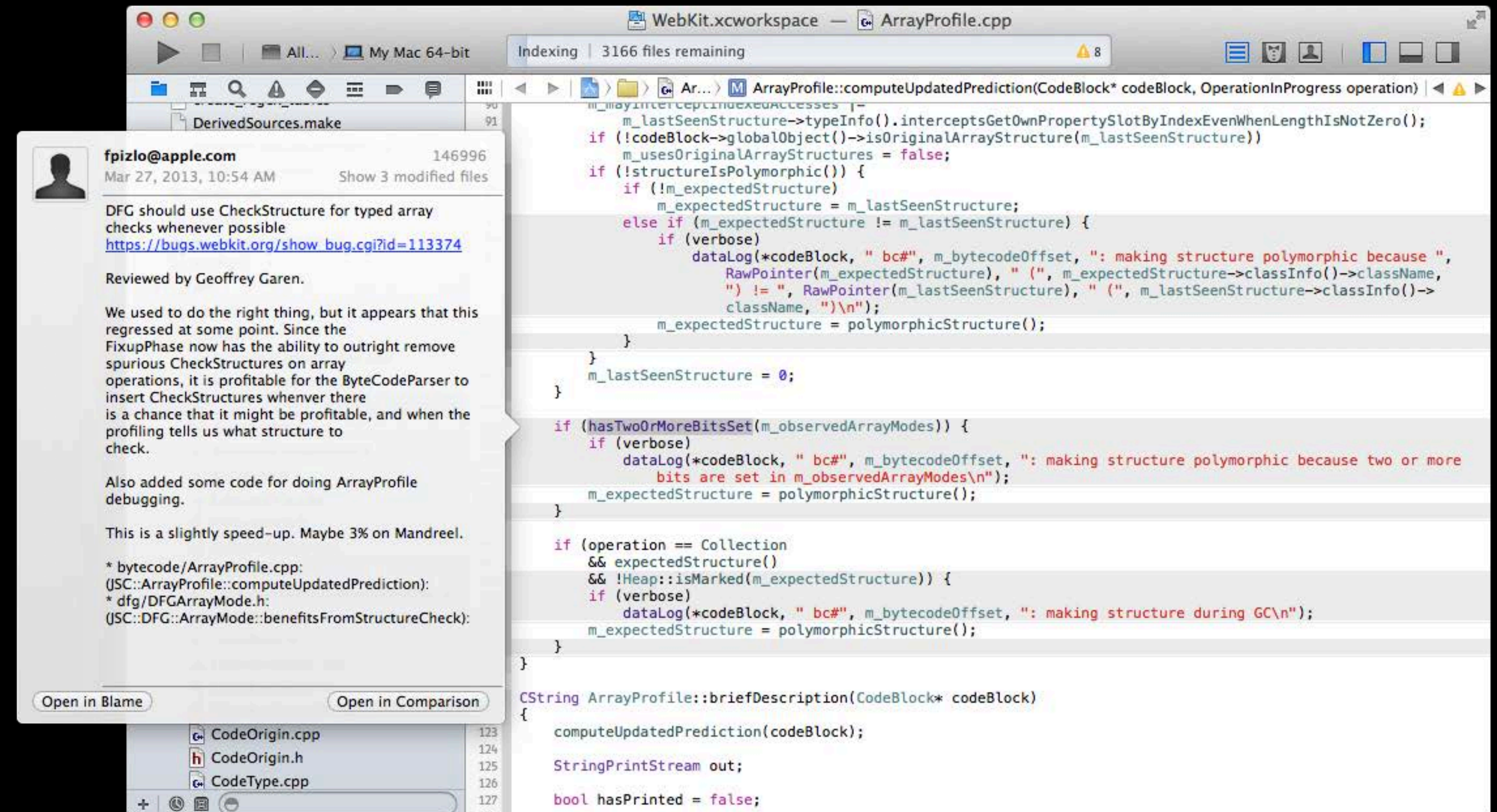
- Improved performance
- Blame for modified files



Subversion 1.7

Enhancements in Xcode

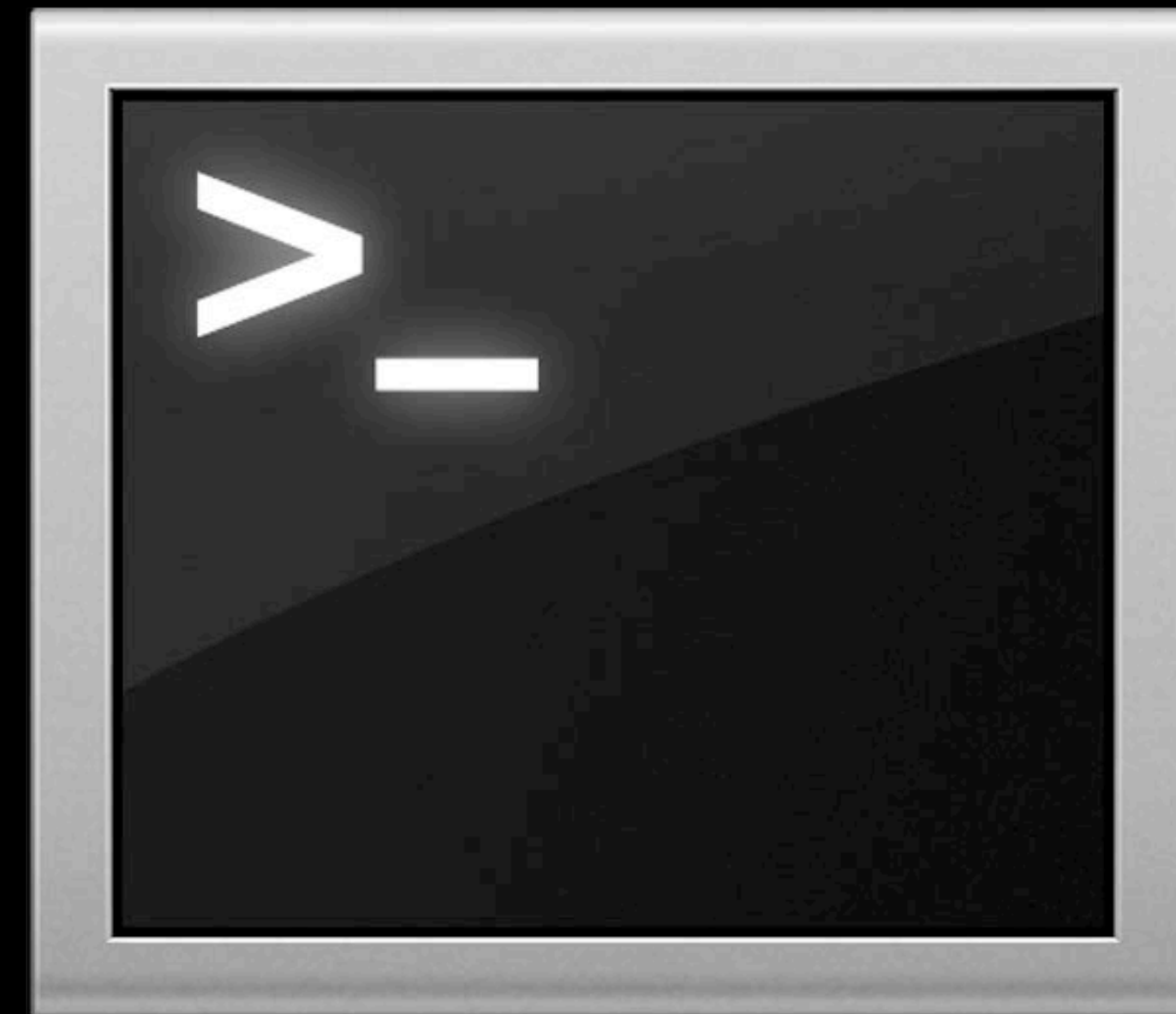
- Improved performance
- Blame for modified files
- Blame for line shortcut



Subversion 1.7

Enhancements in Xcode

- Improved performance
- Blame for modified files
- Blame for line shortcut
- CLI integration

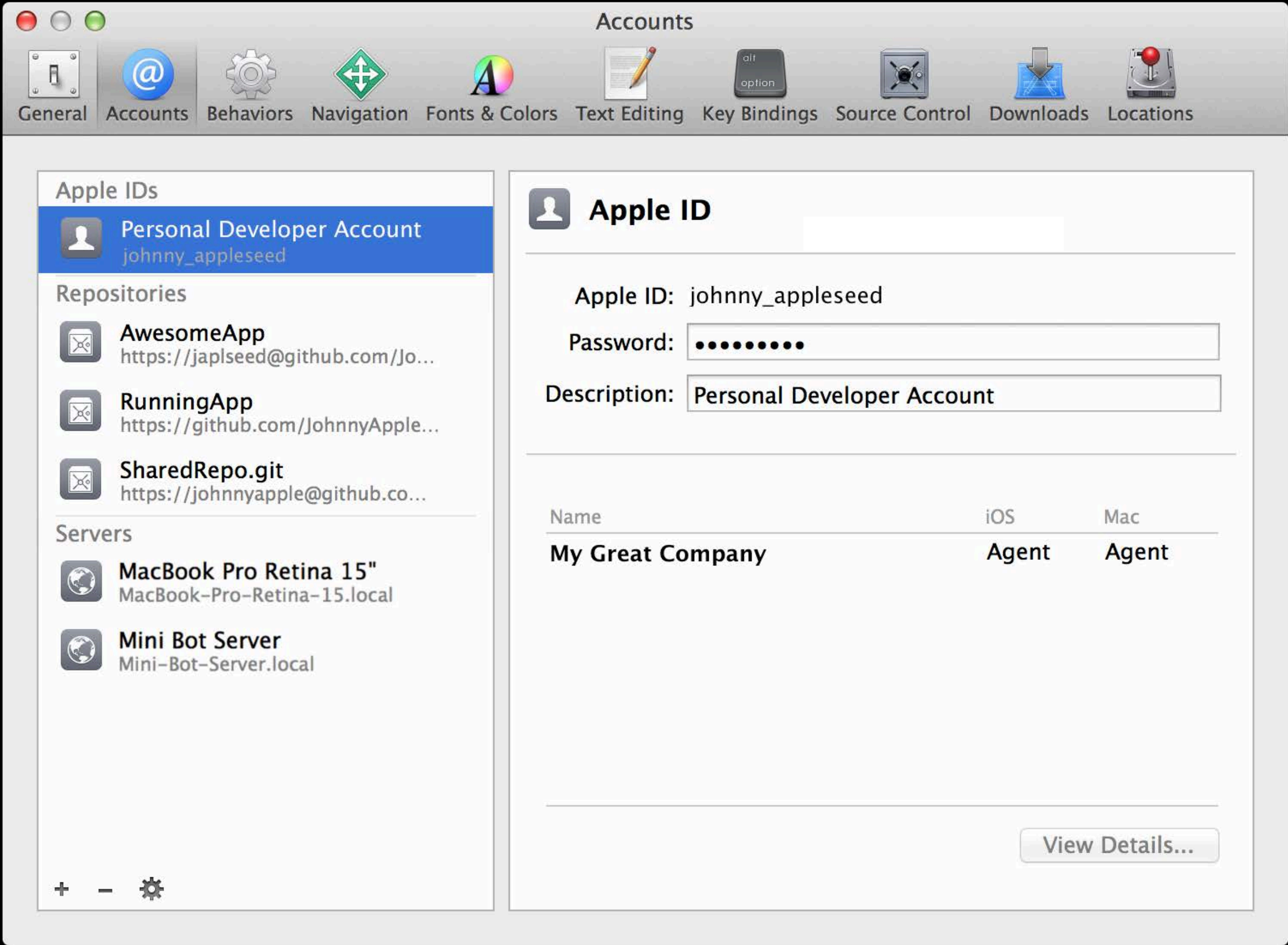


Workspace-Centric Source Control

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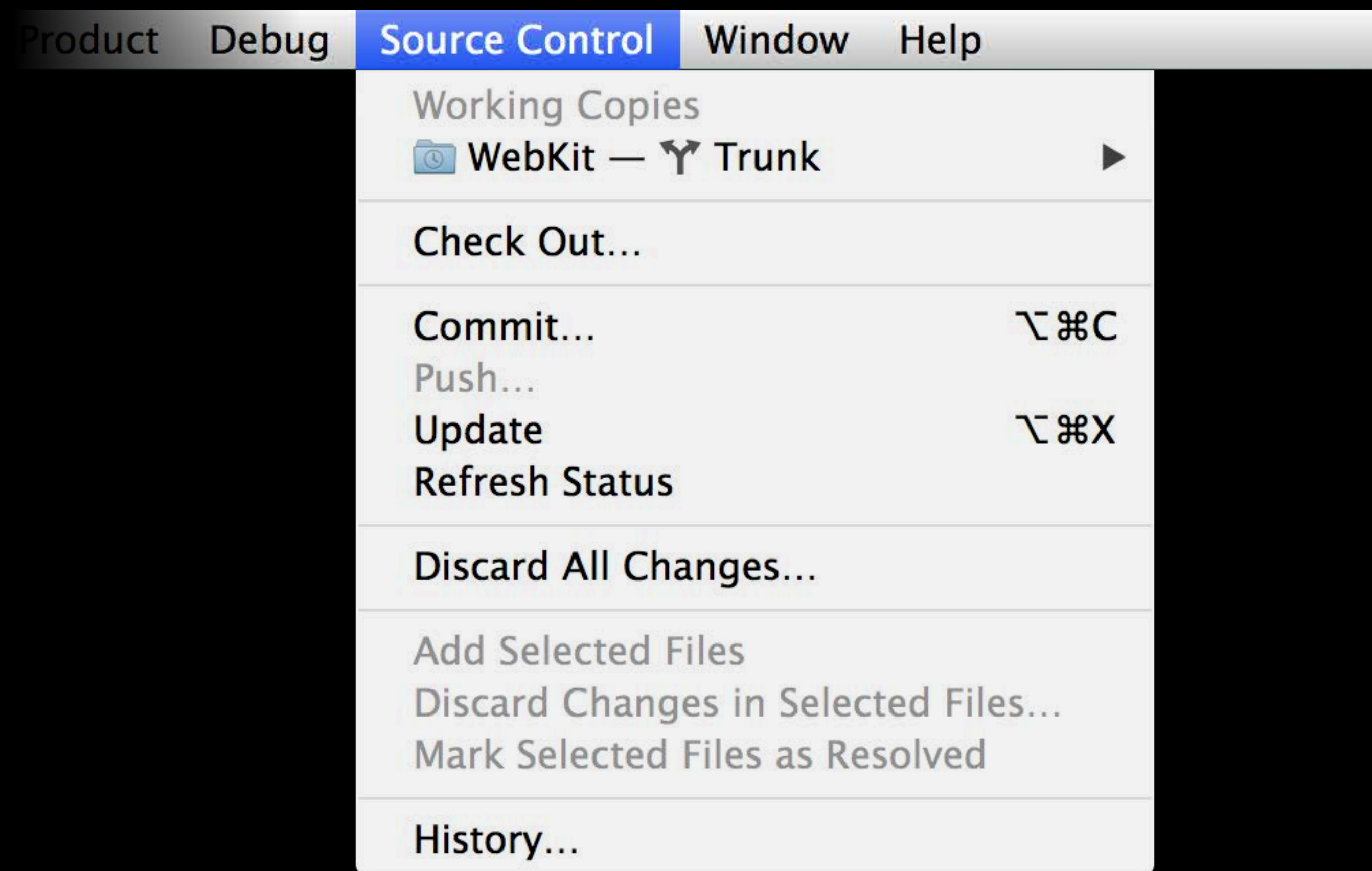
Workspace-Centric Source Control

- Accounts



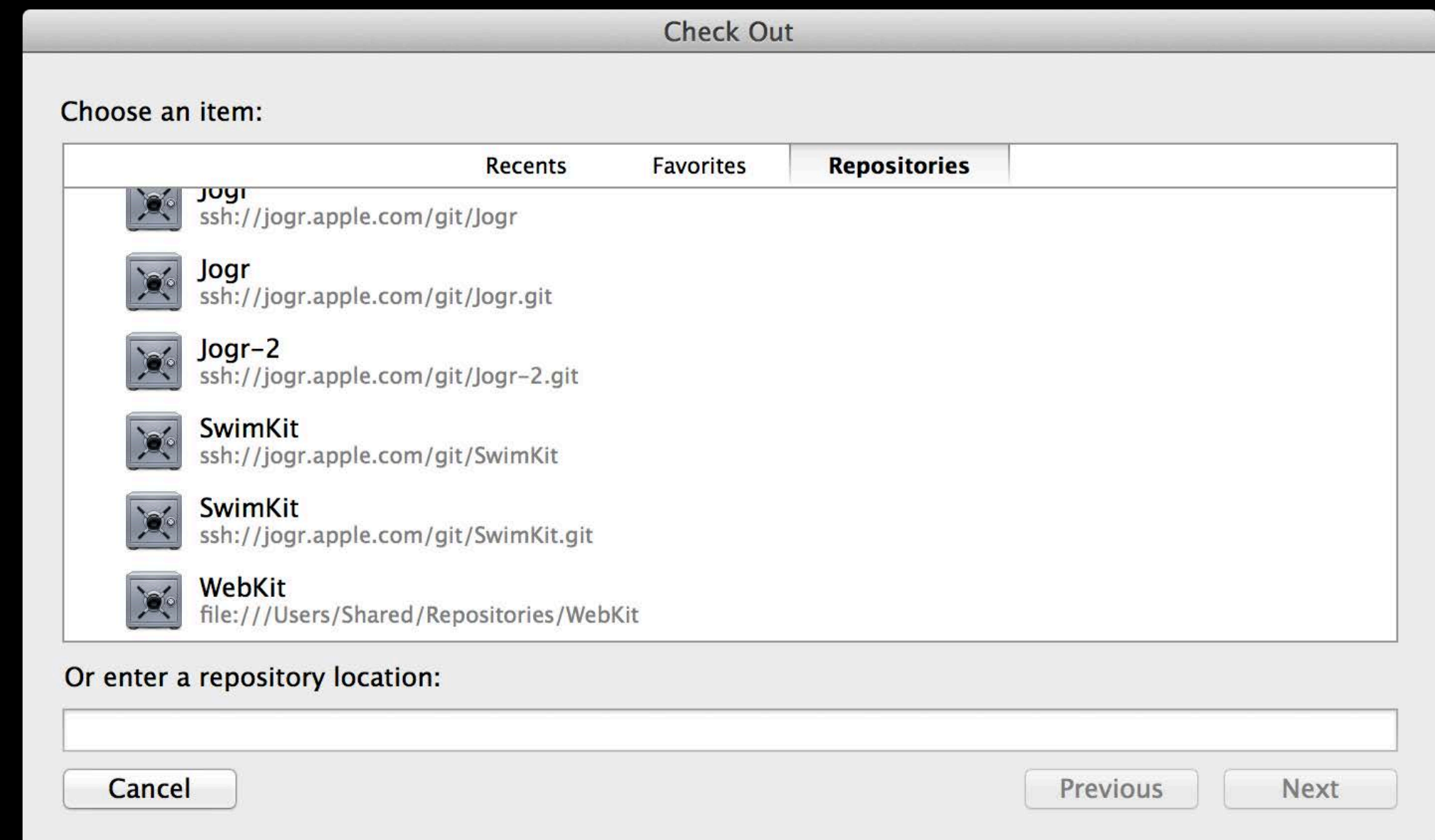
Workspace-Centric Source Control

- Accounts
- Source Control Menu



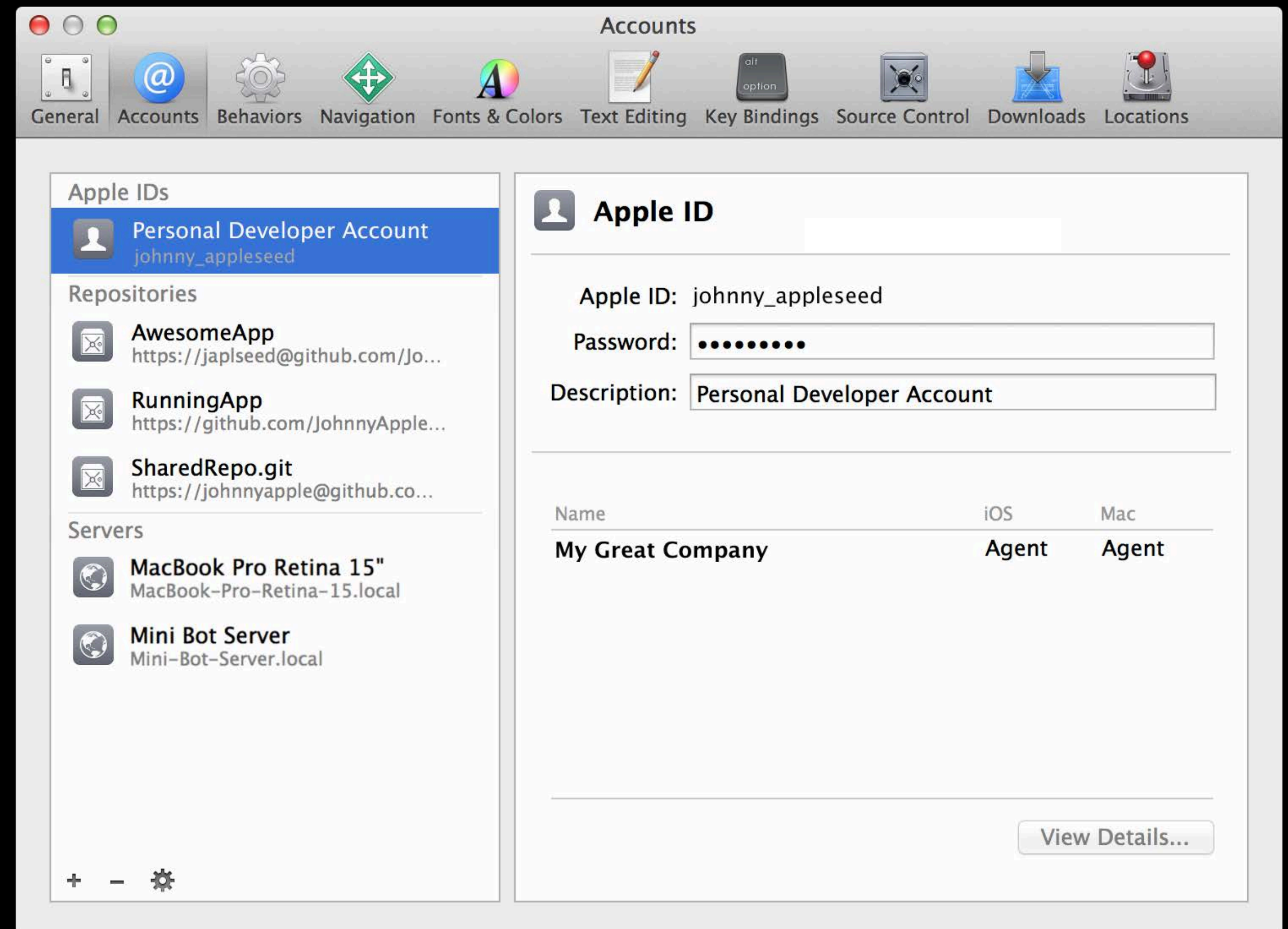
Workspace-Centric Source Control

- Accounts
- Source Control Menu
- Check Out



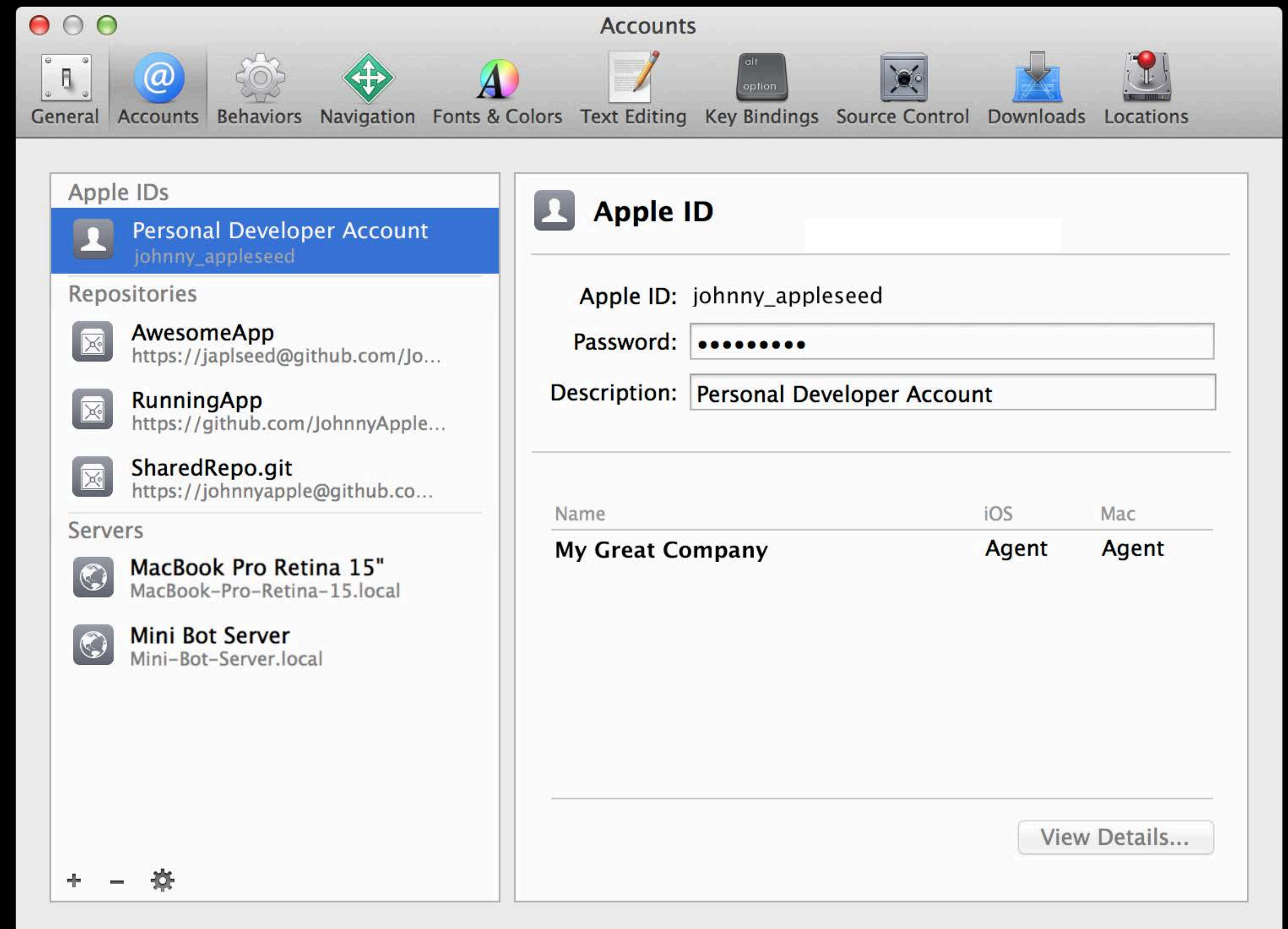
Accounts Preferences

- Single place for all credential management



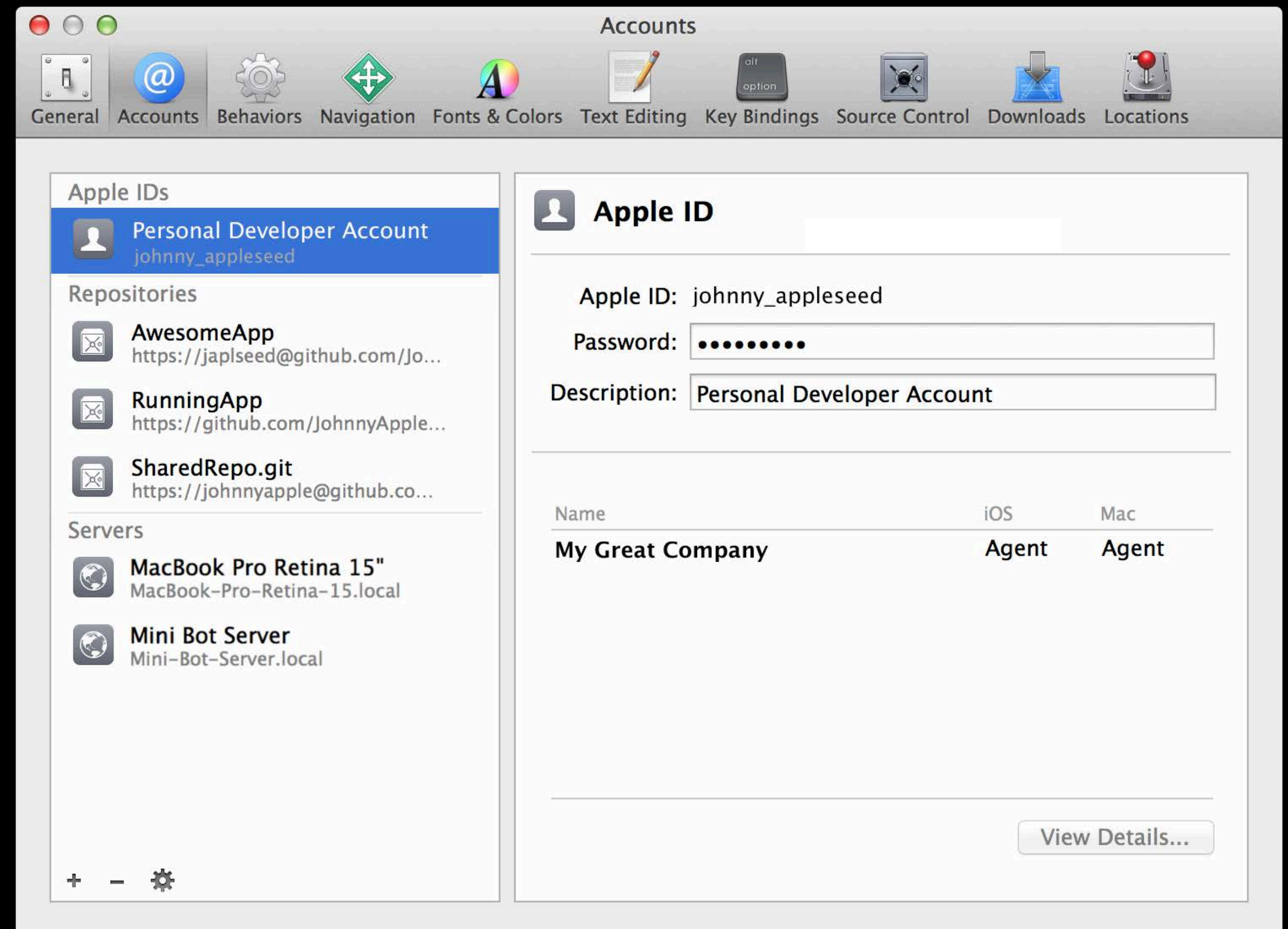
Accounts Preferences

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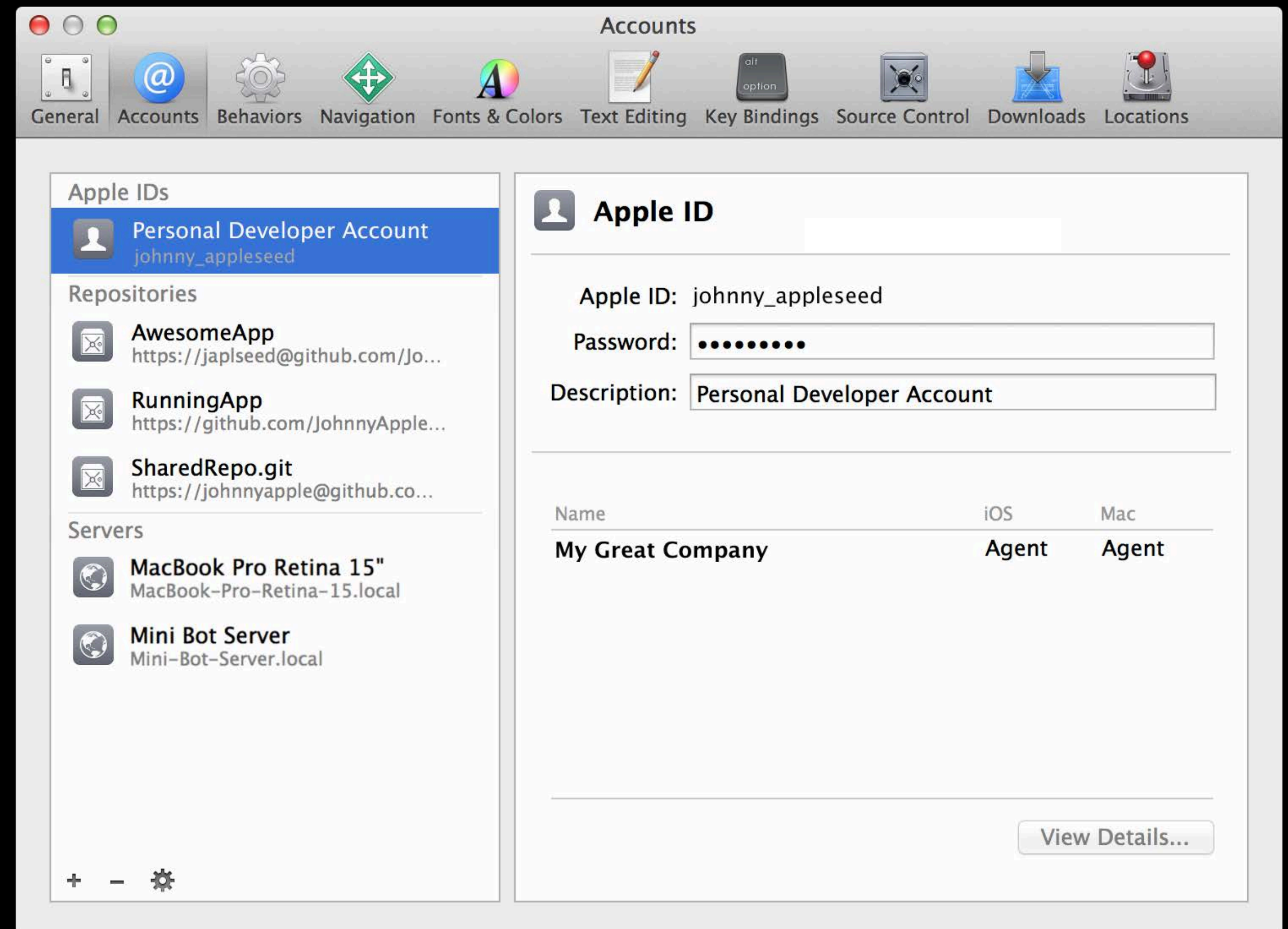
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- Single place for all credential management
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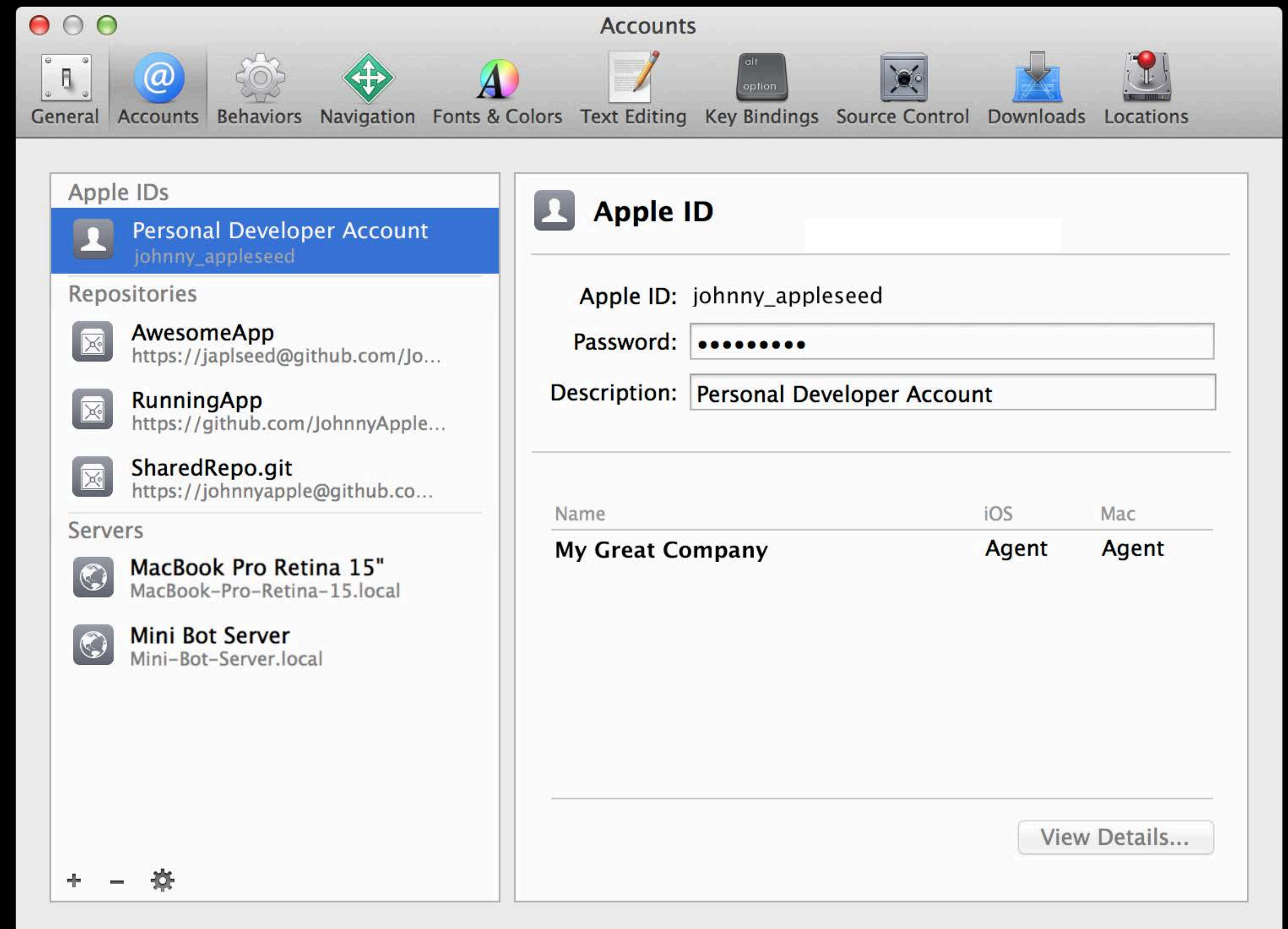
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- Single place for all credential management
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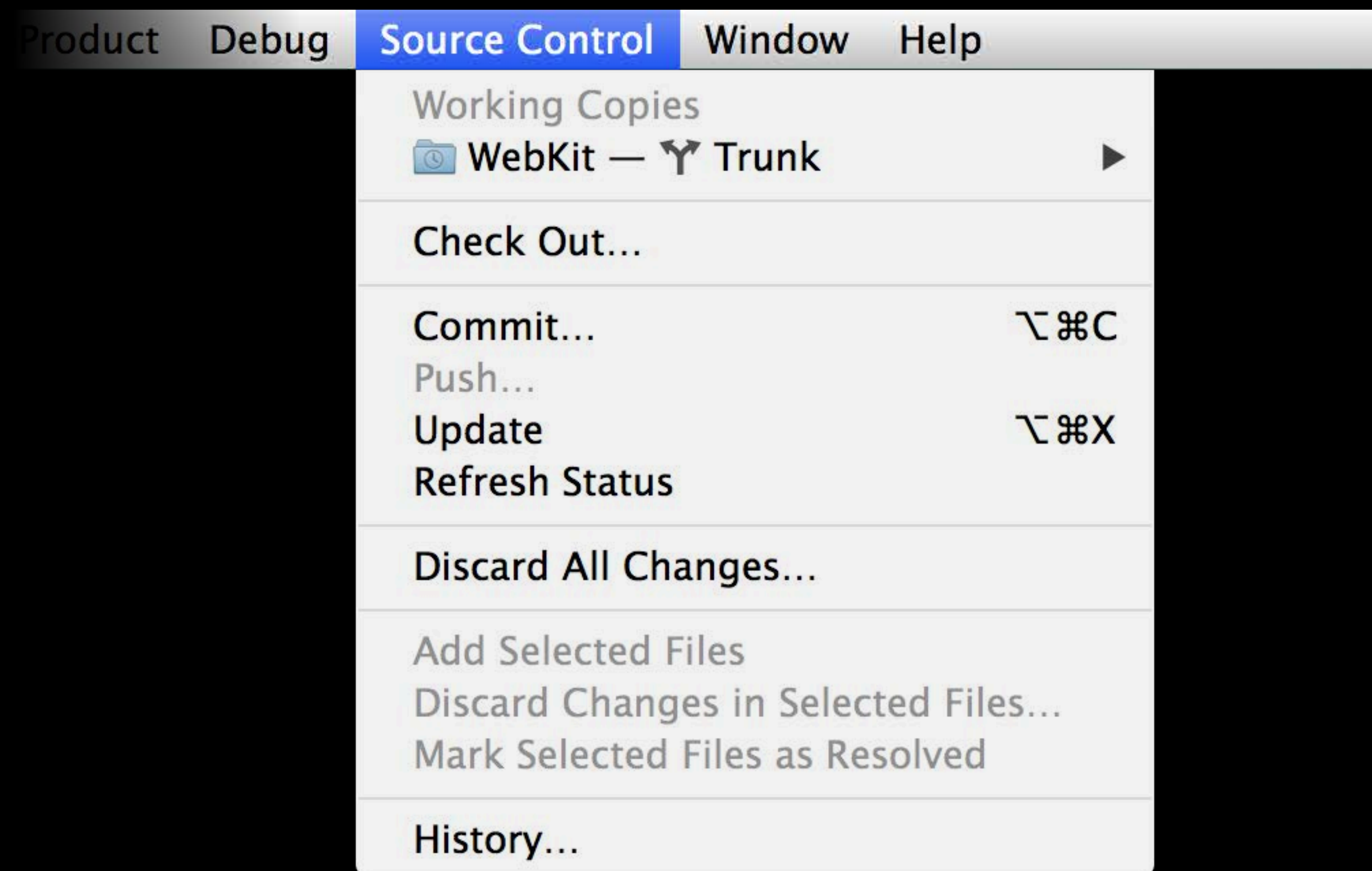
Accounts Preferences

- Single place for all credential management
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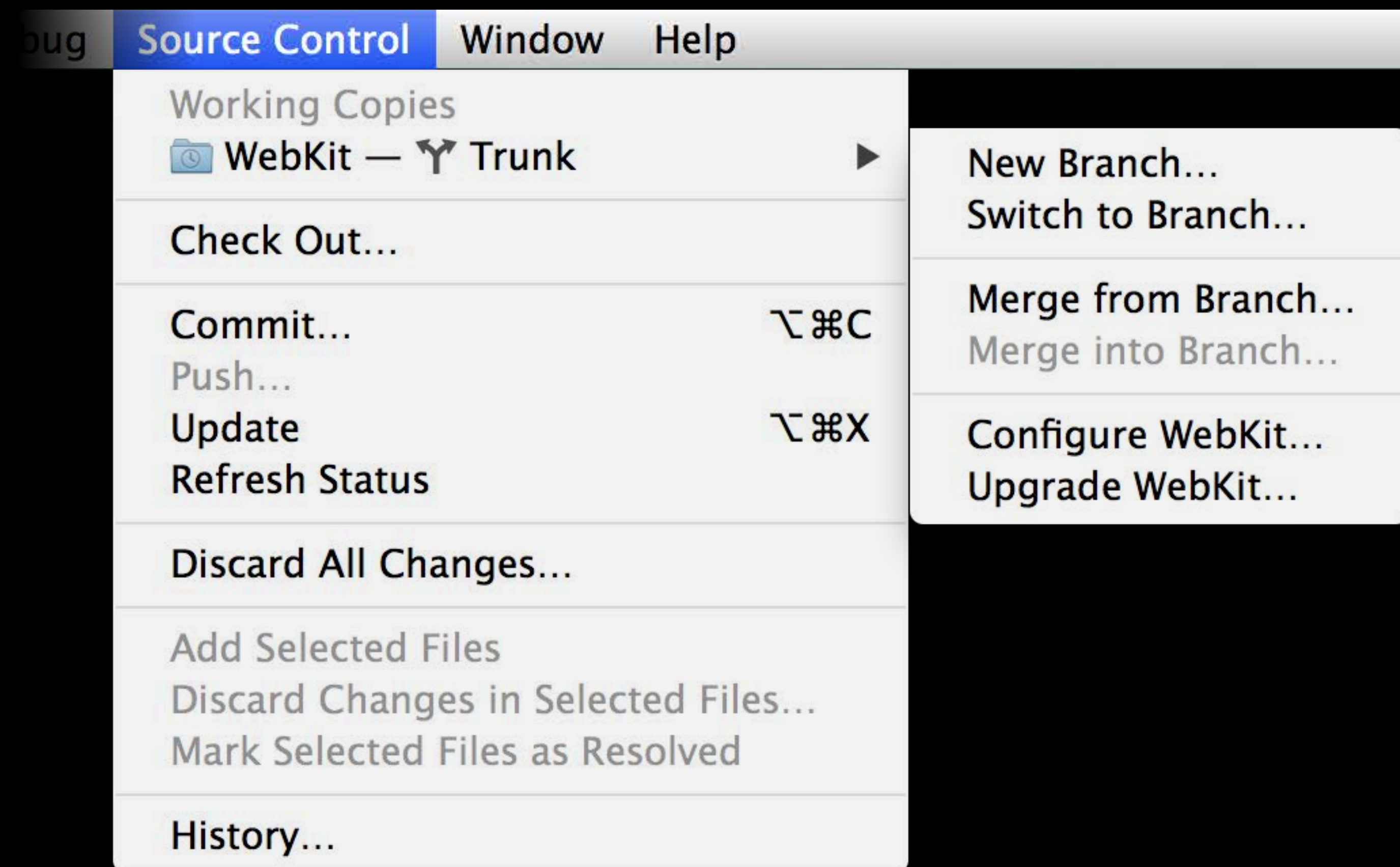
Source Control Menu

- All working copies and current branches readily available



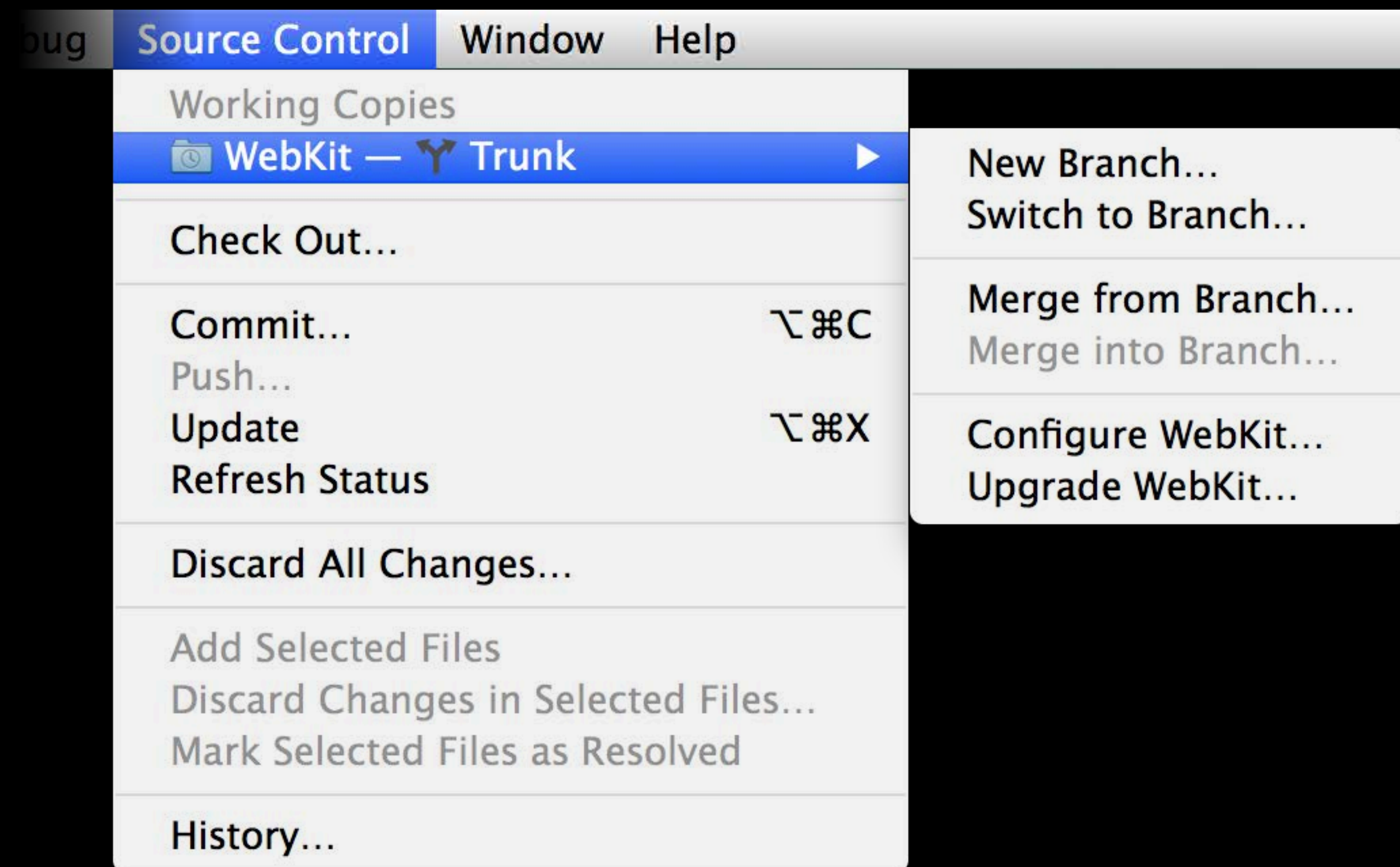
Source Control Menu

- All working copies and current branches readily available
- Branch management



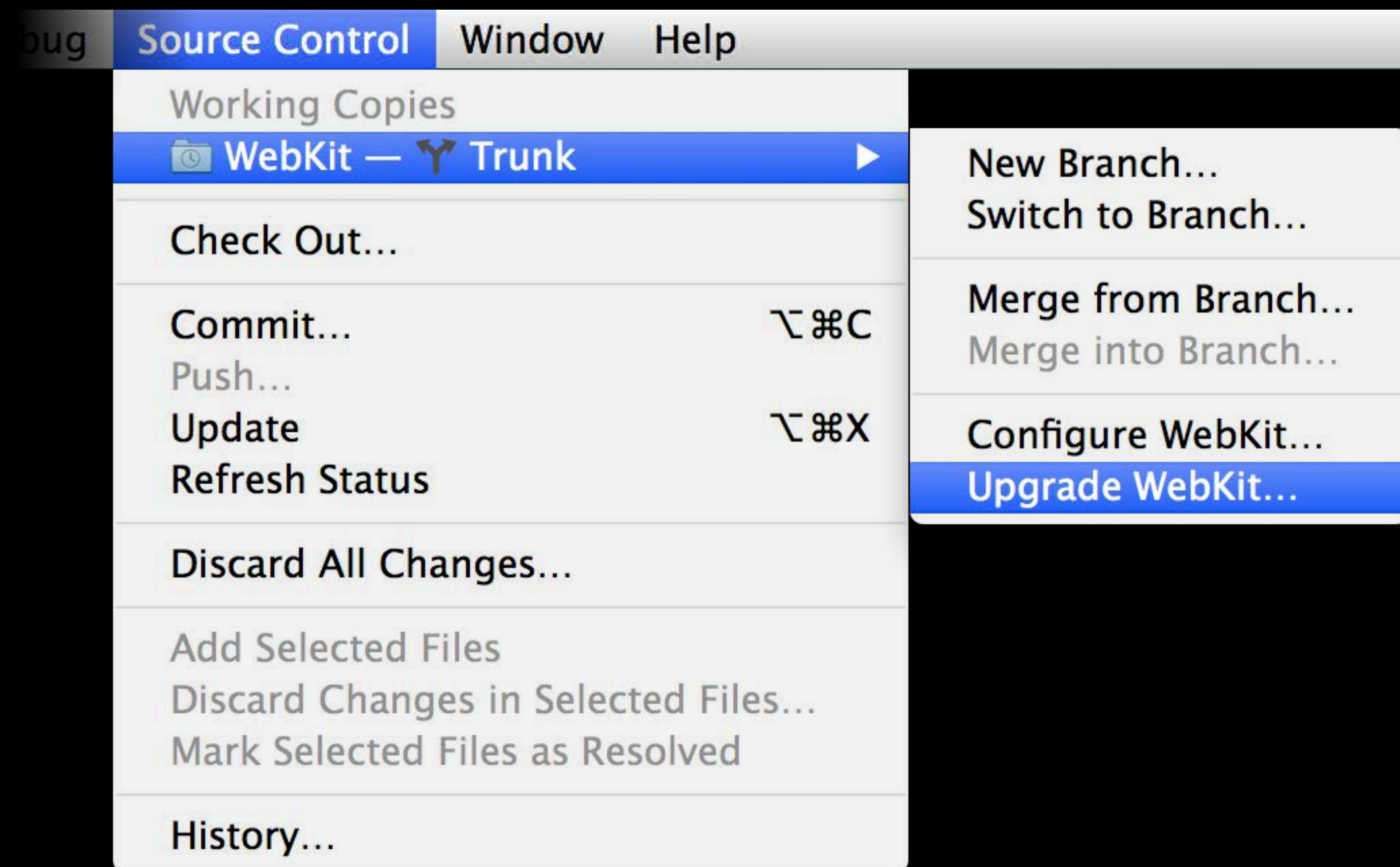
Source Control Menu

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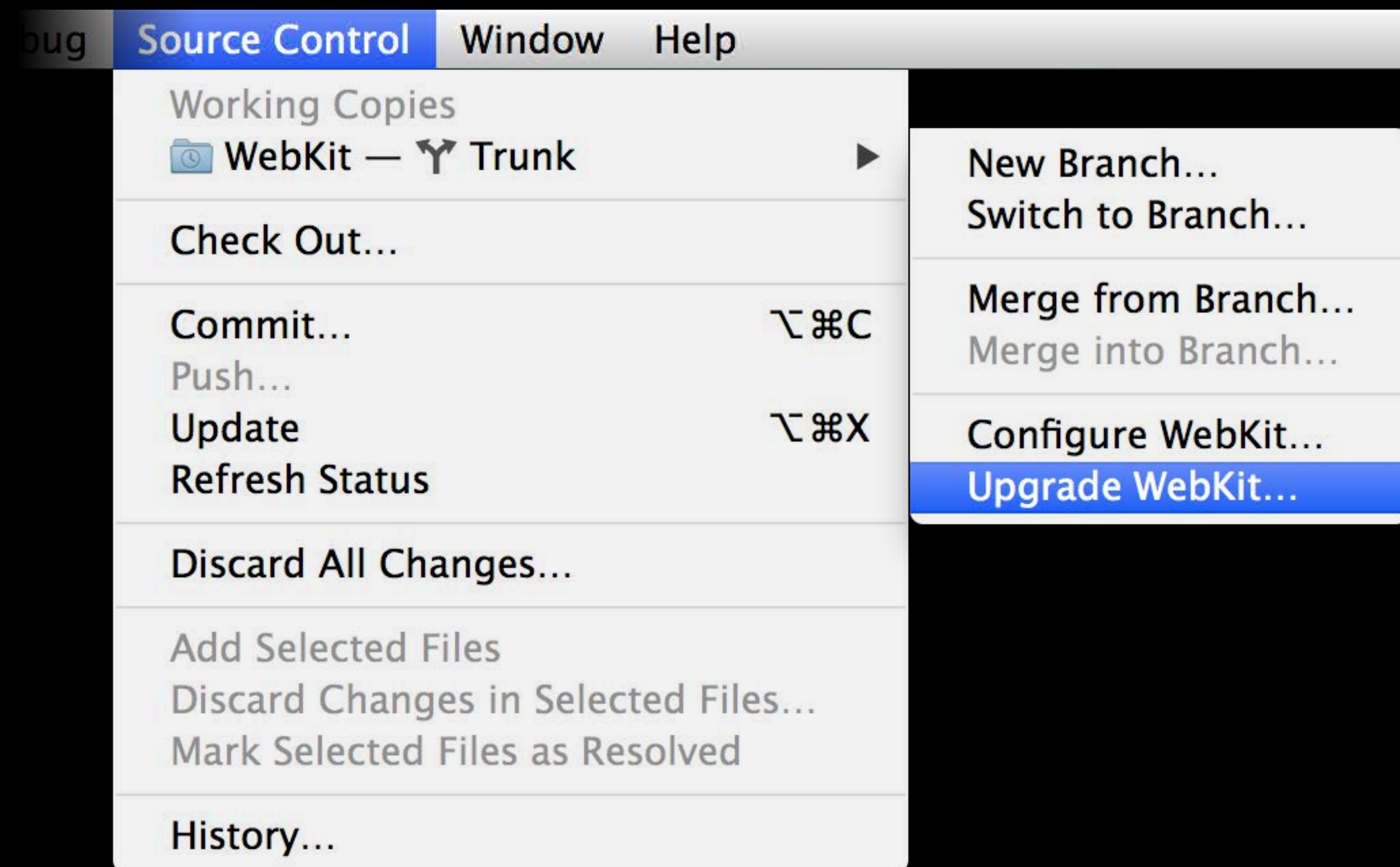
Source Control Menu

- All working copies and current branches readily available
- Branch management
- On-demand upgrade



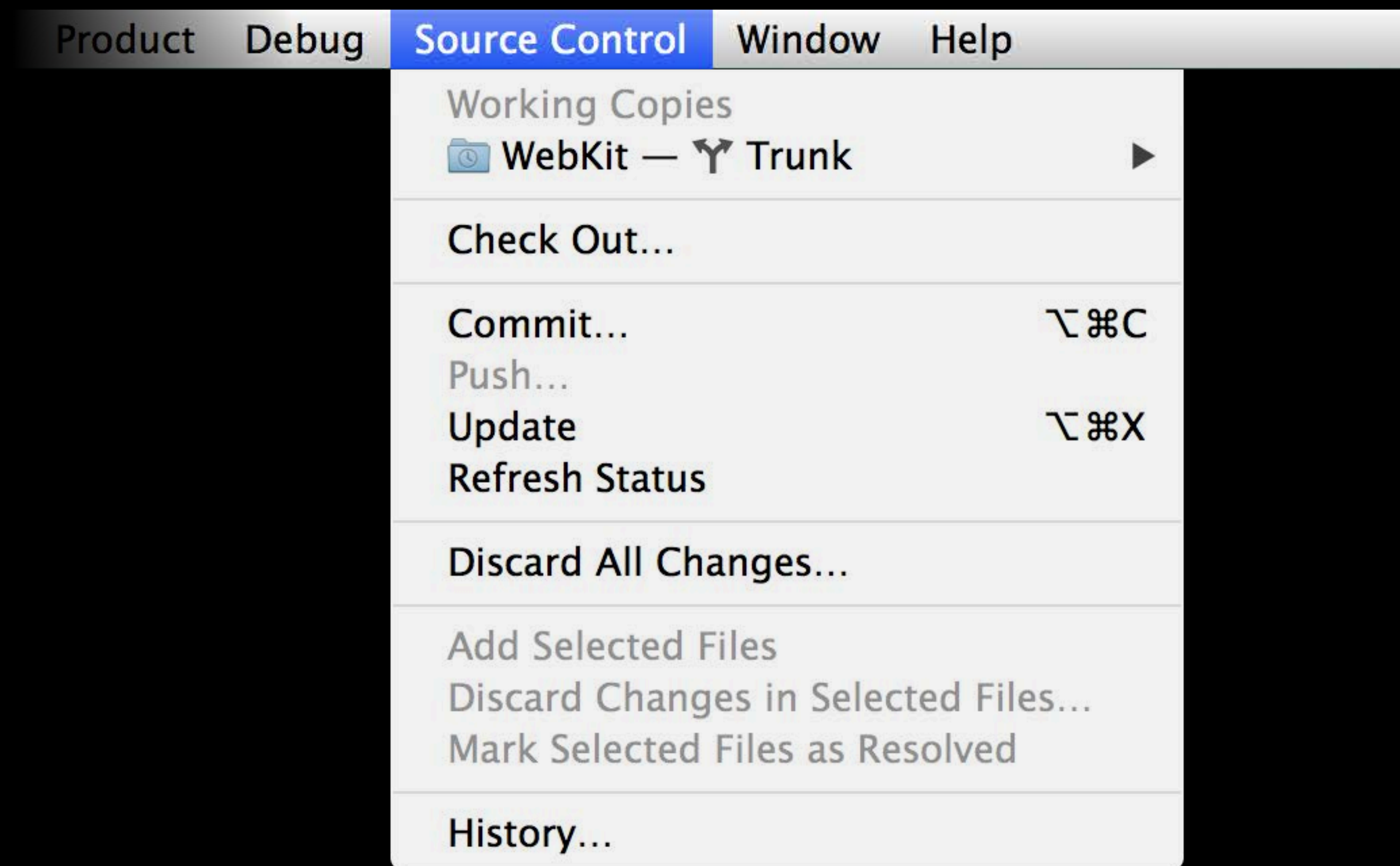
Source Control Menu

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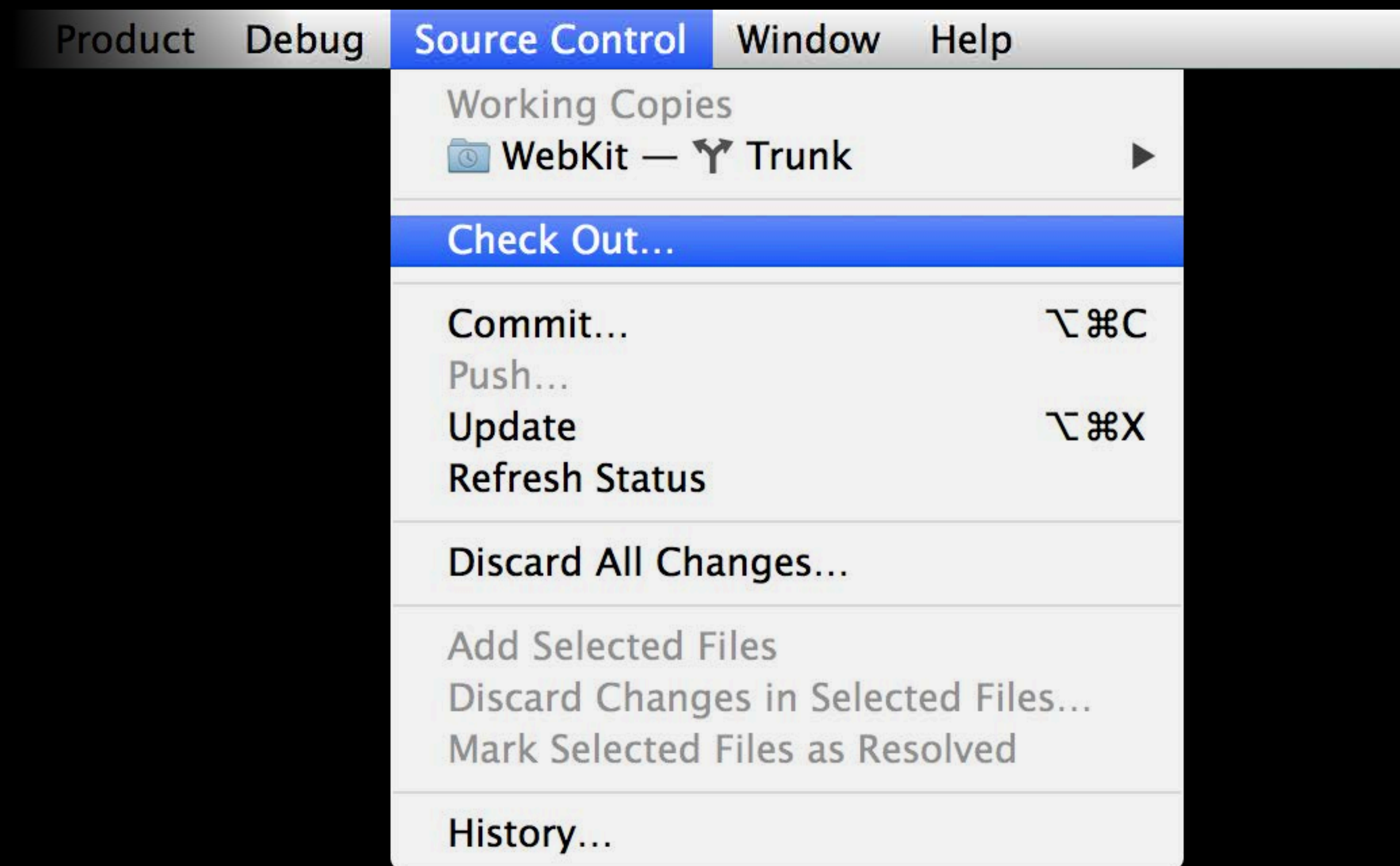
Source Control Menu

- Check Out



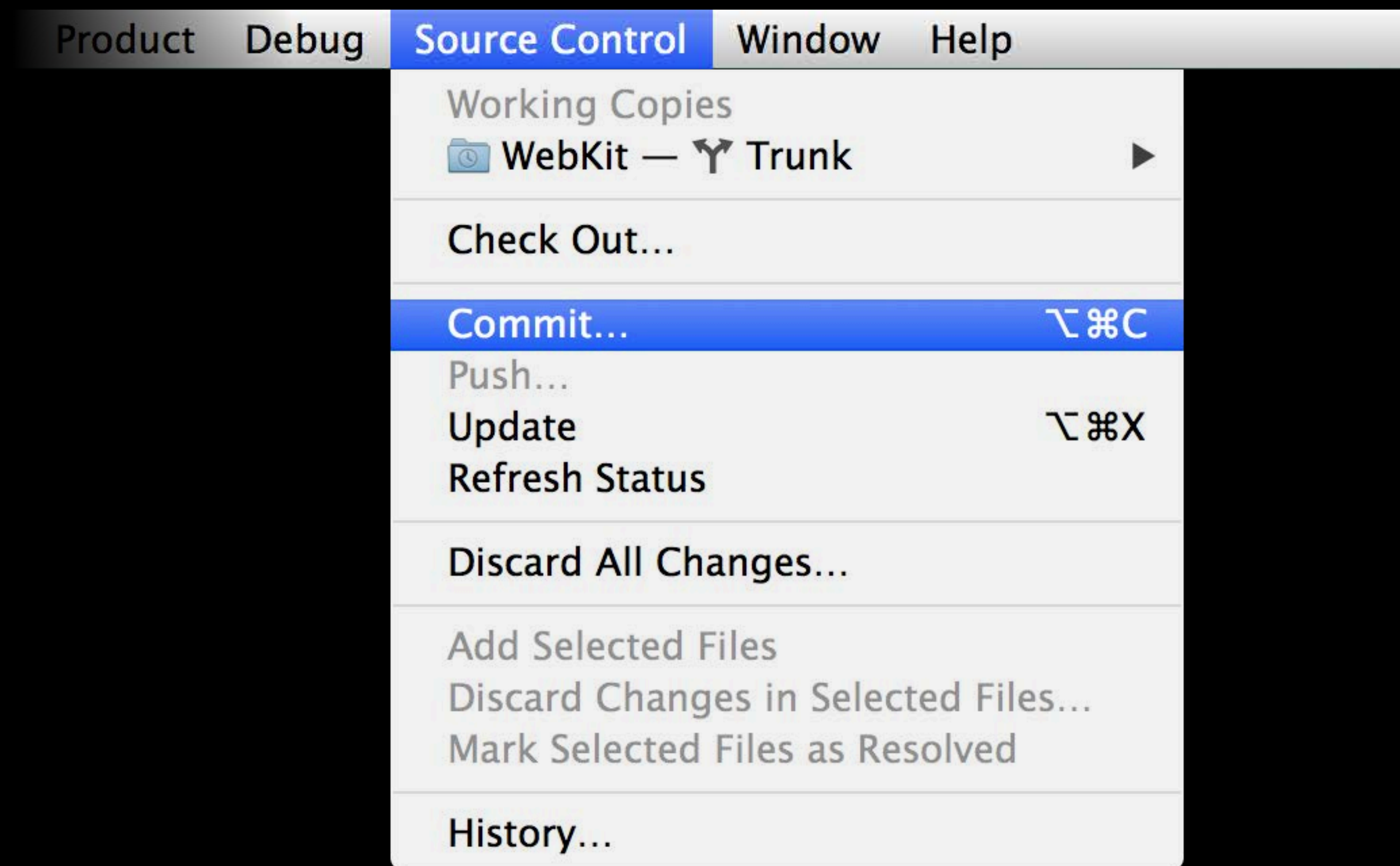
Source Control Menu

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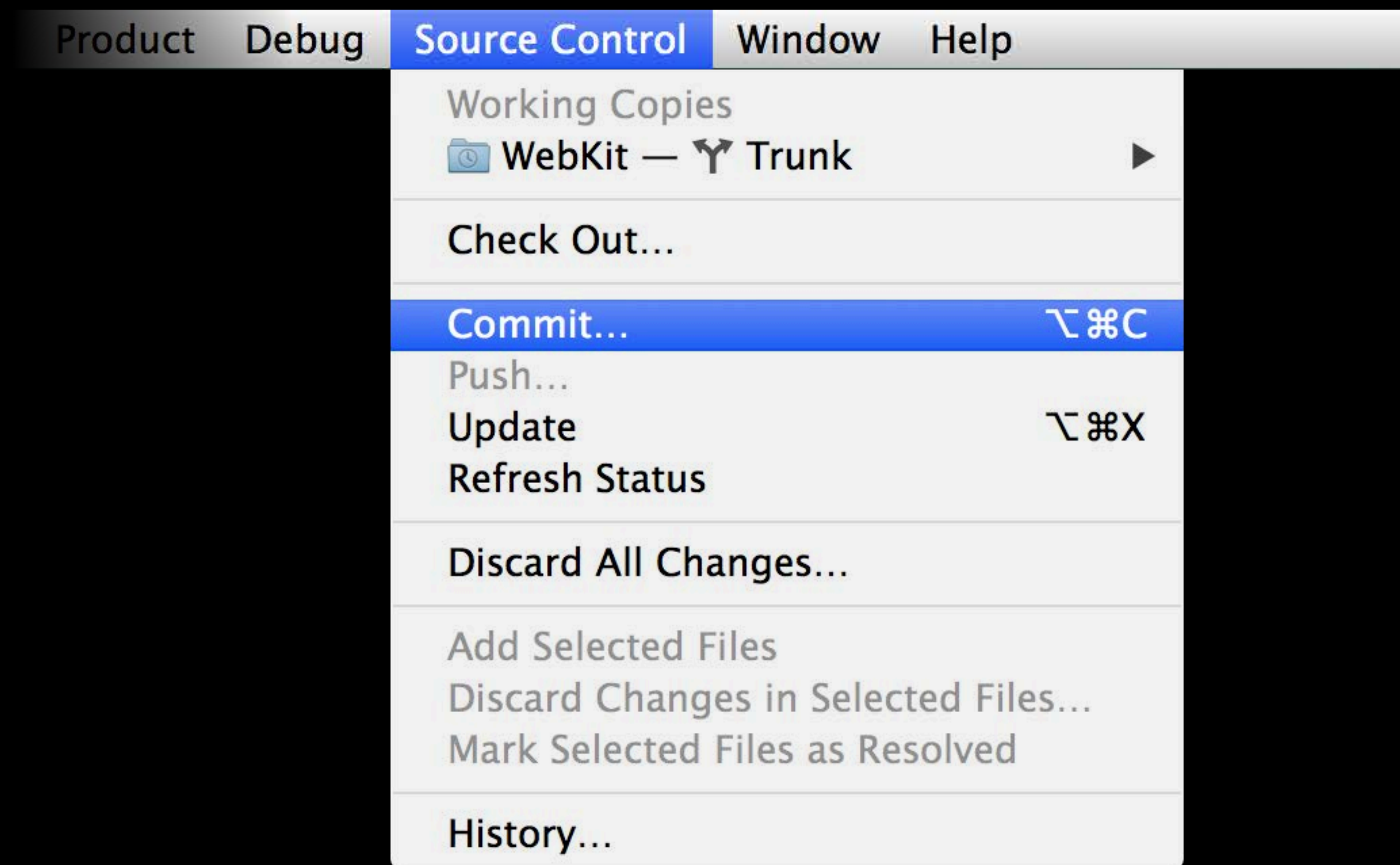
Source Control Menu

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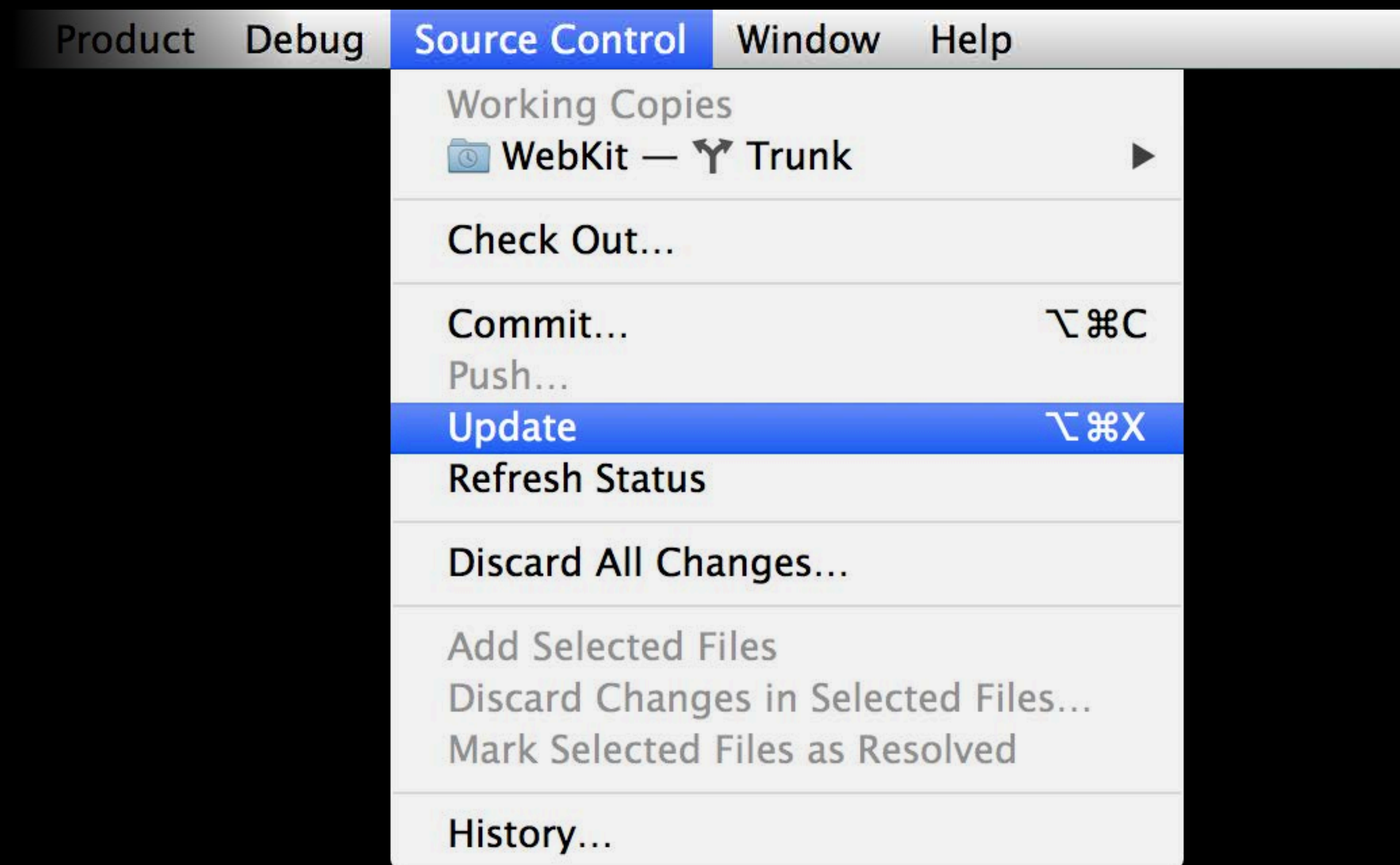
Source Control Menu

- Check Out
- Commit



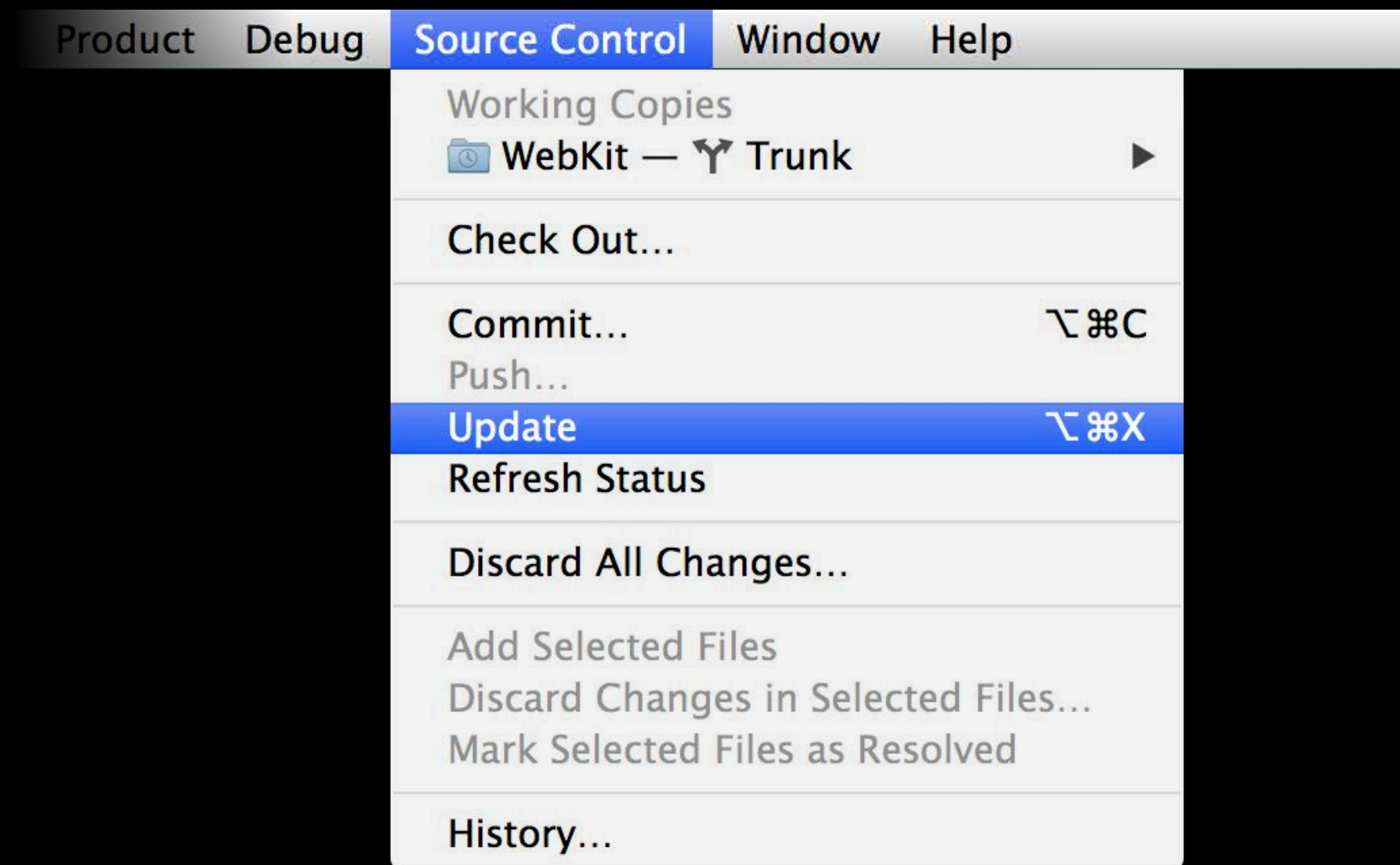
Source Control Menu

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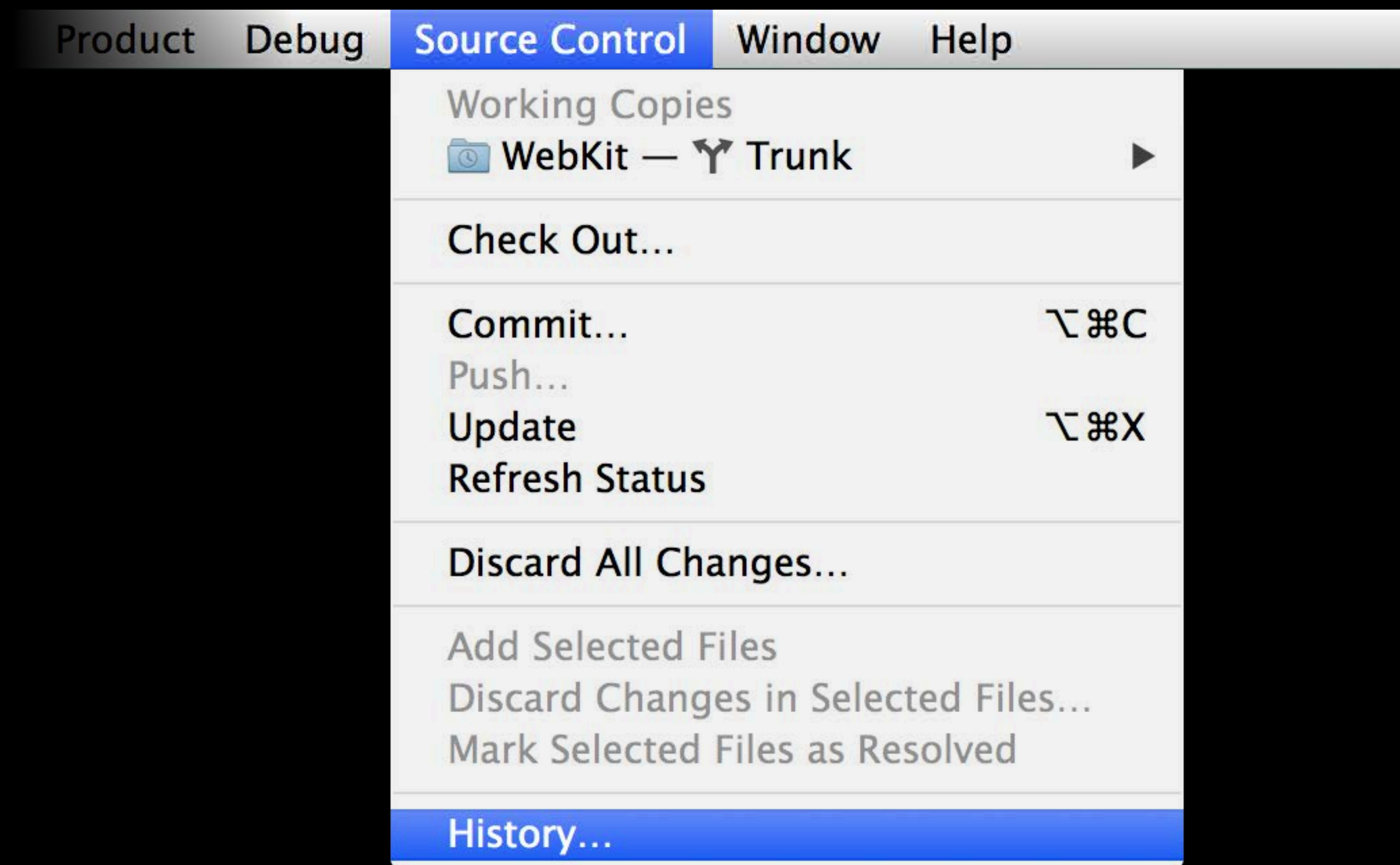
Source Control Menu

- Check Out
- Commit
- Push/Pull/Update



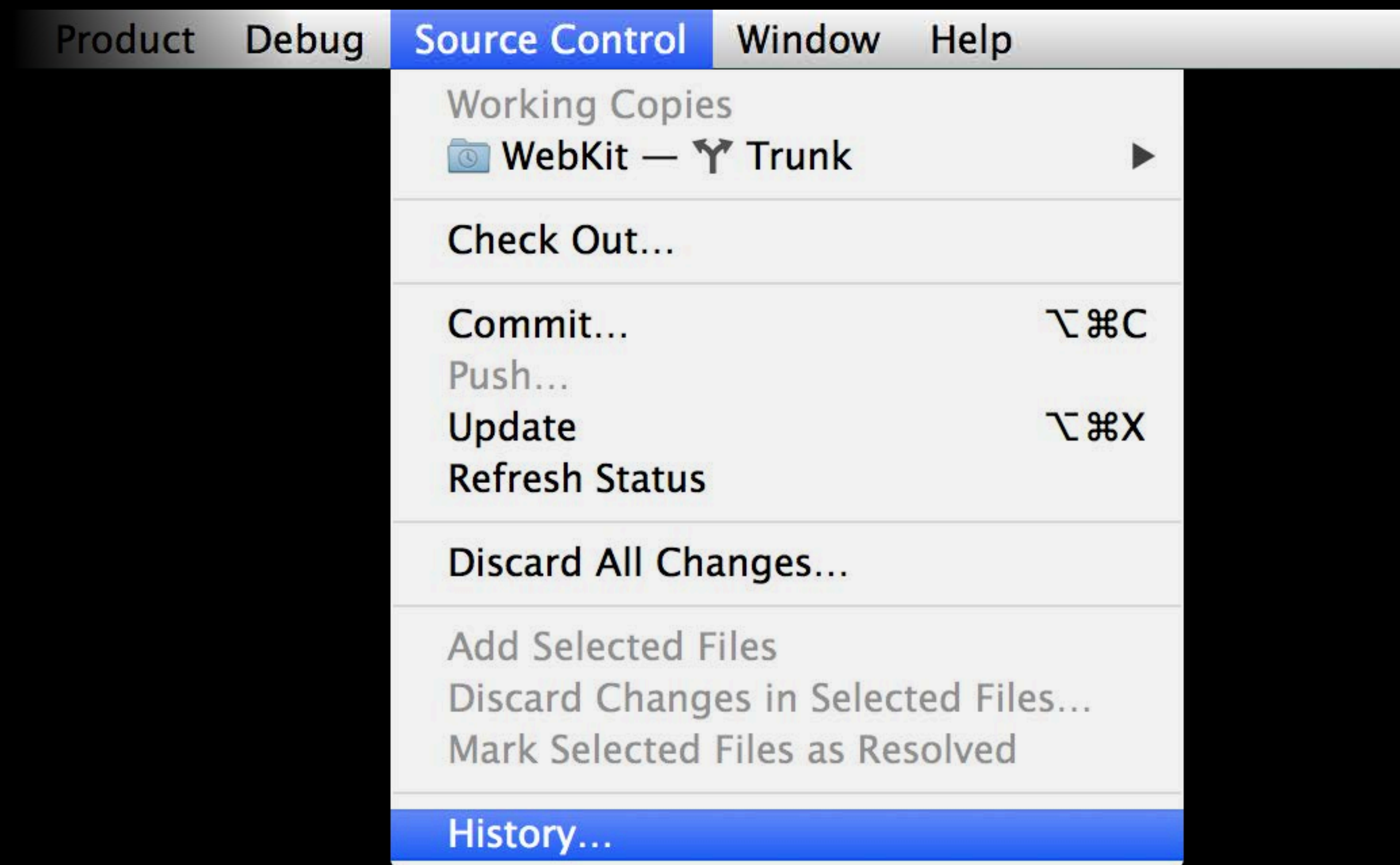
Source Control Menu

- Check Out
- Commit
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Source Control Menu

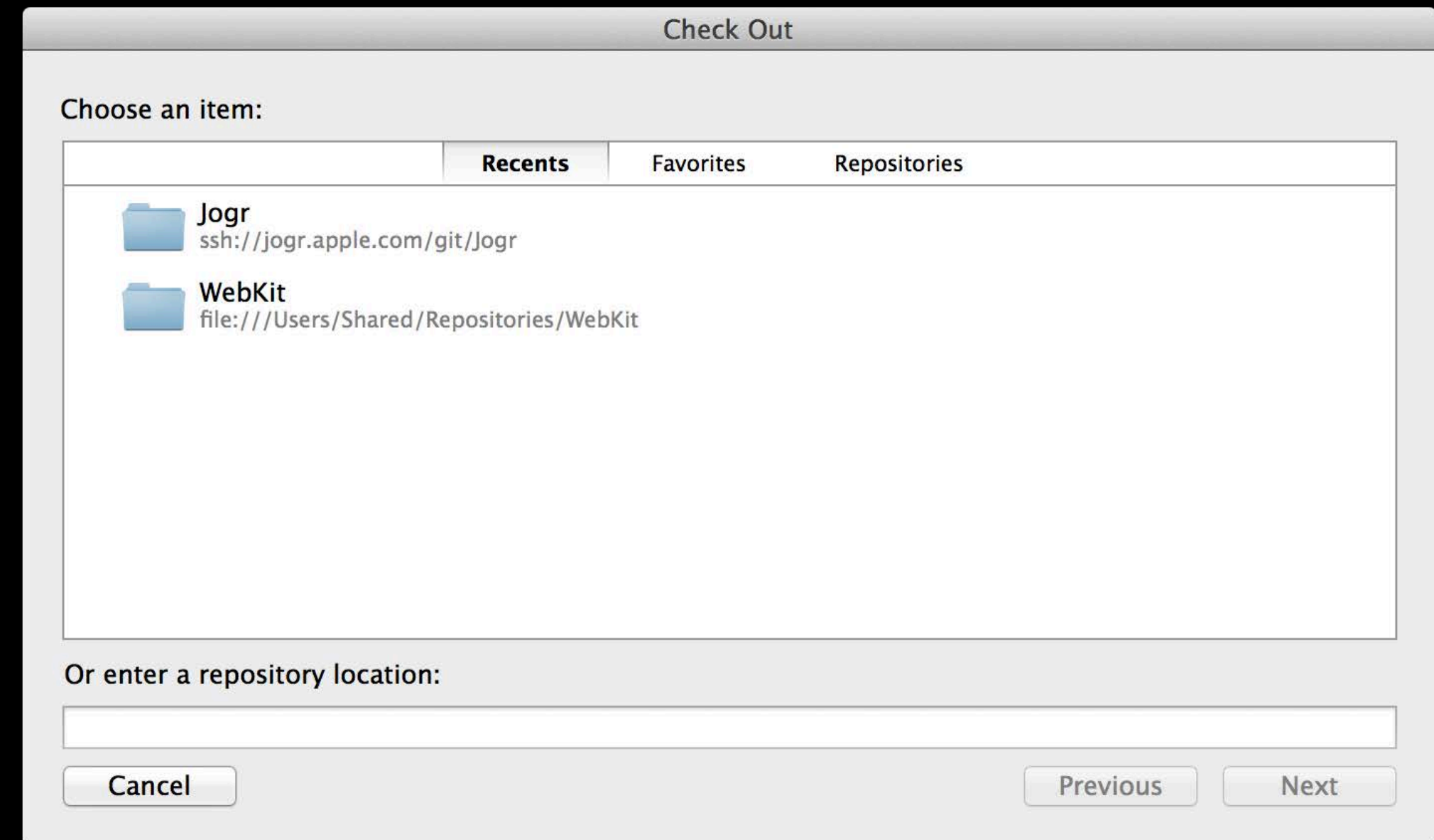
- Check Out
- Commit
- Push/Pull/Update
- History



Check Out

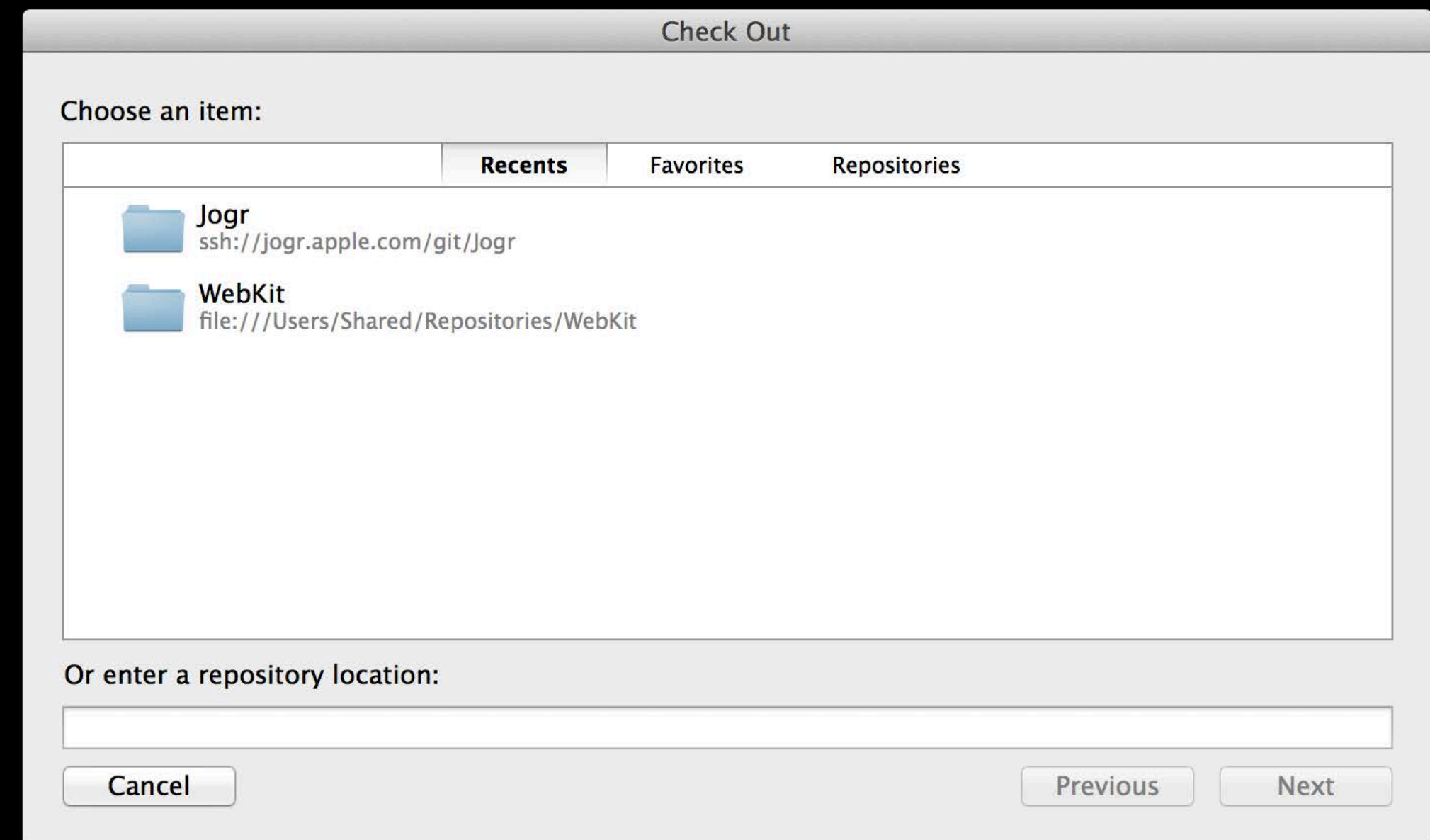
Check Out

- New look



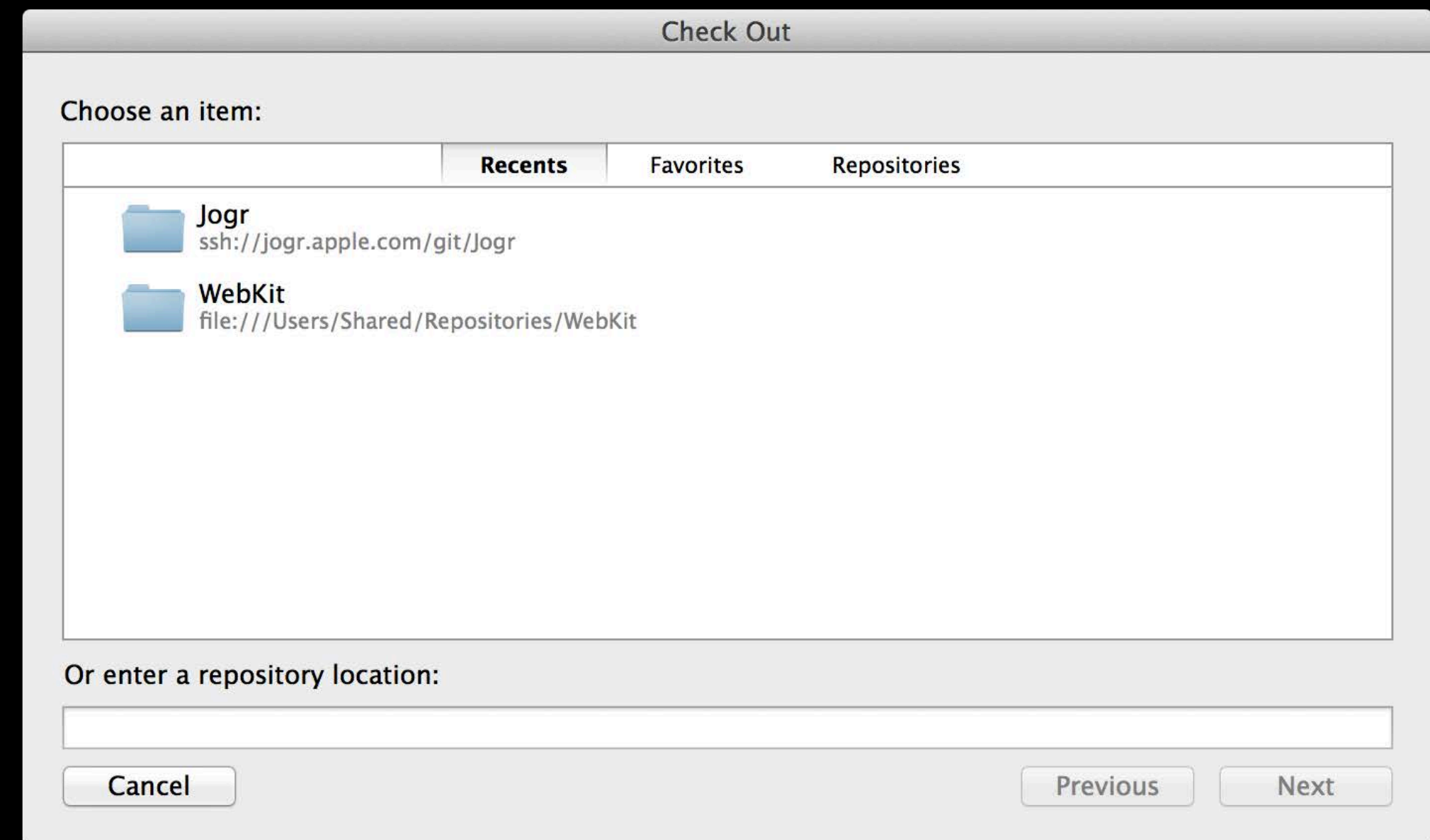
Check Out

- New look
- More powerful



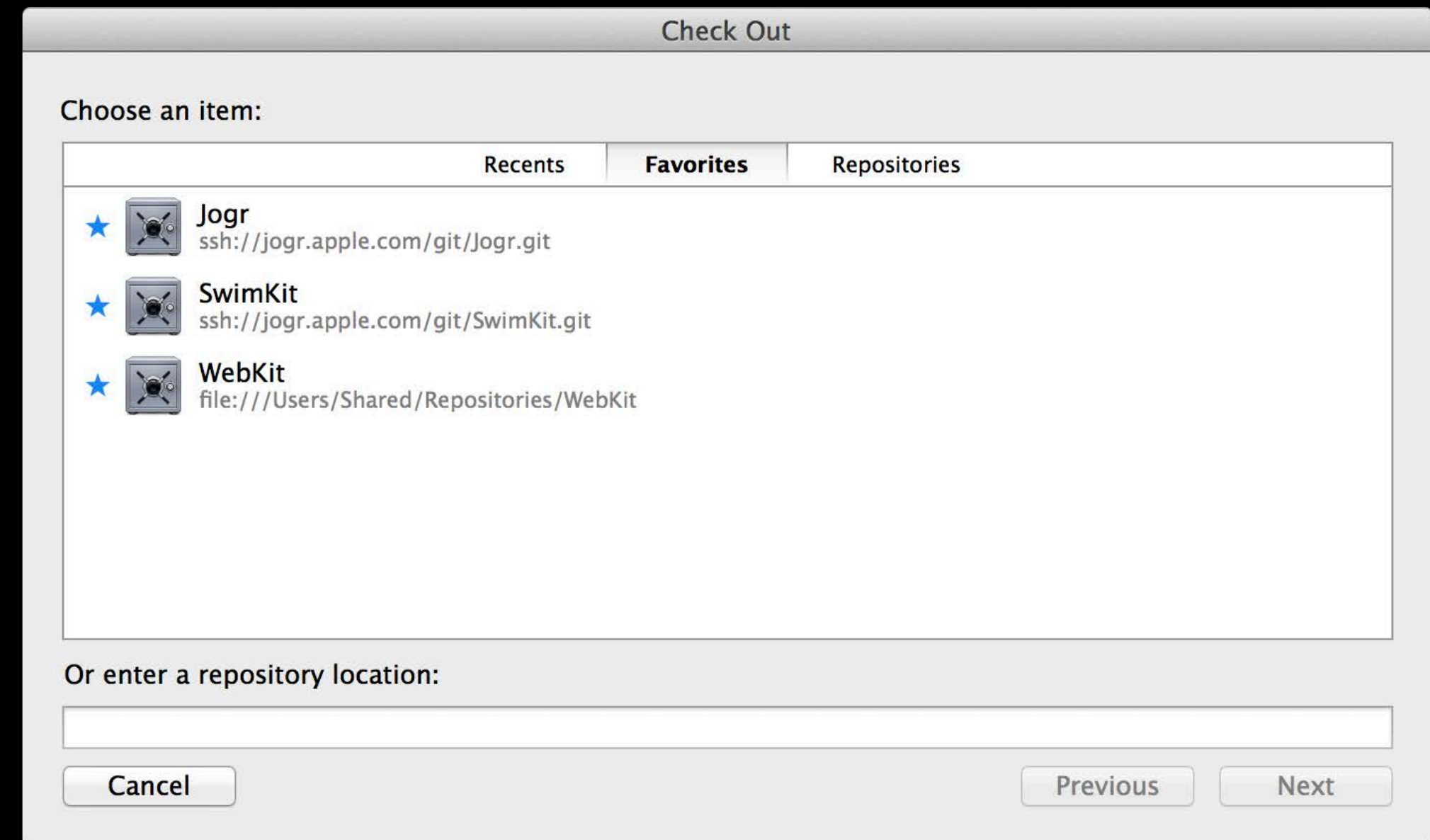
Check Out

- New look
- More powerful
 - Recents



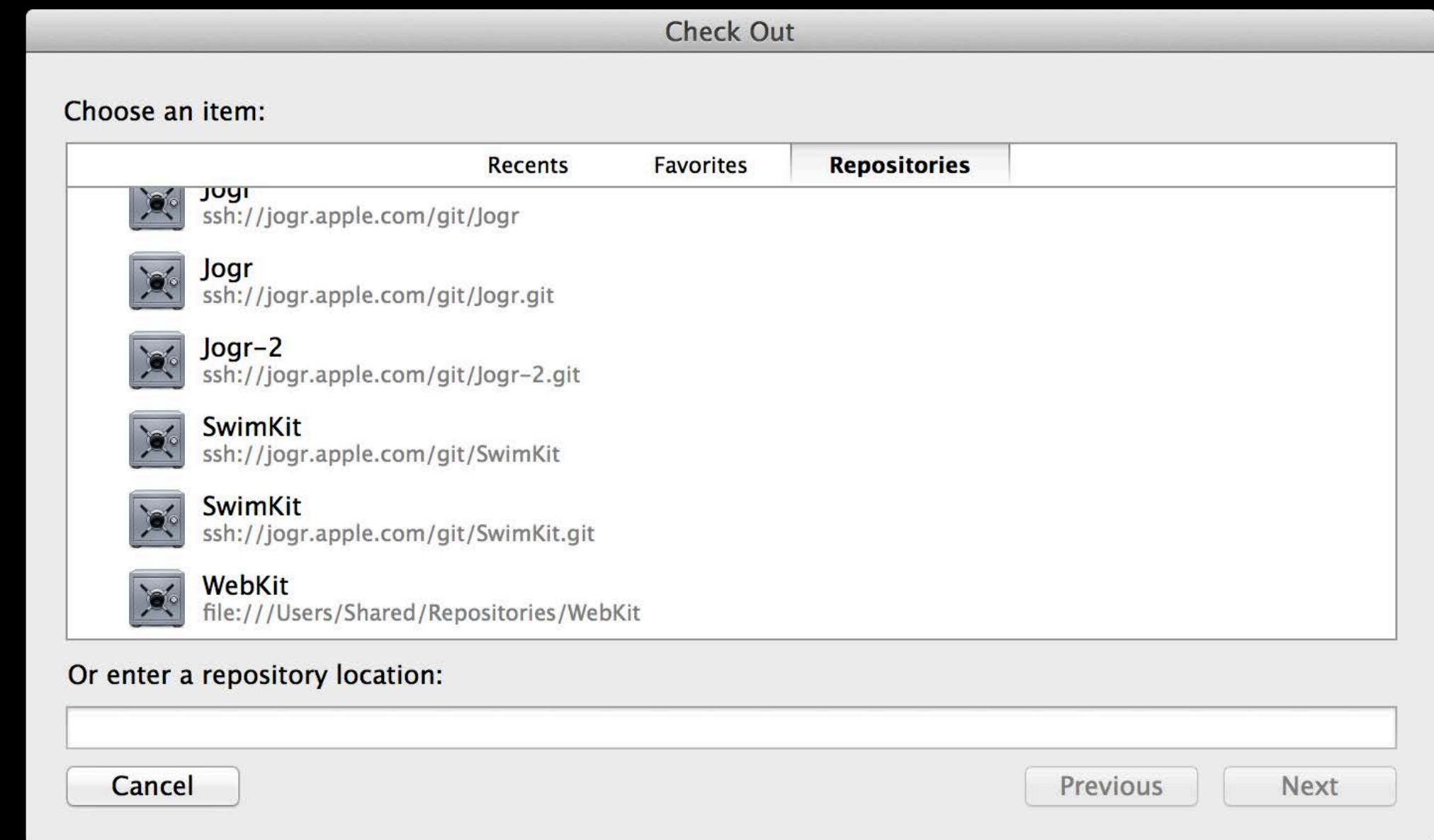
Check Out

- New look
- More powerful
 - Recents
 - Favorites



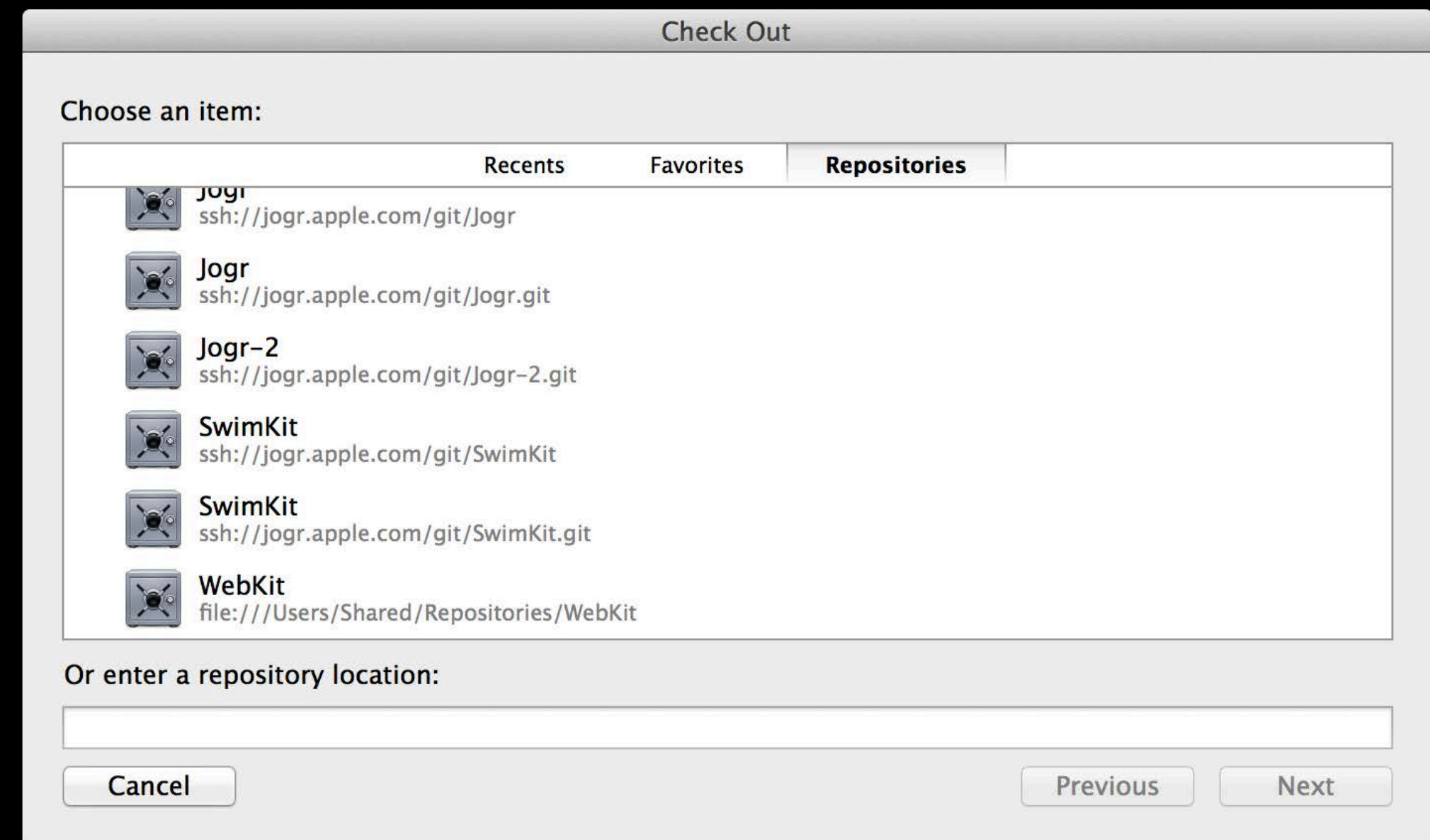
Check Out

- New look
- More powerful
 - Recents
 - Favorites
 - Repositories



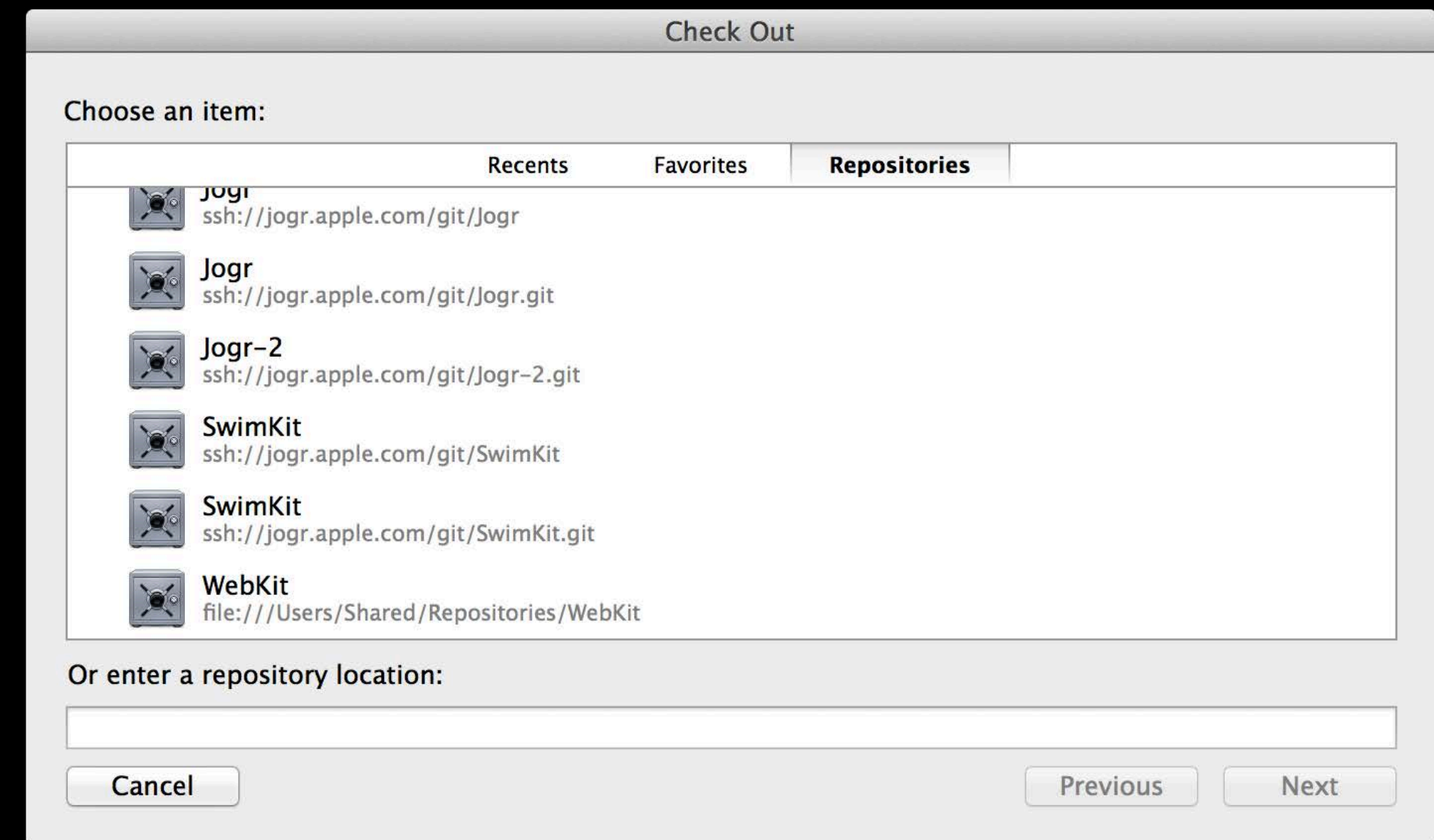
Check Out

- New look
- More powerful
 - Recents
 - Favorites
 - Repositories
 - OS X Server



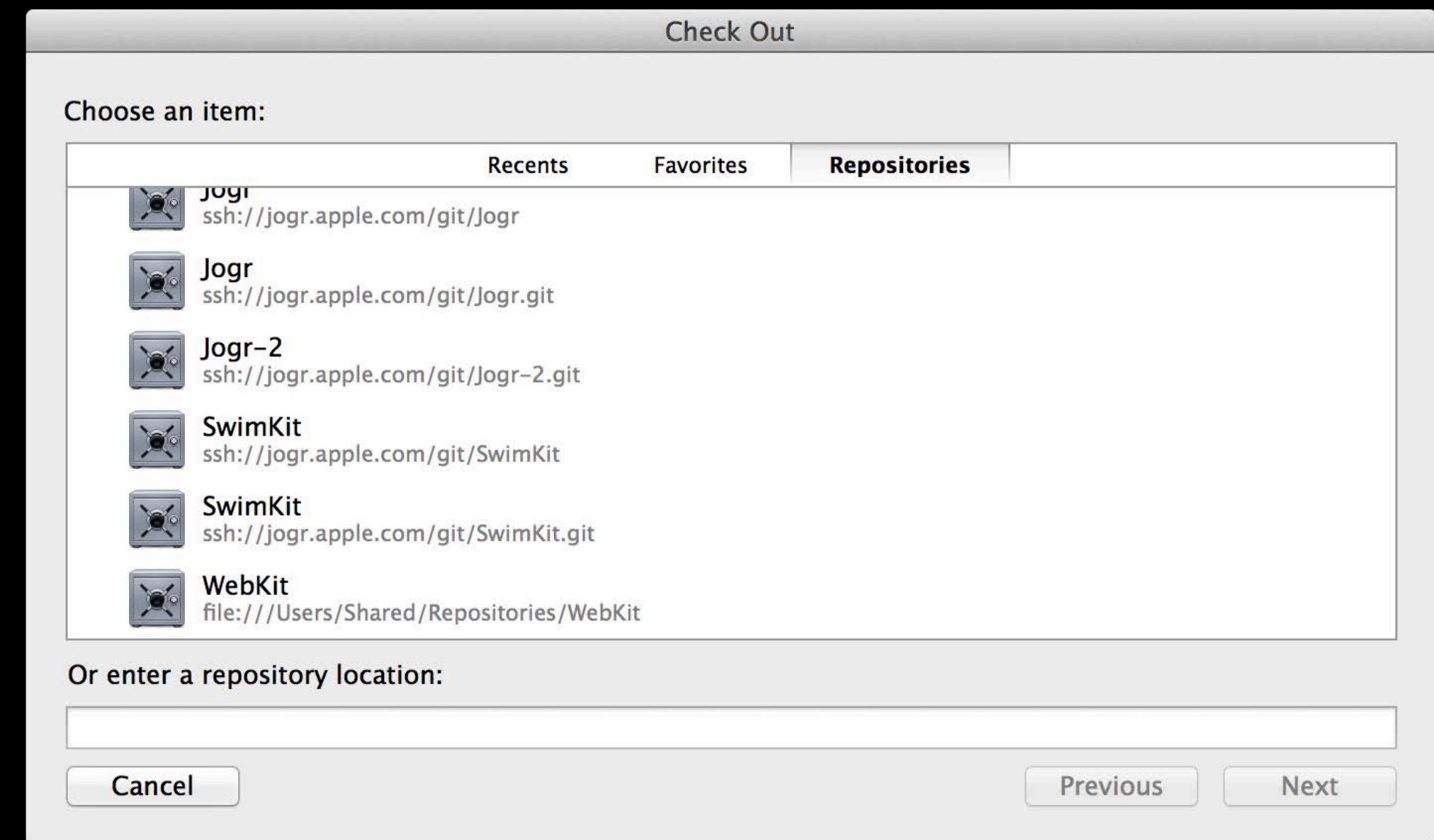
Check Out

- New look
- More powerful
 - Recents
 - Favorites
 - Repositories
 - OS X Server
- Browsing



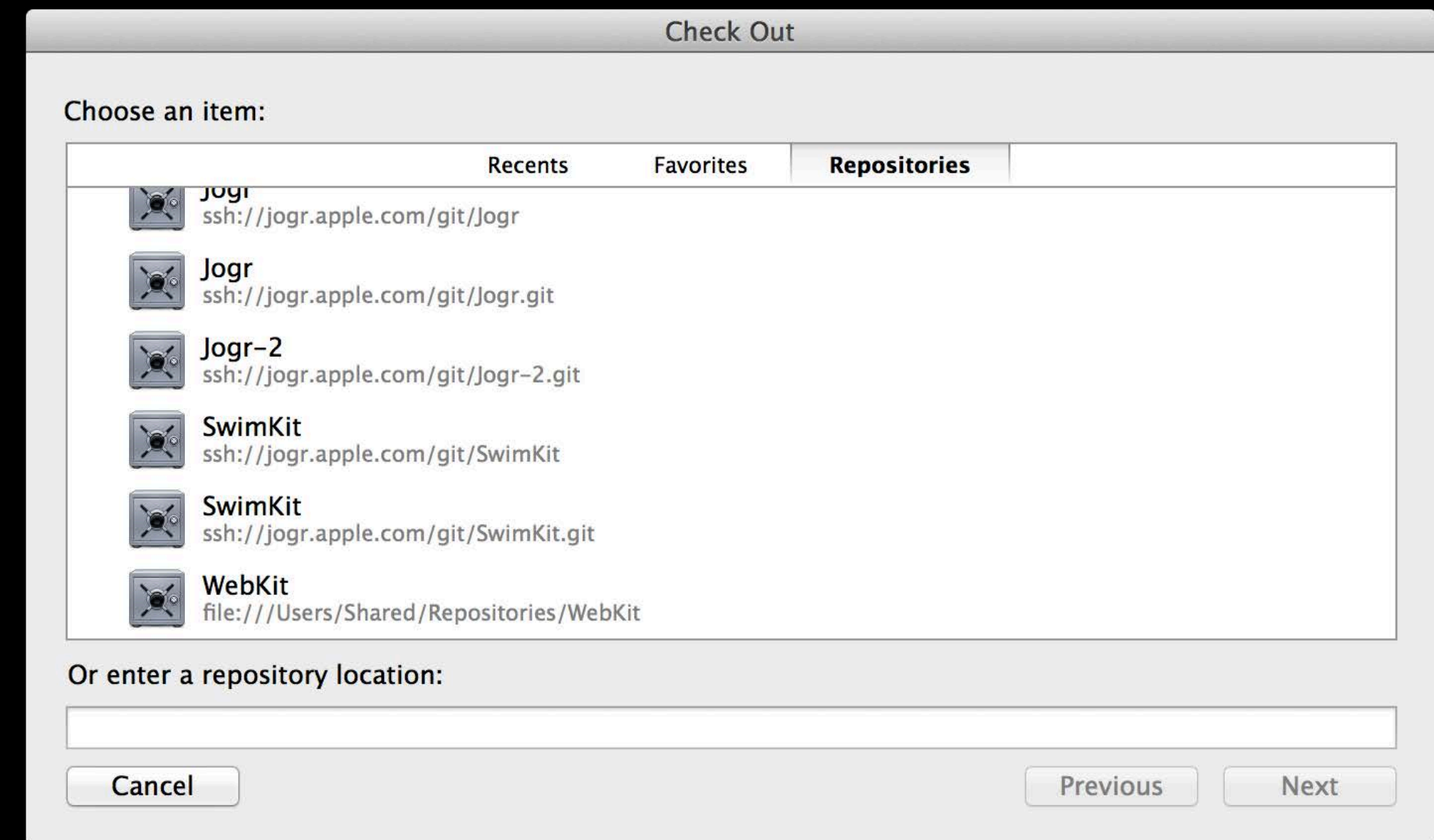
Check Out

- New look
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 - OS X Server
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- Smarter



Check Out

- New look
- More powerful
 - Recents
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 - Repositories
 - OS X Server
- Browsing
- Smarter
 - SVN branch auto-discovery



Demo

Summary

Summary

- Accounts

Summary

- Accounts
- Source Control Menu

Summary

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- Check Out

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 - Auto-discovery

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- Source Control Menu
- Check Out
 - Auto-discovery
 - SVN branches
 - Accounts

Advanced Check Out

Multiple working copies

Advanced Check Out

Multiple working copies

- Many projects aggregate multiple working copies

Advanced Check Out

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- Easy to set up new developers

Advanced Check Out

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- Many projects aggregate multiple working copies
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- Move away from:

Advanced Check Out

Multiple working copies

- Many projects aggregate multiple working copies
- Easy to set up new developers
- Move away from:
 - Subversion externals

Advanced Check Out

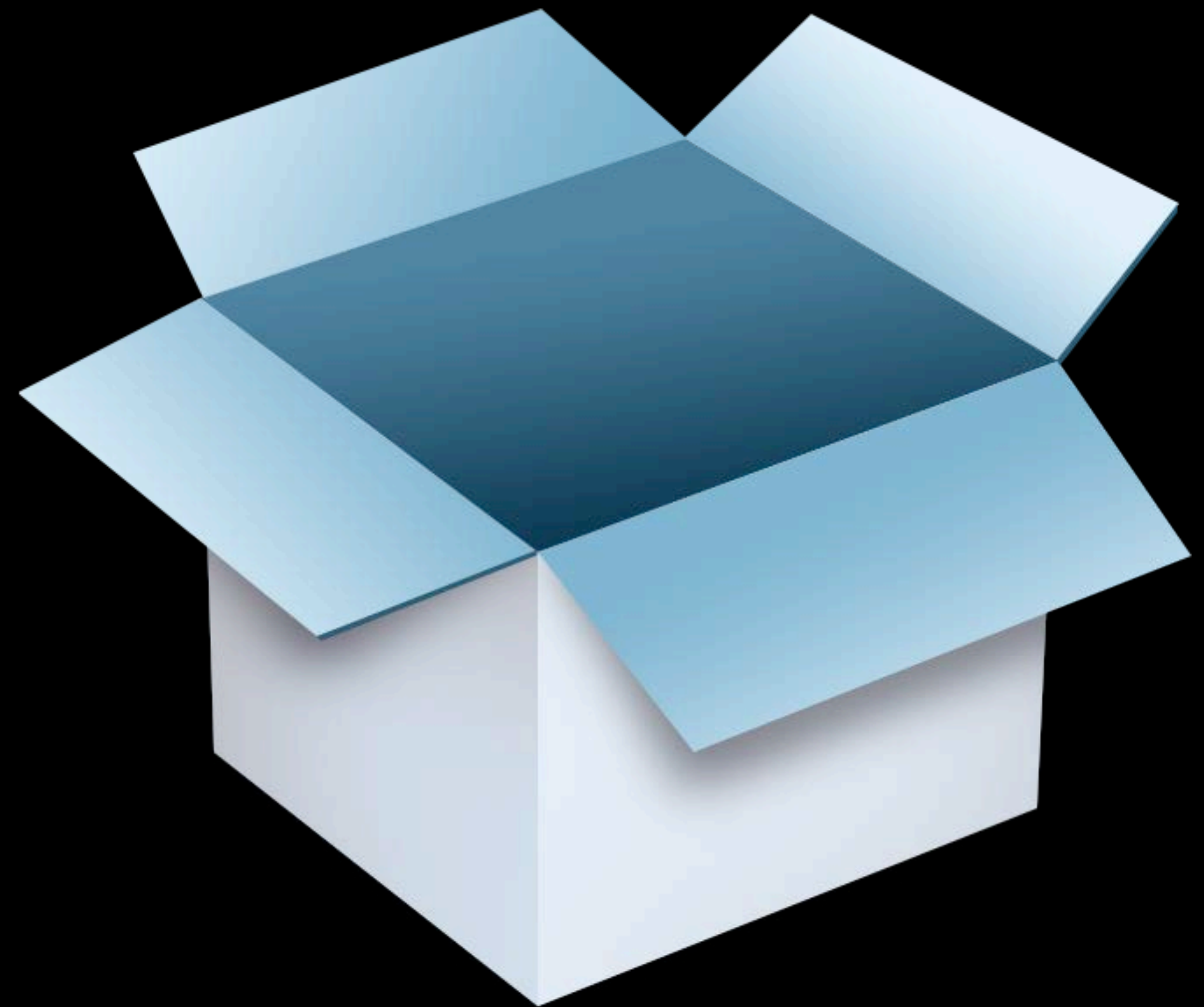
Multiple working copies

- Many projects aggregate multiple working copies
- Easy to set up new developers
- Move away from:
 - Subversion externals
 - Git submodules

Advanced Check Out

Multiple working copies

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Advanced Check Out

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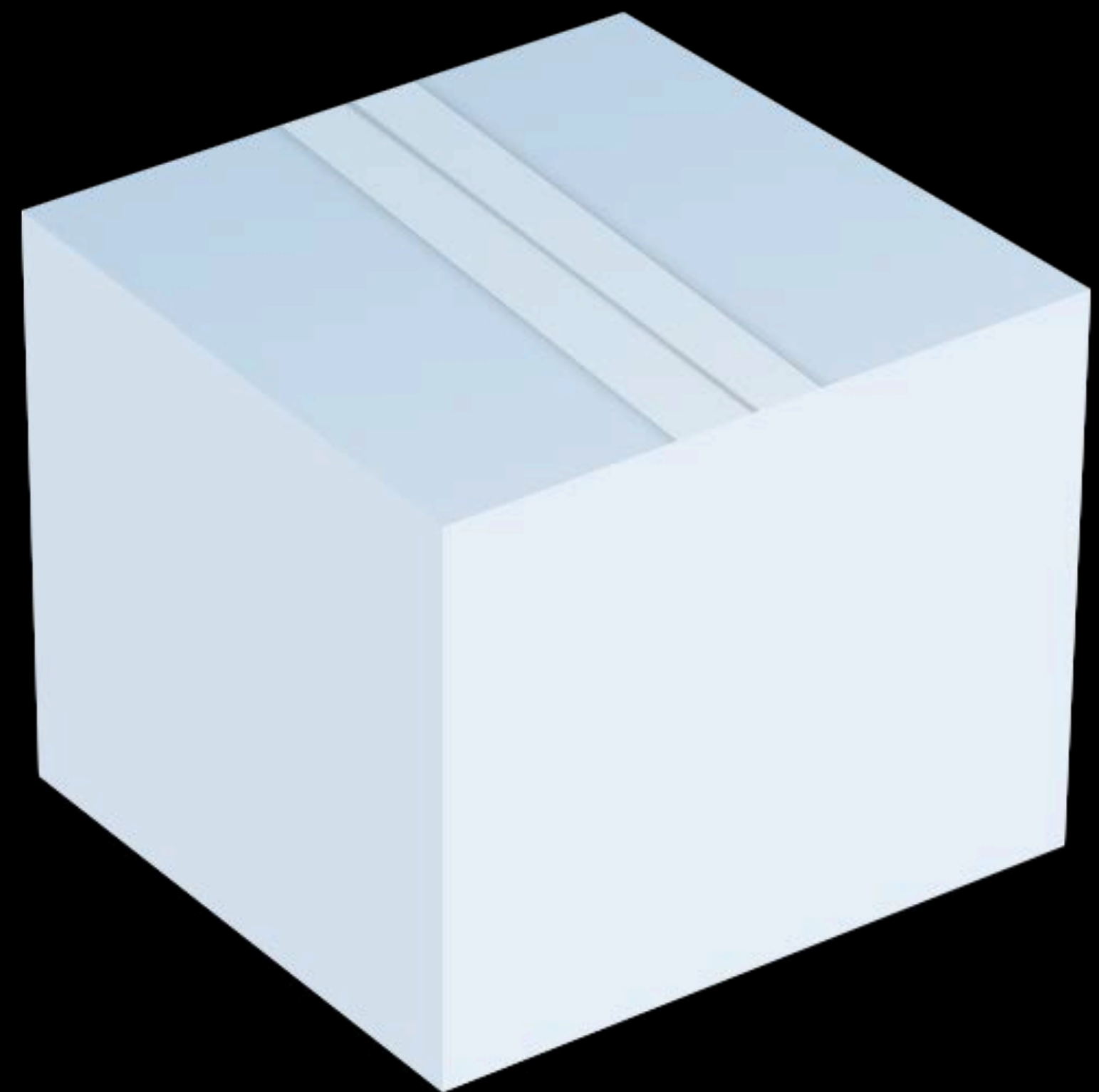
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Advanced Check Out

Multiple working copies

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Advanced Check Out

Multiple working copies

Advanced Check Out

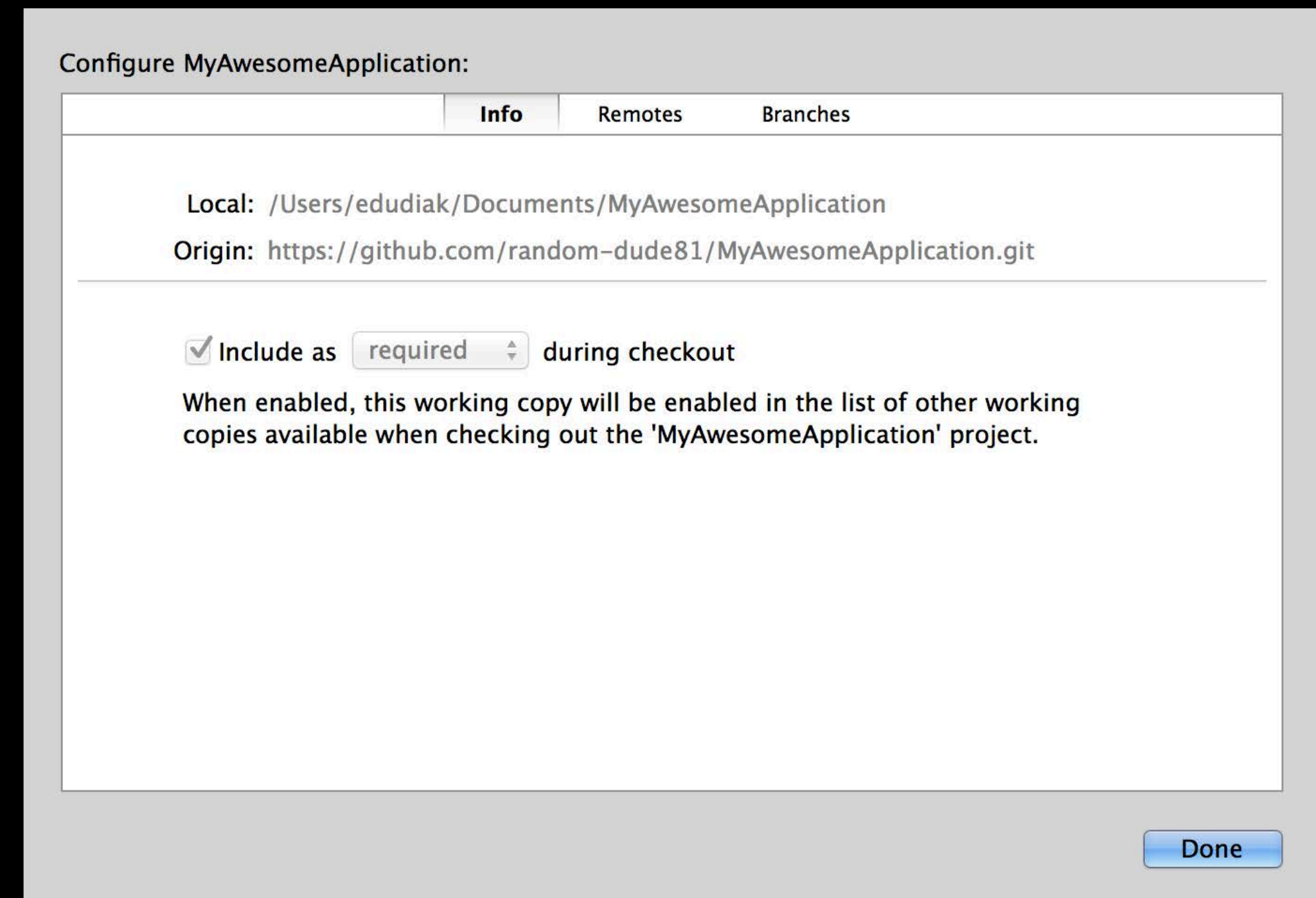
Multiple working copies

- First open contains all working copies

Advanced Check Out

Multiple working copies

- First open contains all working copies
- Managed via Source Control Menu



Advanced Check Out

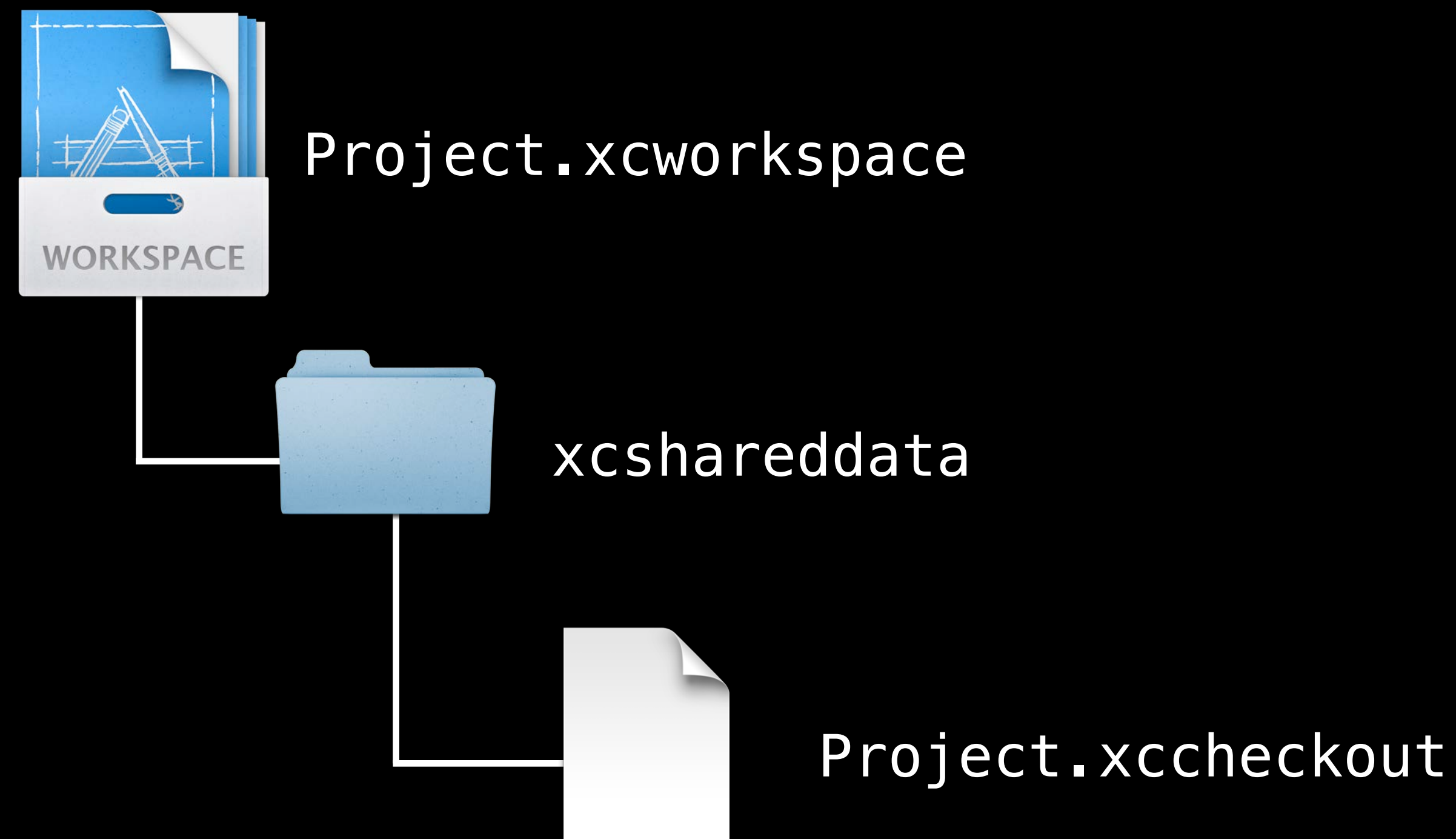
Multiple working copies

- Commit 'Source Control Data'

Advanced Check Out

Multiple working copies

- Commit 'Source Control Data'



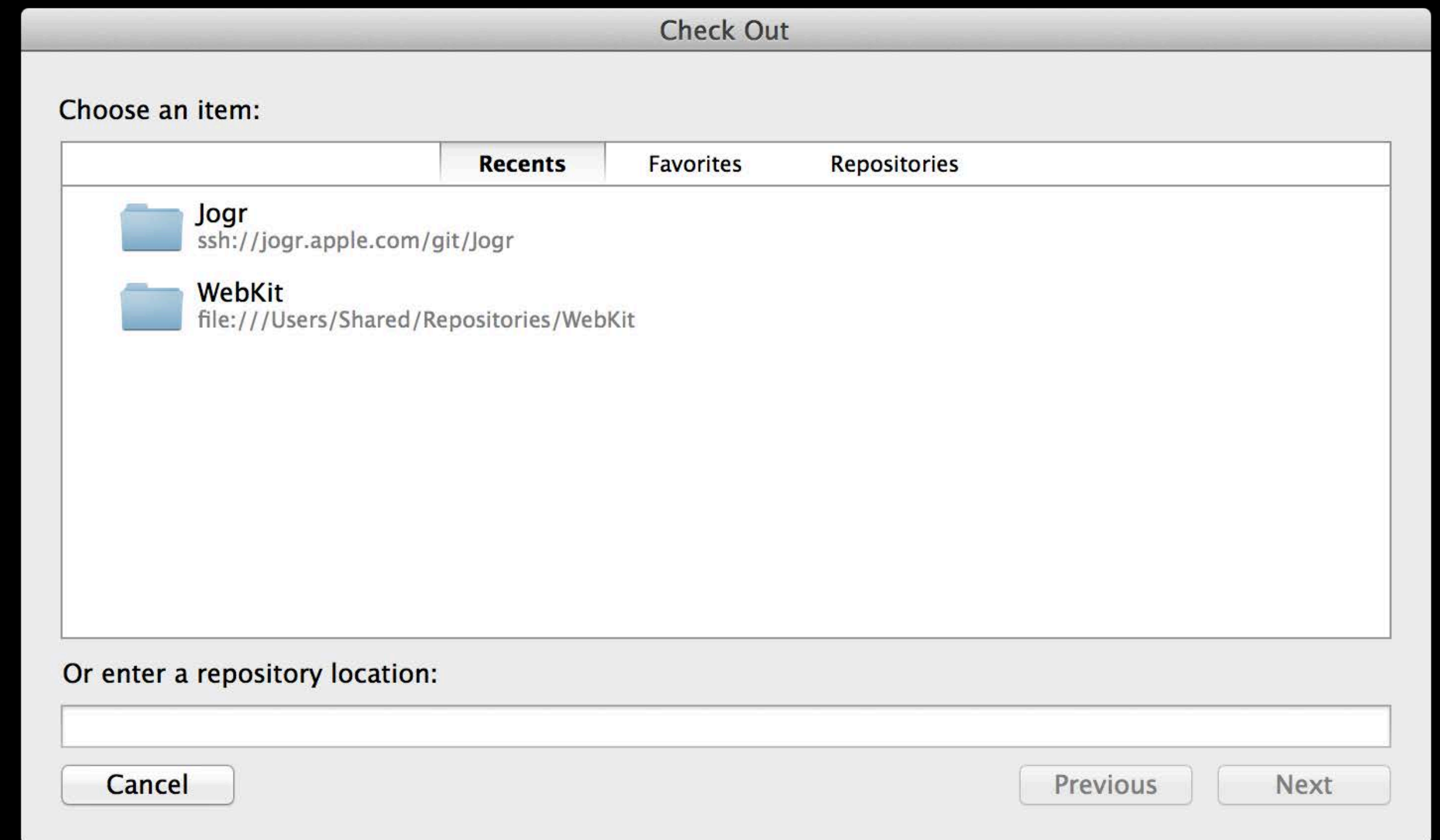
Advanced Check Out

Multiple working copies

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Multiple working copies

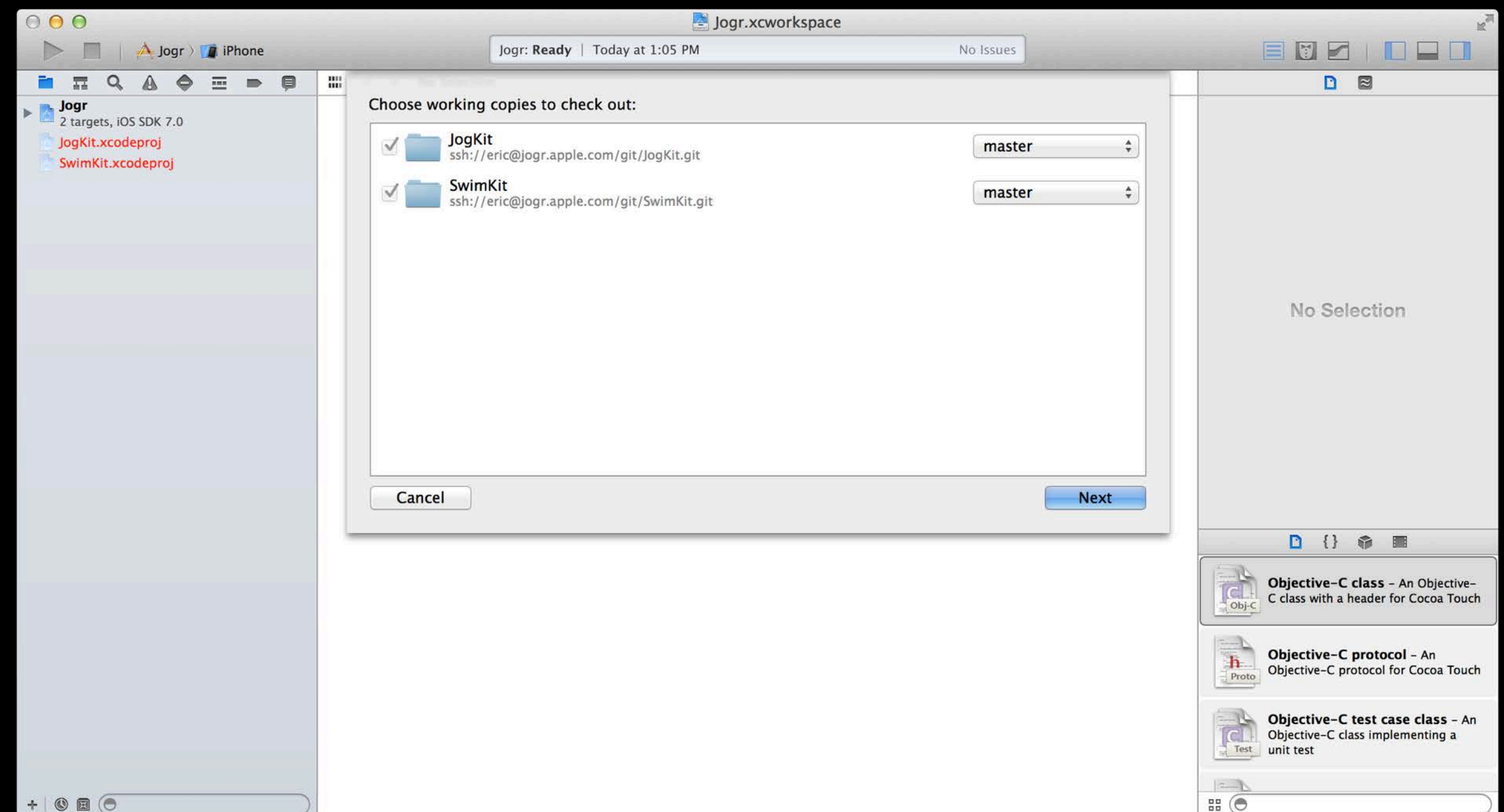
- Accessed via Recents or on Workspace open



Advanced Check Out

Multiple working copies

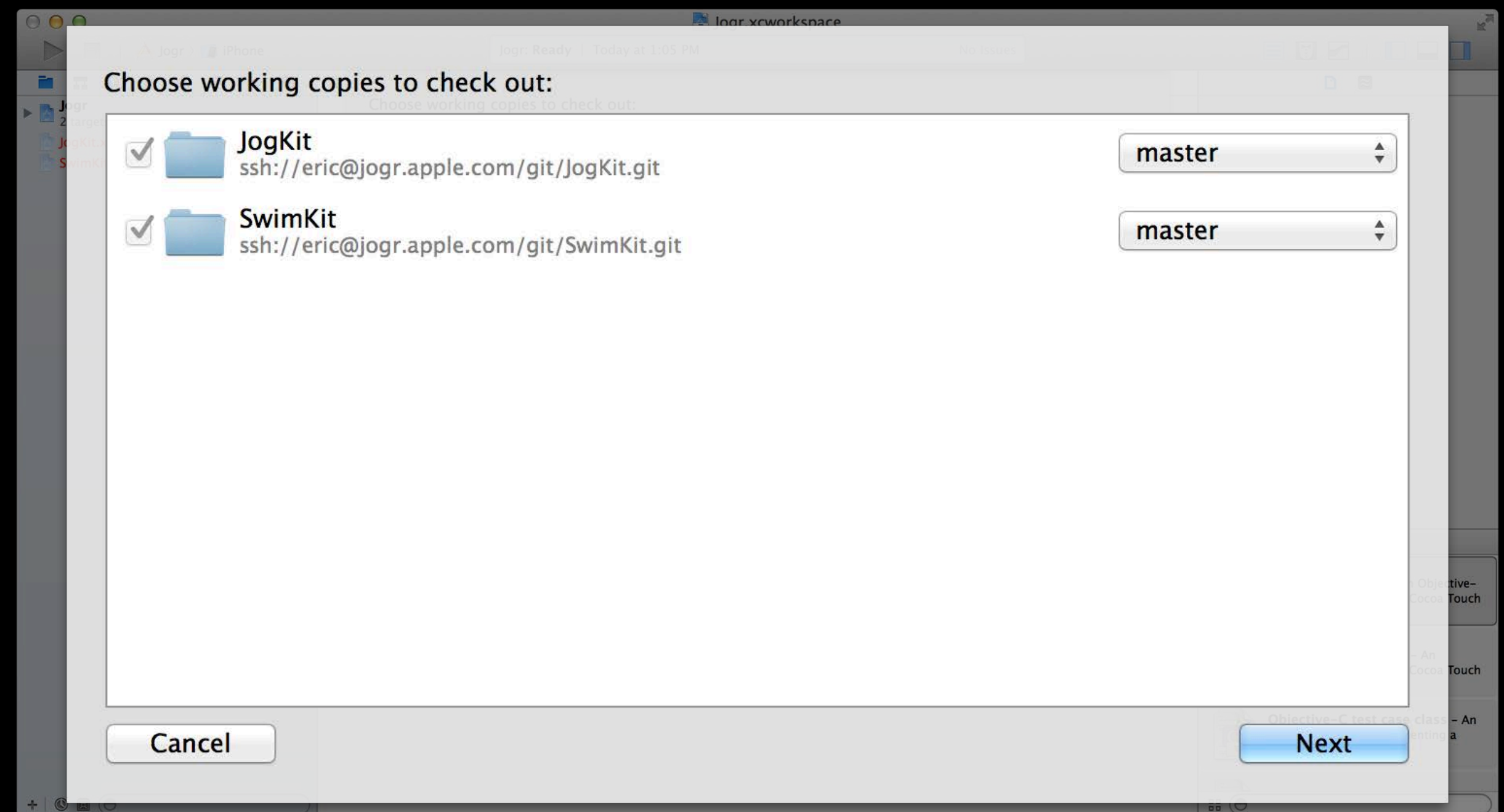
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Advanced Check Out

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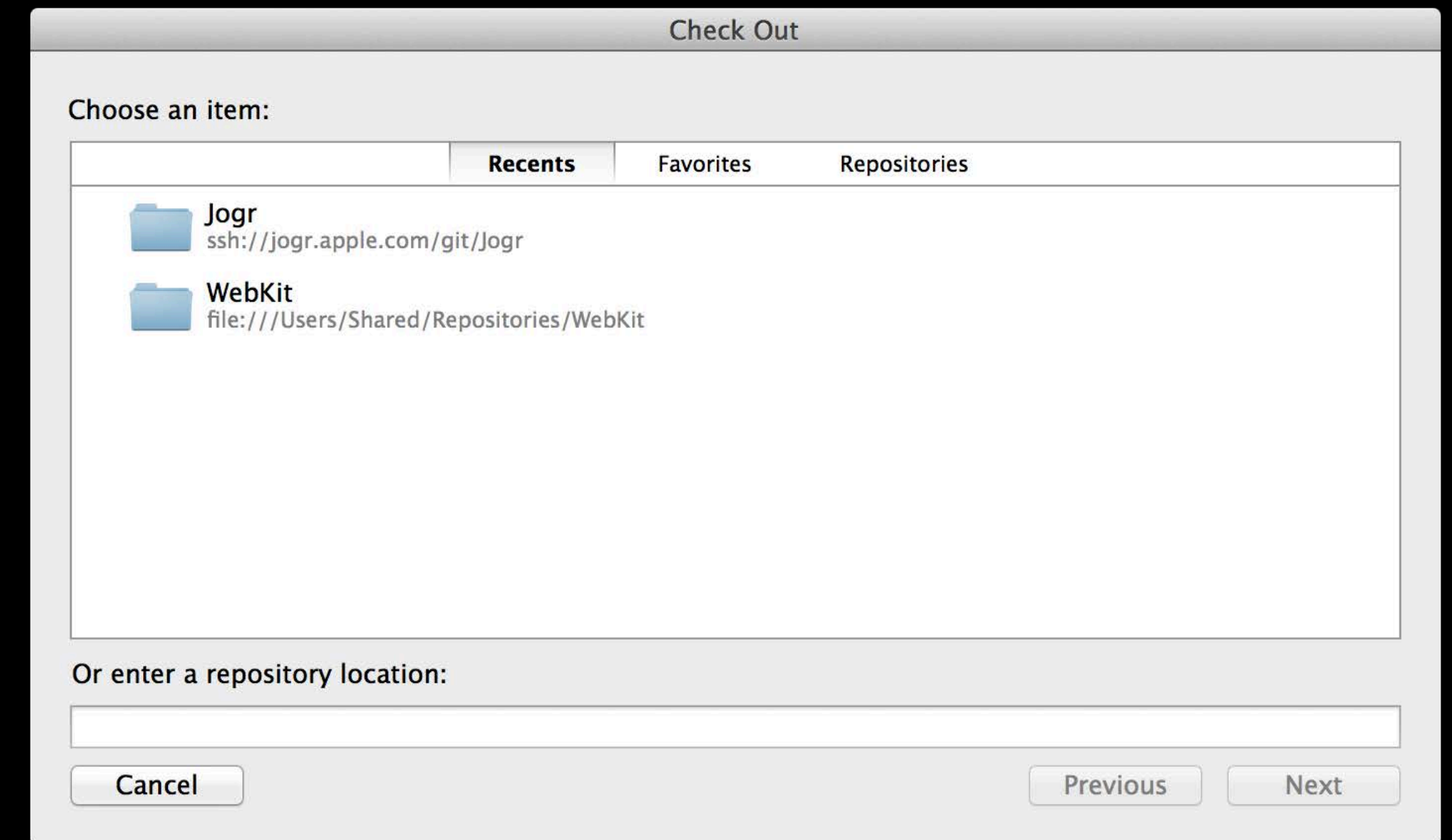


Demo

Summary

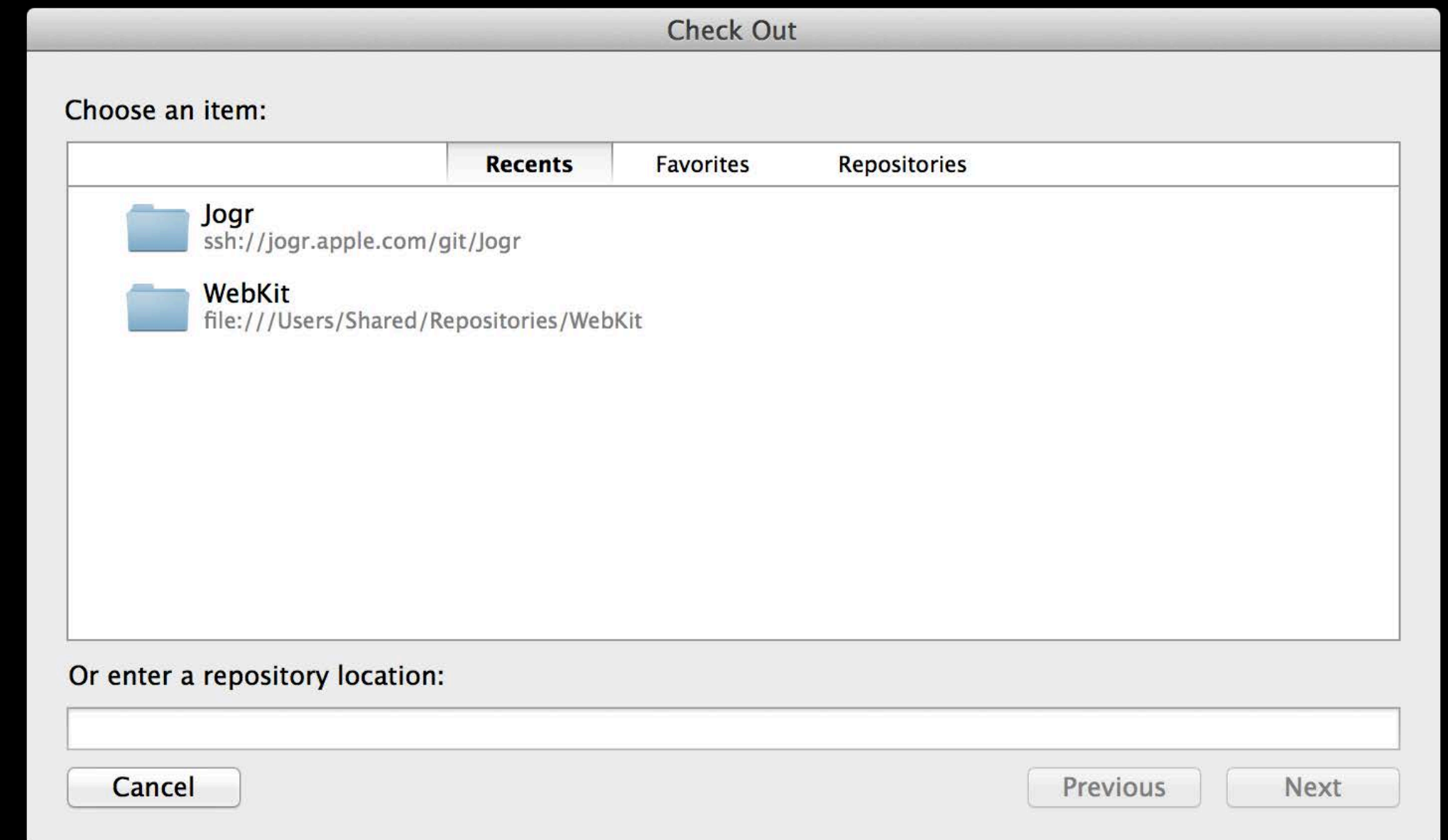
Summary

- Check Out



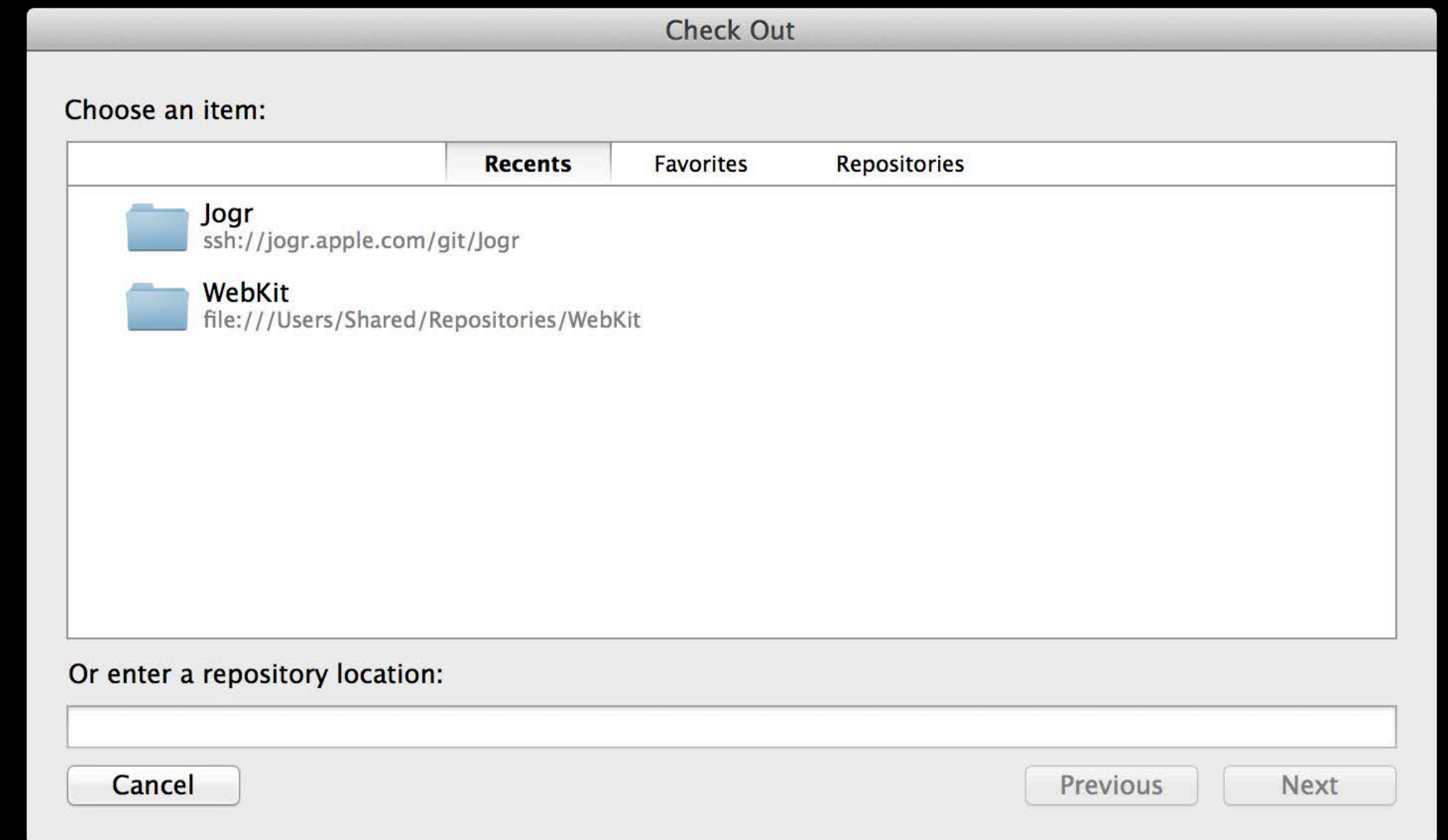
Summary

- Check Out
 - Streamlined workflow



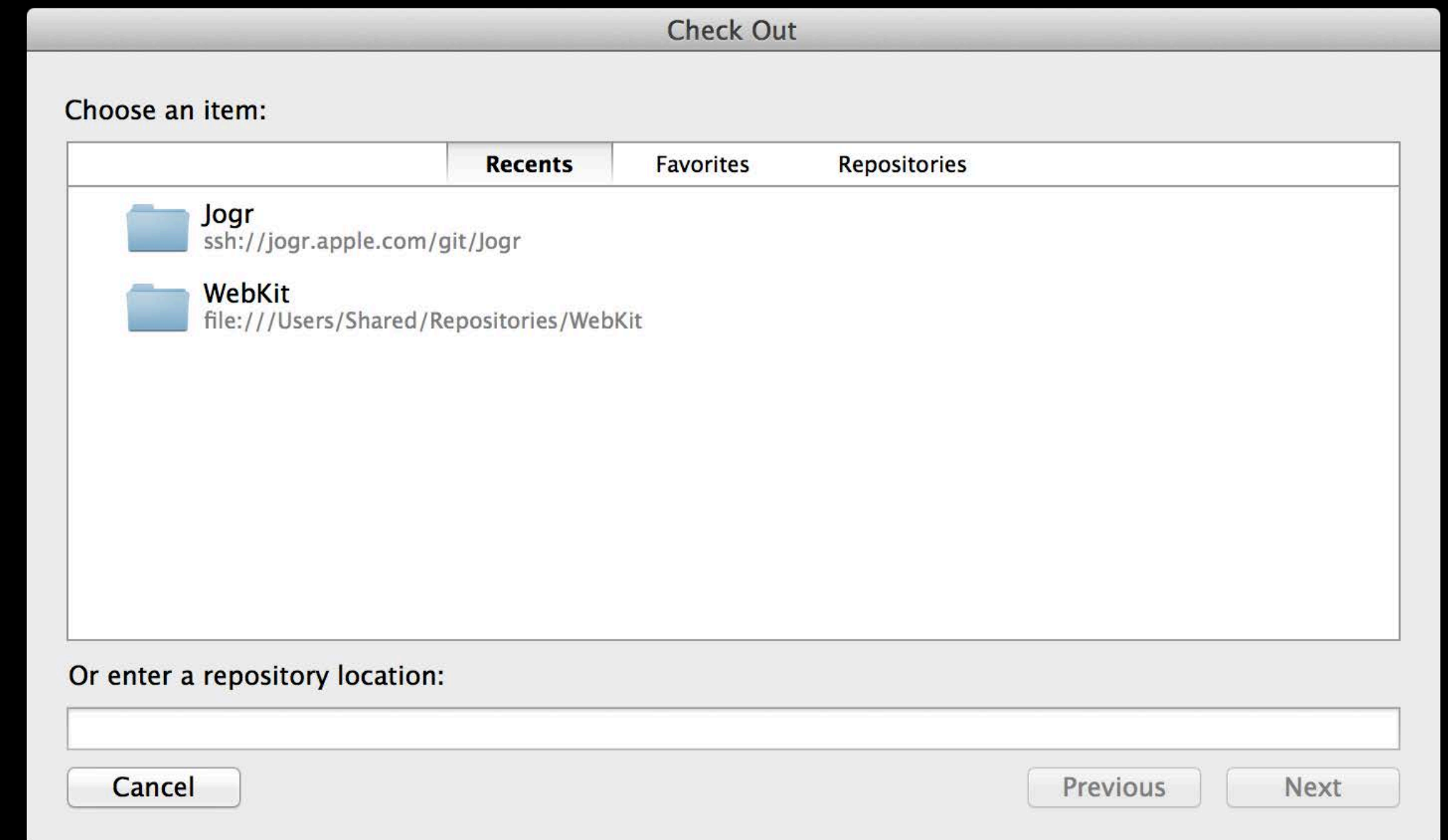
Summary

- Check Out
 - Streamlined workflow
 - Branch integration



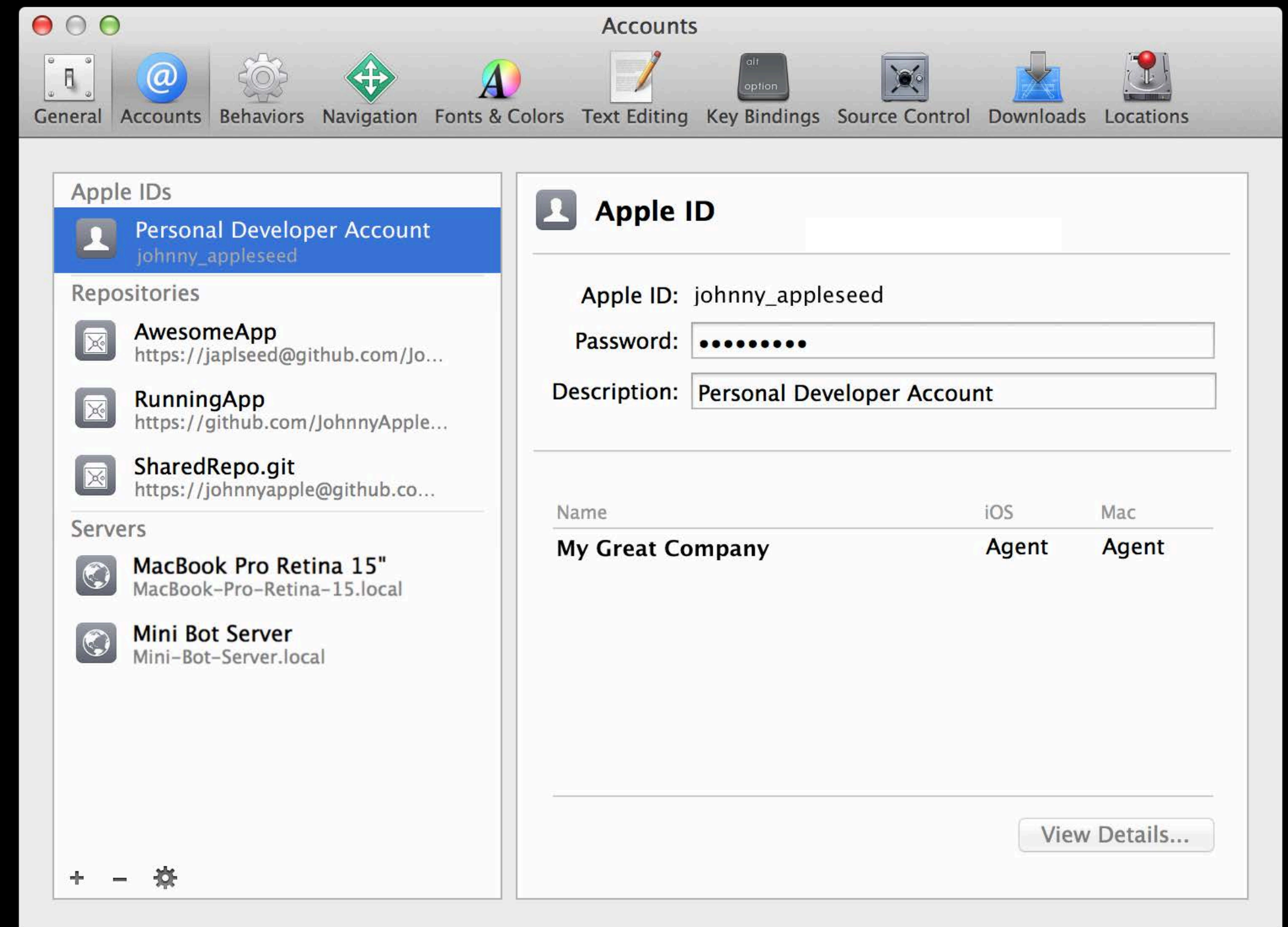
Summary

- Check Out
 - Streamlined workflow
 - Branch integration
 - Multiple working copy support



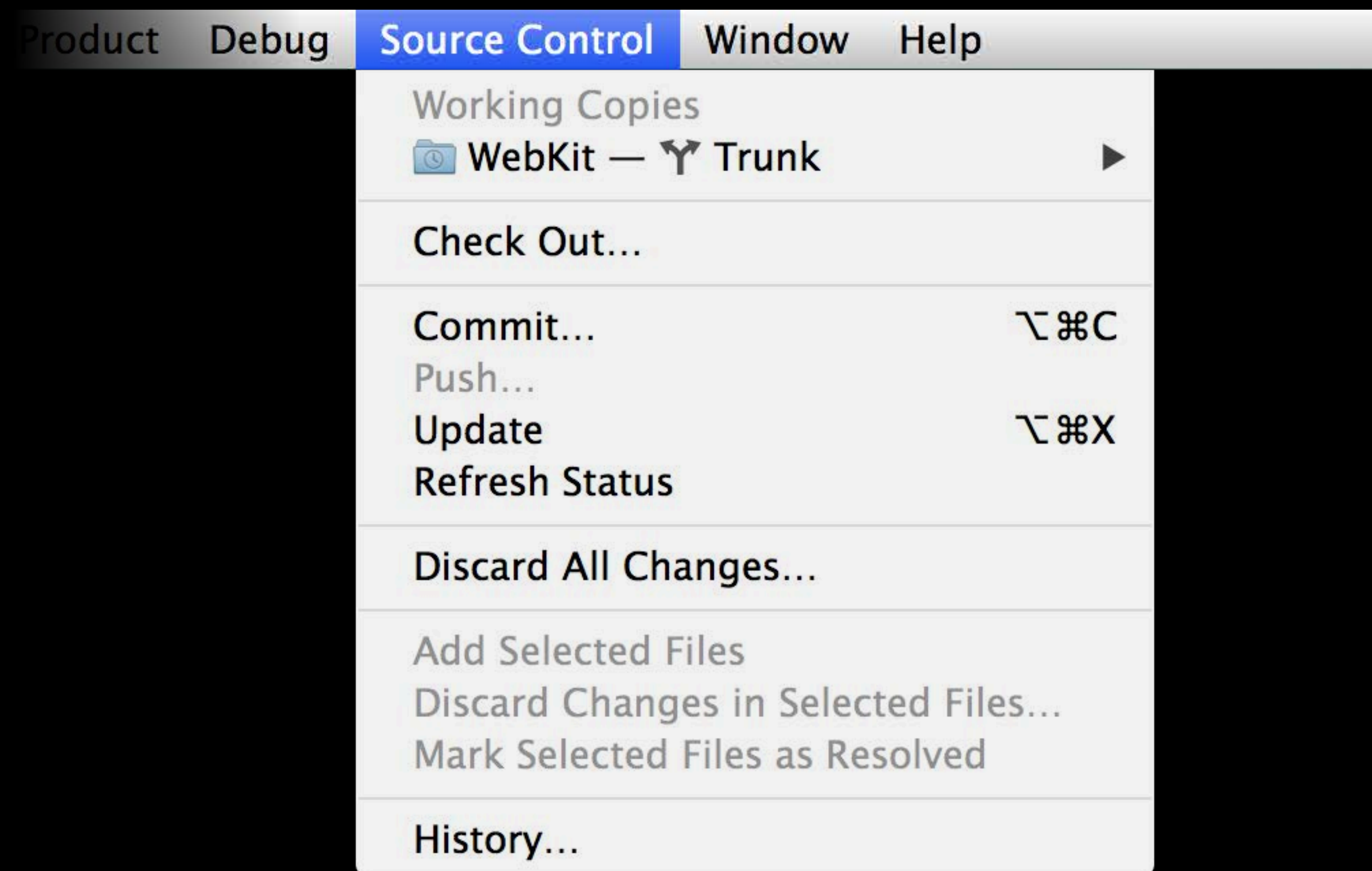
Summary

- Check Out
 - Streamlined workflow
 - Branch integration
 - Multiple working copy support
- Single point to manage accounts



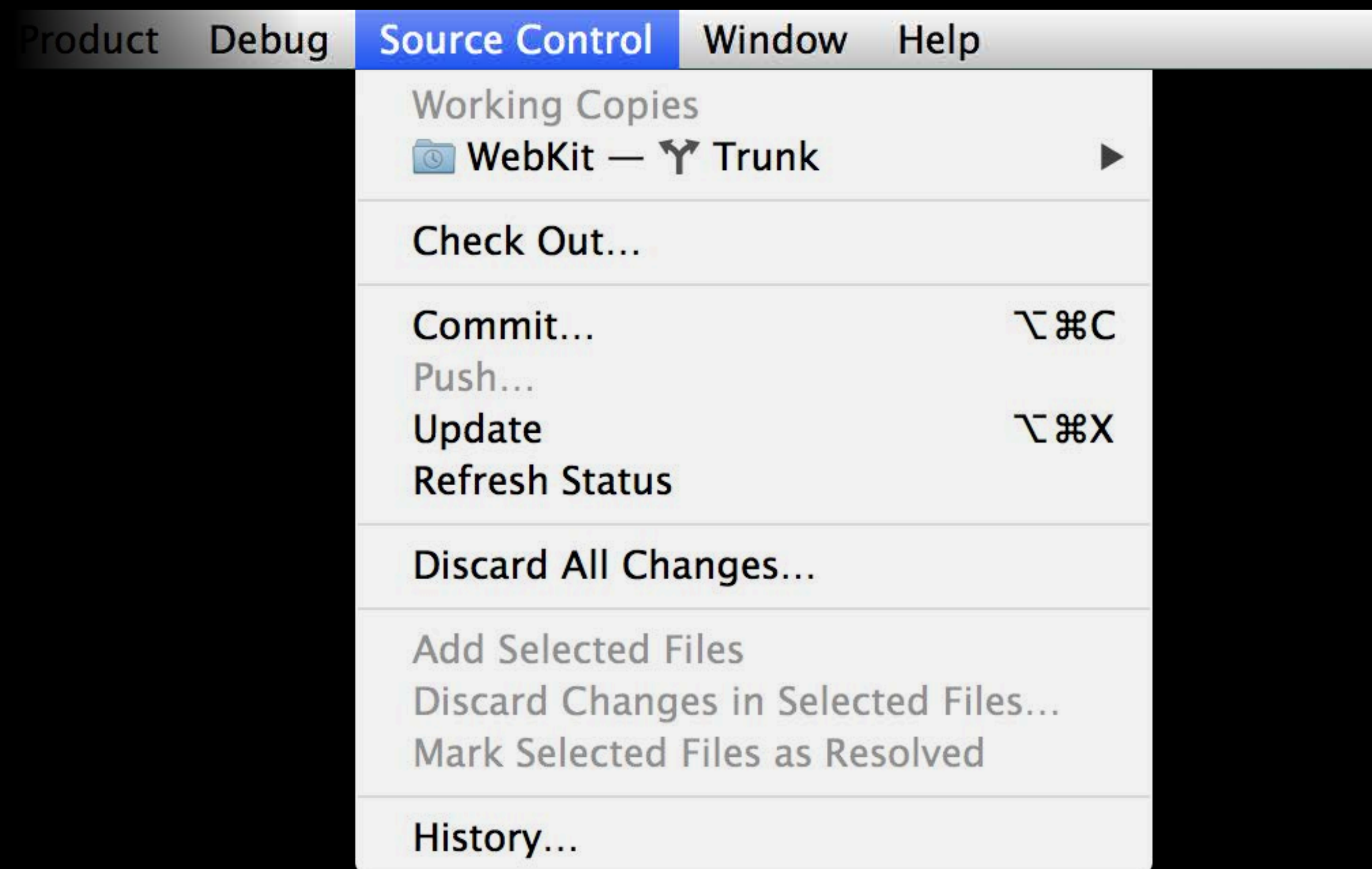
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- Check Out
 - Streamlined workflow
 - Branch integration
 - Multiple working copy support
- Single point to manage accounts
- Source Control Menu



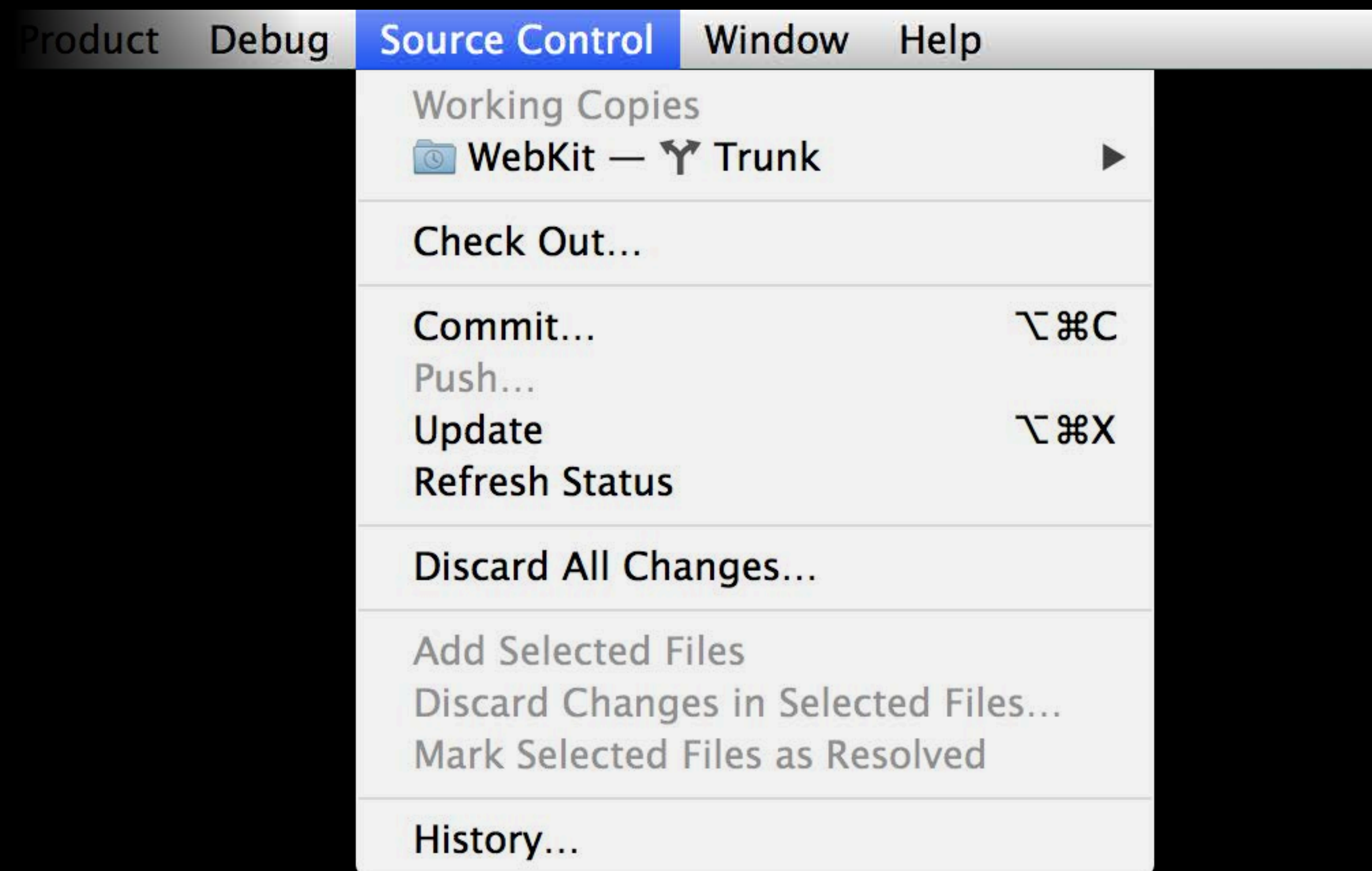
Summary

- Check Out
 - Streamlined workflow
 - Branch integration
 - Multiple working copy support
- Single point to manage accounts
- Source Control Menu
 - Branching workflows



Summary

- Check Out
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 - Current branch



Summary

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 - Branching workflows
 - Current branch
- History with Search

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- History with Search
- Subversion 1.7

Collaborating with OS X Server

Eric Dudiak

Xcode Software Engineer

Xcode Service on OS X Server

End-to-end collaboration

Xcode Service on OS X Server

End-to-end collaboration

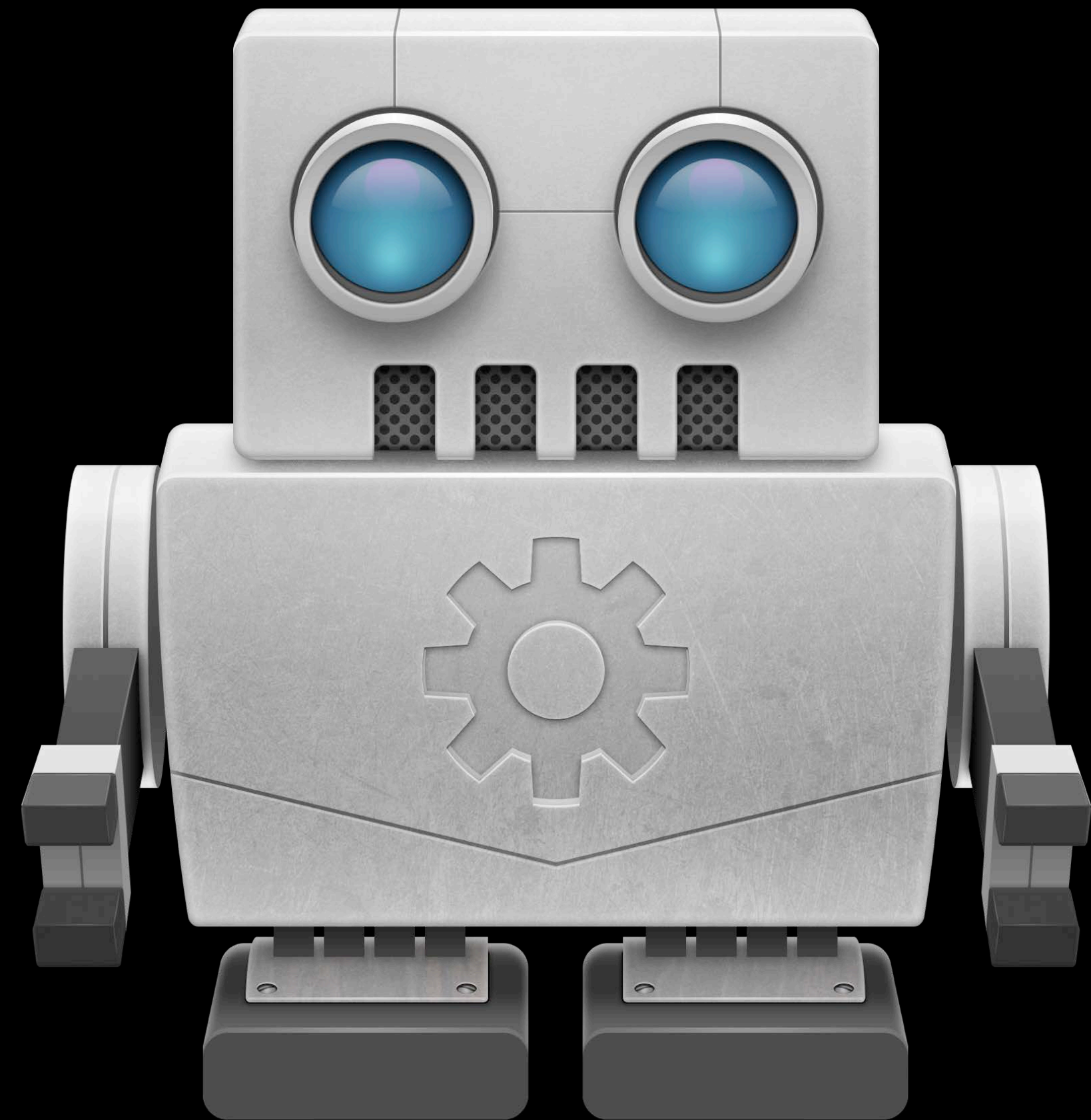
- Hosting of Git Repositories



Xcode Service on OS X Server

End-to-end collaboration

- Hosting of Git Repositories
- Automated testing



Xcode Service on OS X Server

End-to-end collaboration

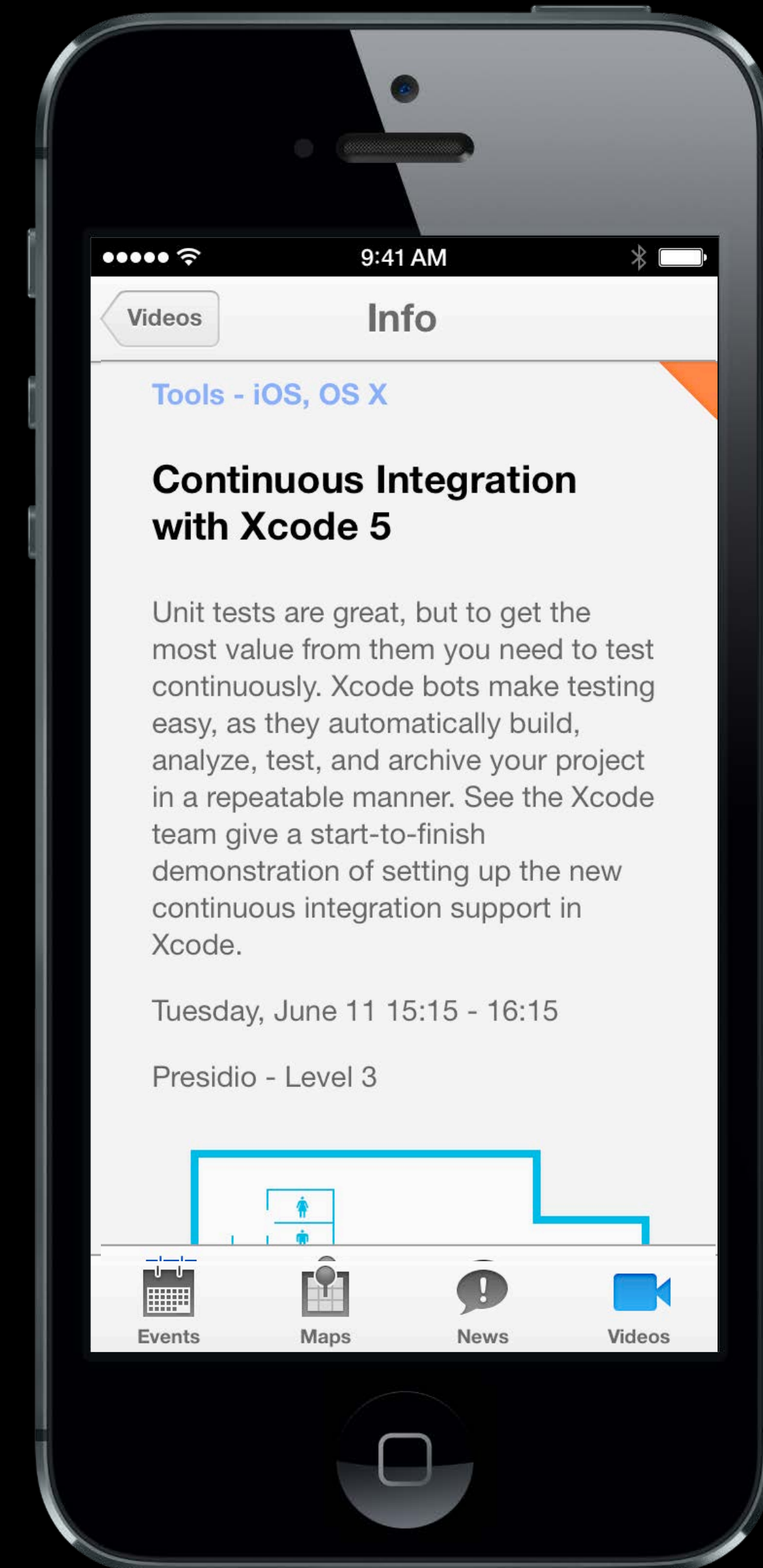
- Hosting of Git Repositories
- Automated testing
- Archives releases



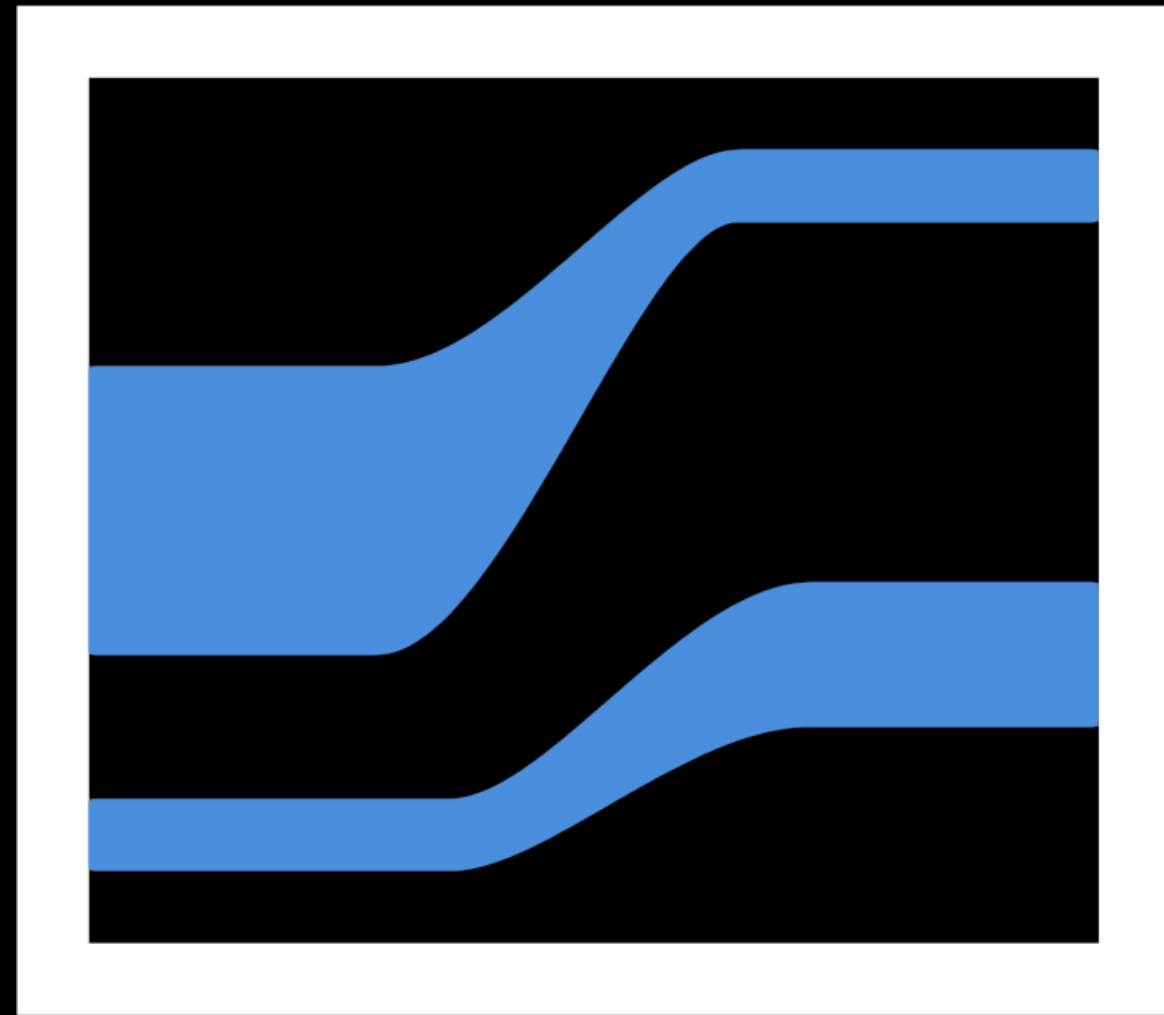
More Information

WWDC 2013 Session

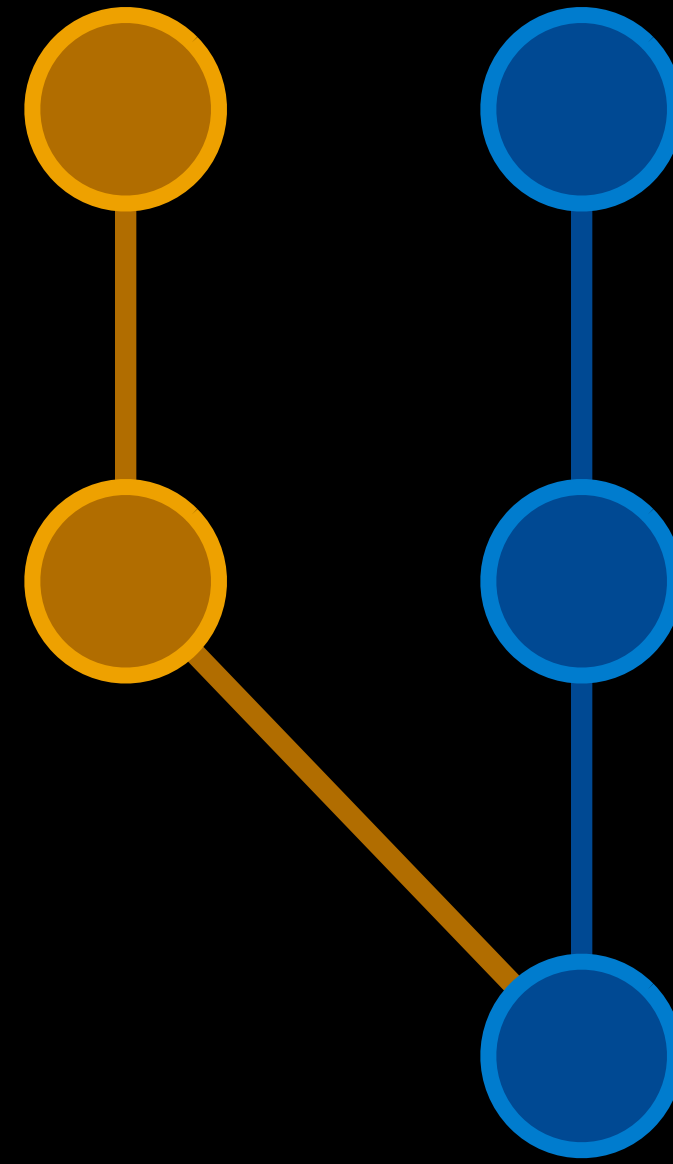
- Continuous Integration with Xcode 5



The Three Cs of Source Control



Confidence



Compartmentalization



Collaboration

Branches

Branches

- Help working in teams

Branches

- Help working in teams
- Develop features

Branches

- Help working in teams
- Develop features
 - Insulate mainline code

Branches

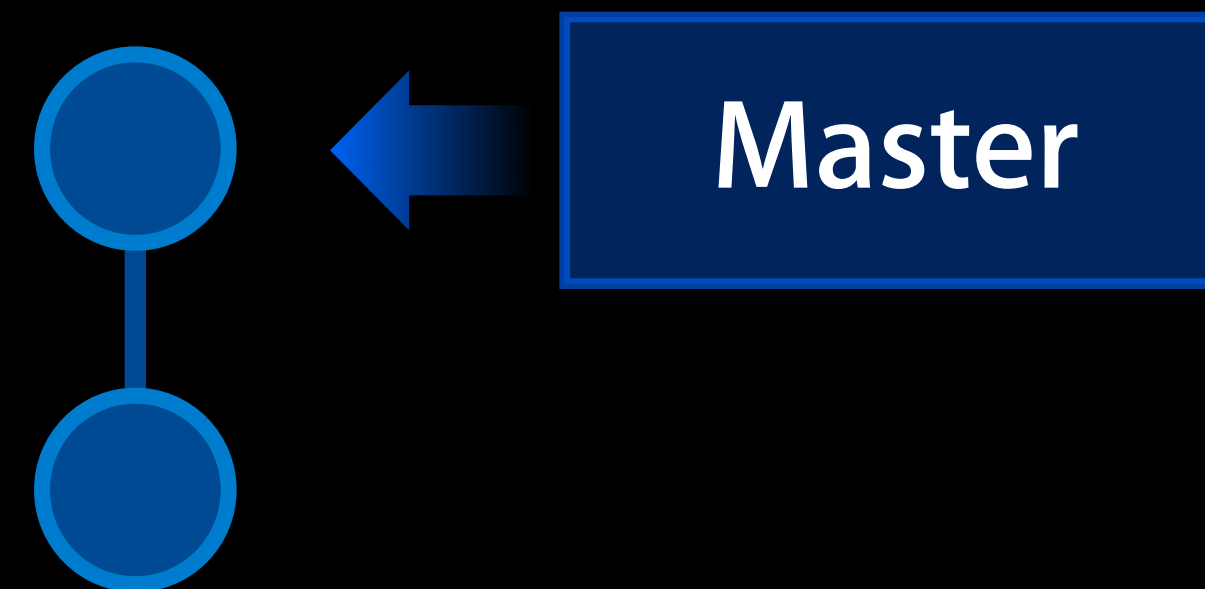
- Help working in teams
- Develop features
 - Insulate mainline code
- Automated testing per branch

Branches

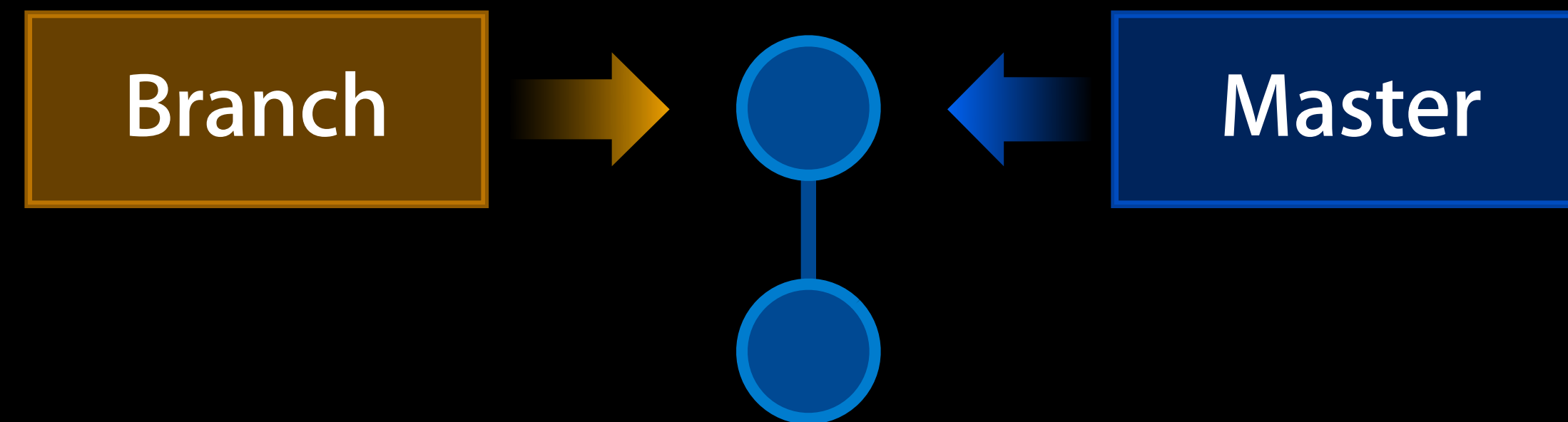
- Help working in teams
- Develop features
 - Insulate mainline code
- Automated testing per branch
 - Verify branch before merging

What Is a Branch?

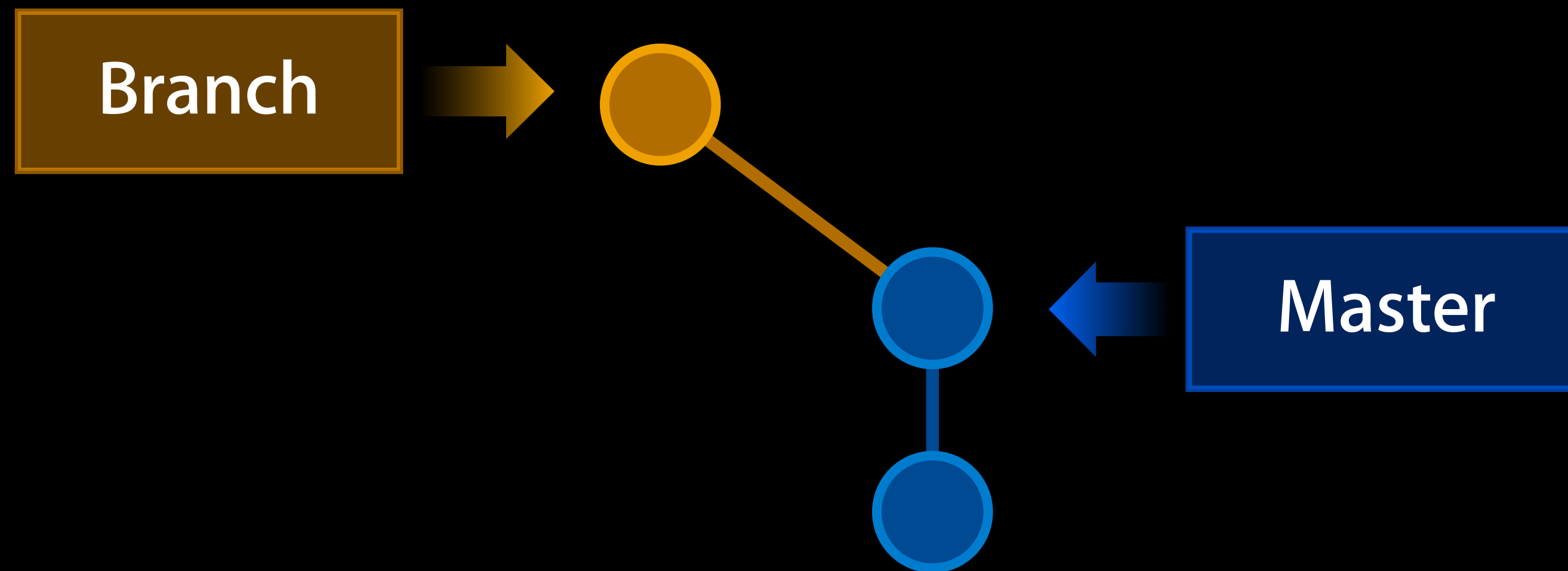
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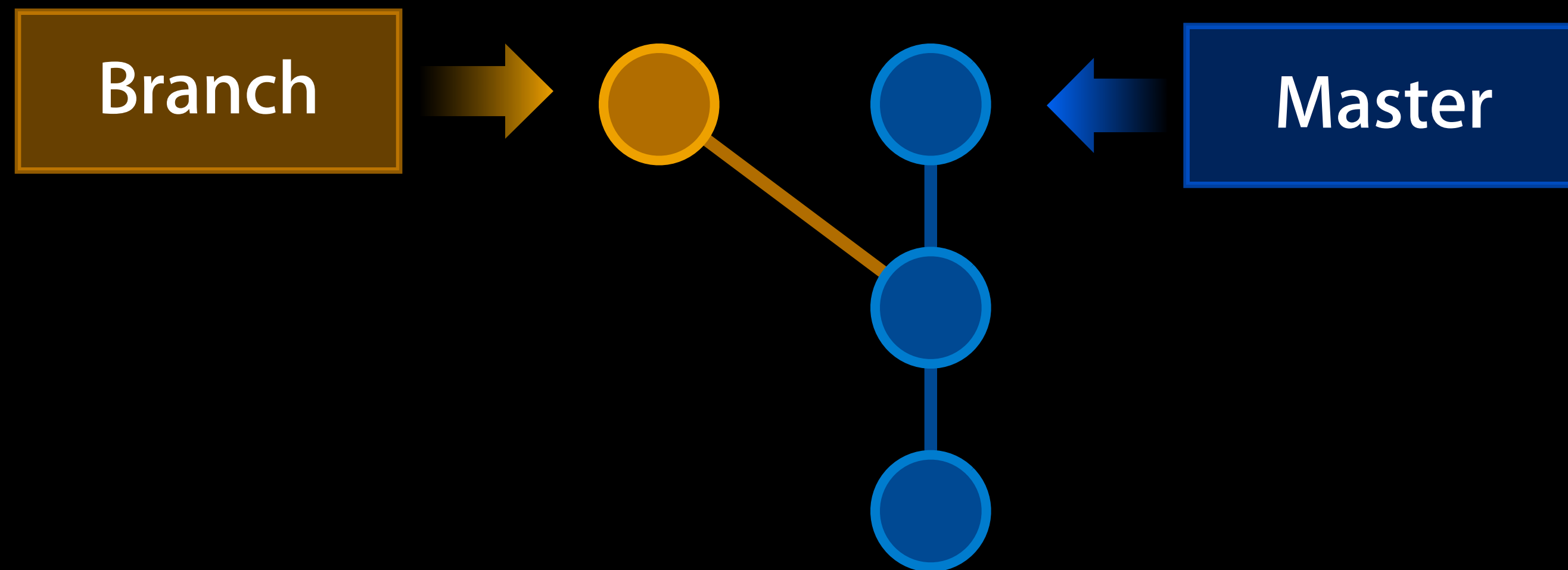
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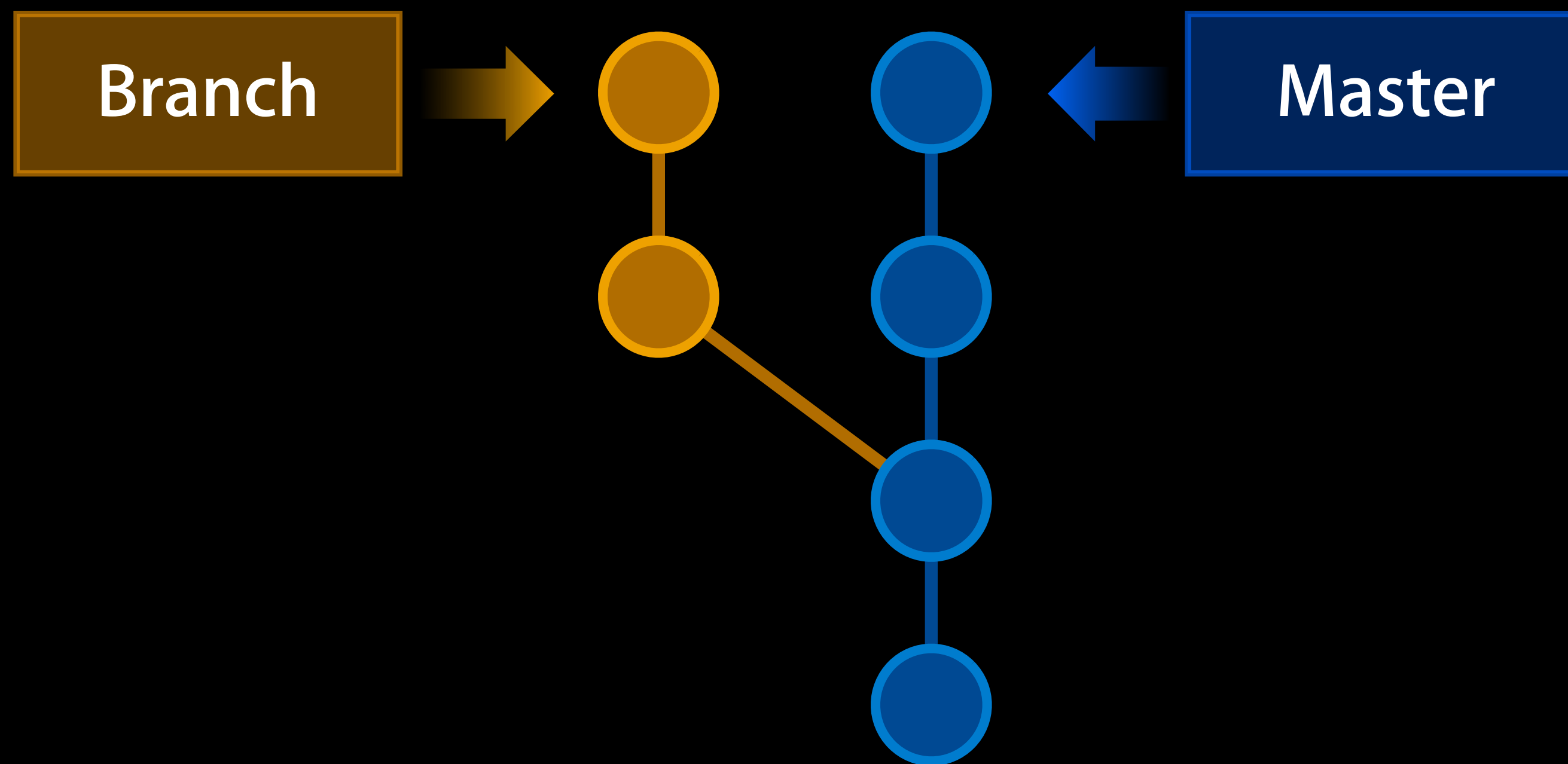
What Is a Branch?



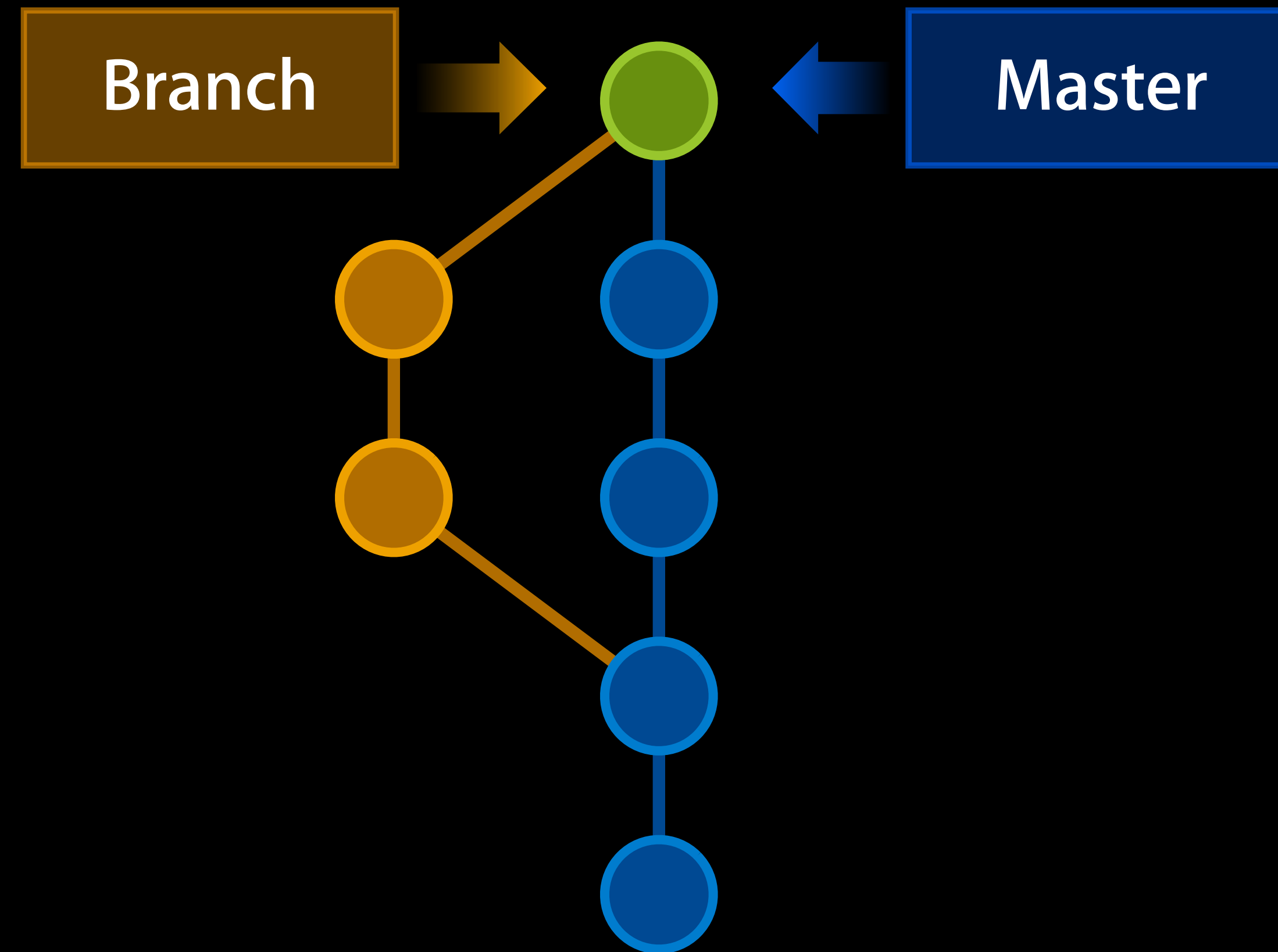
What Is a Branch?

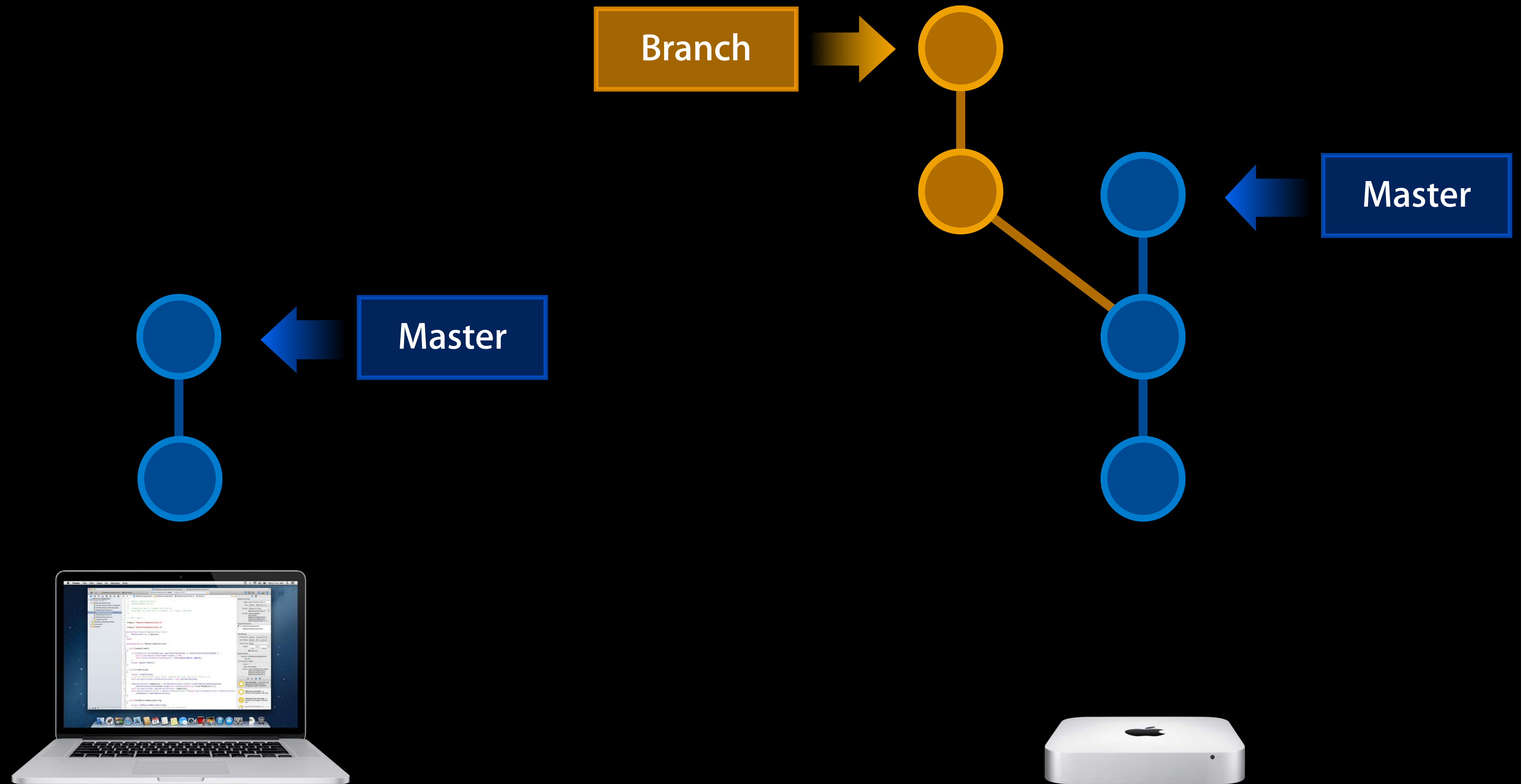


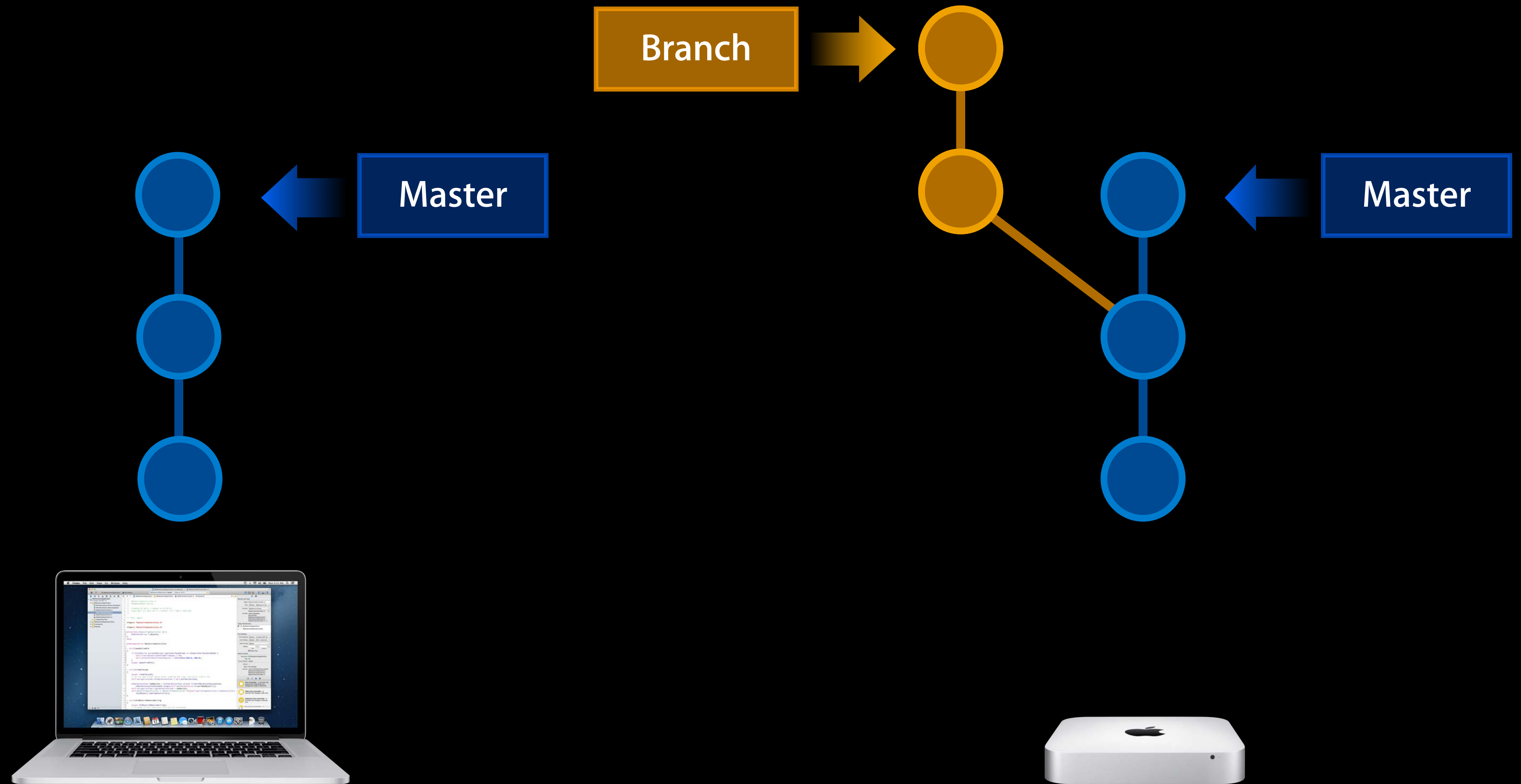
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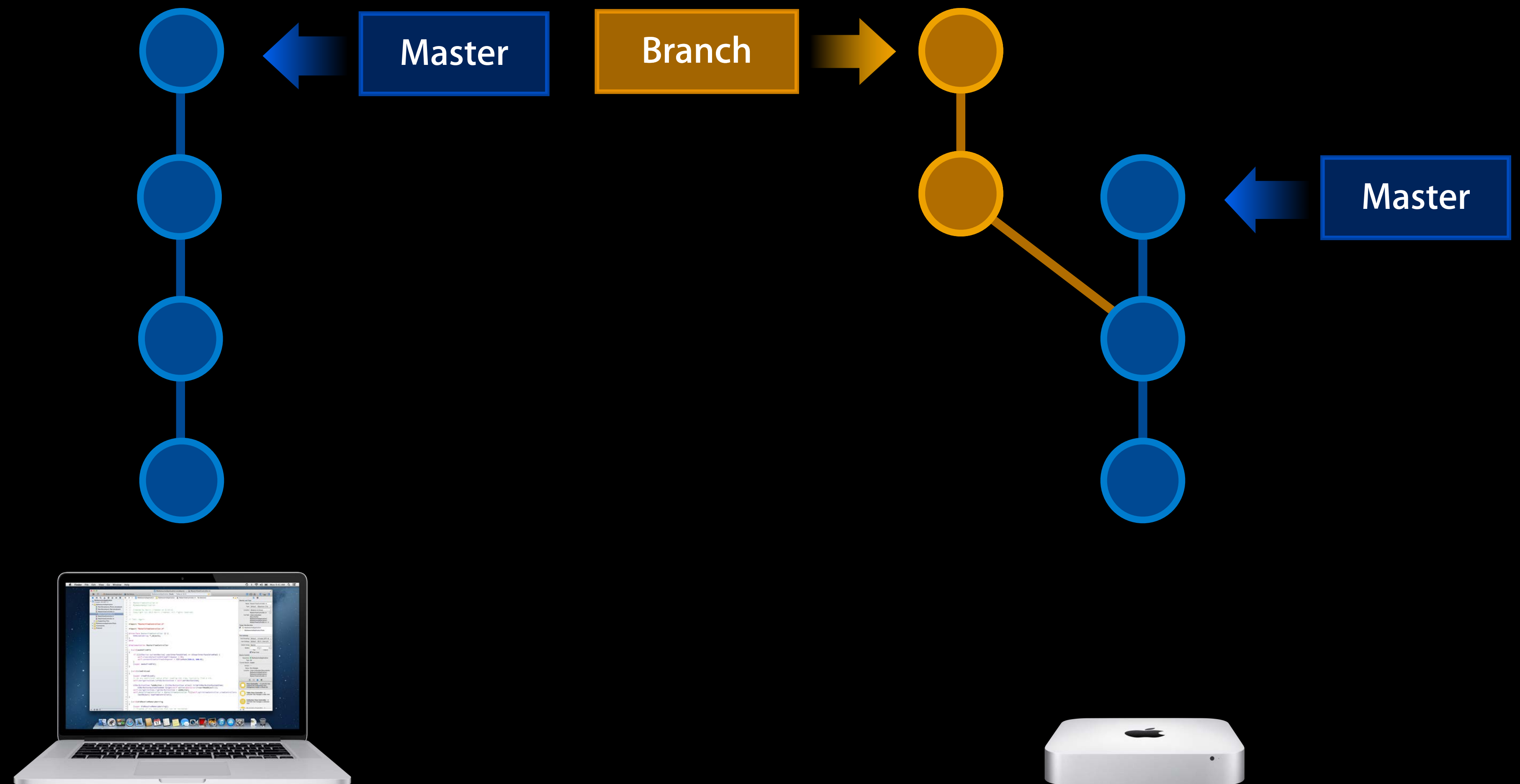


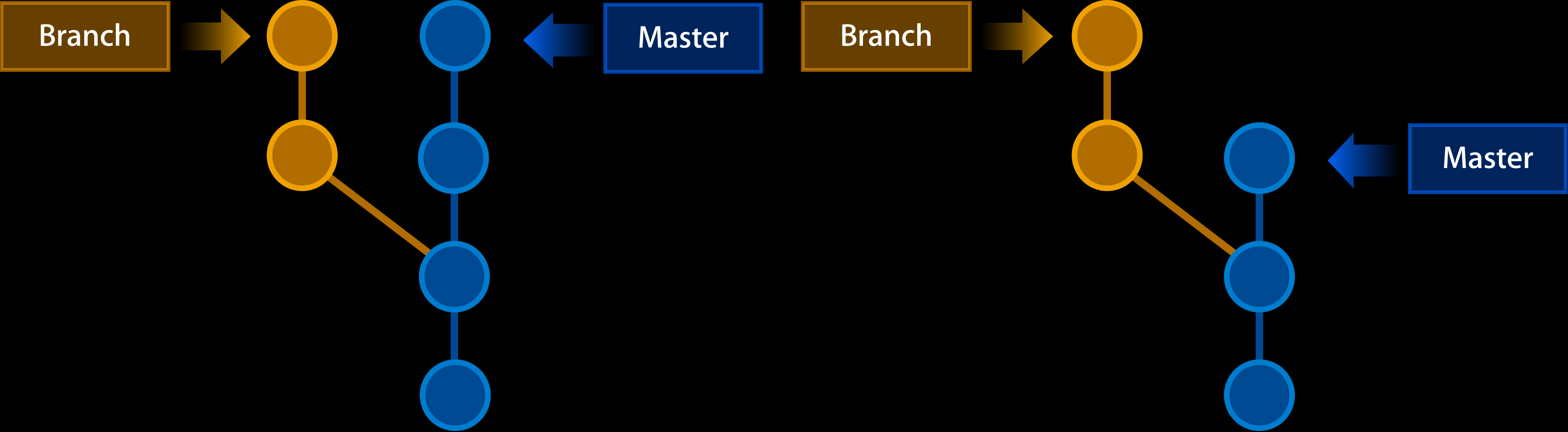
What Is a Branch?

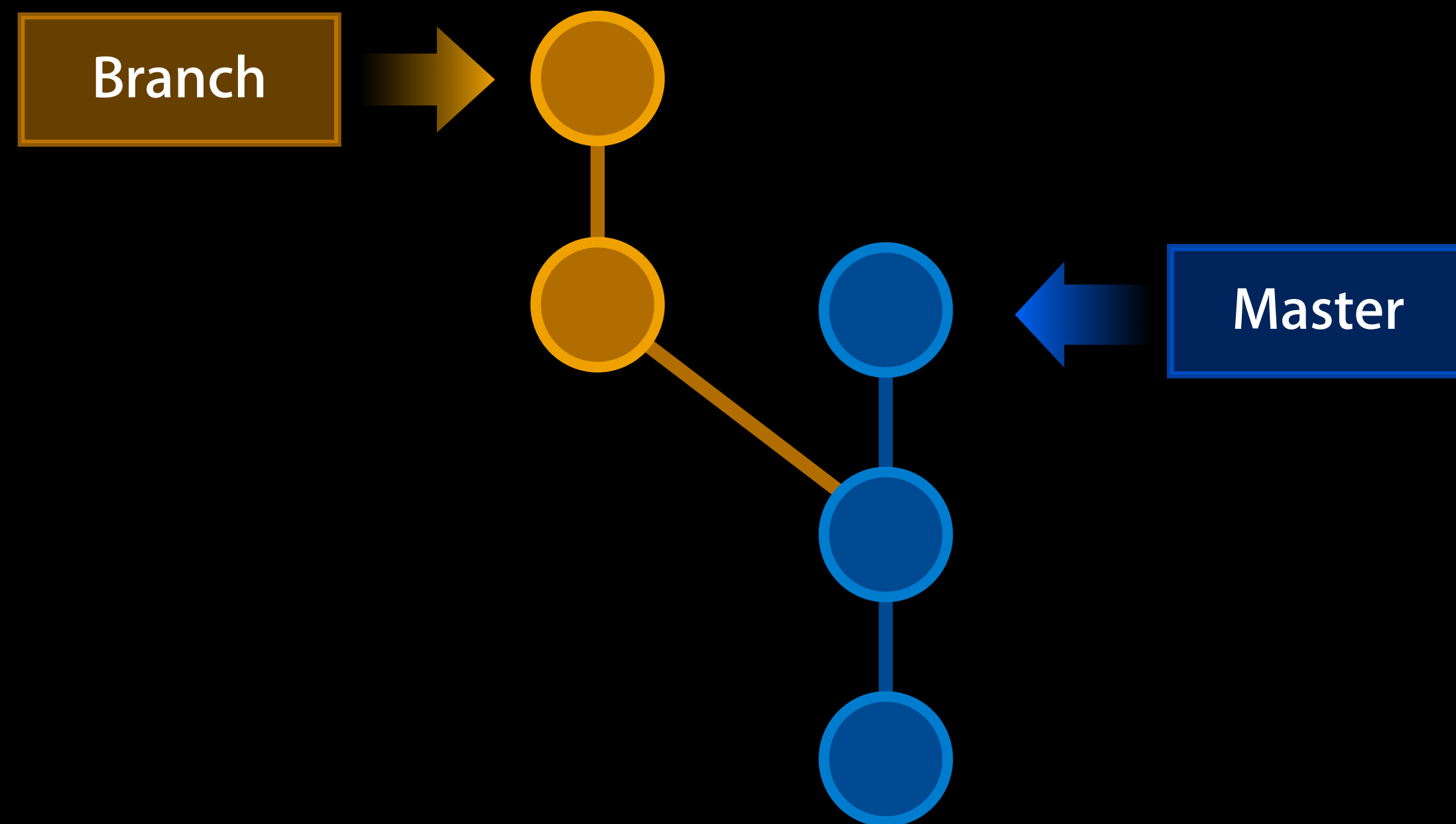
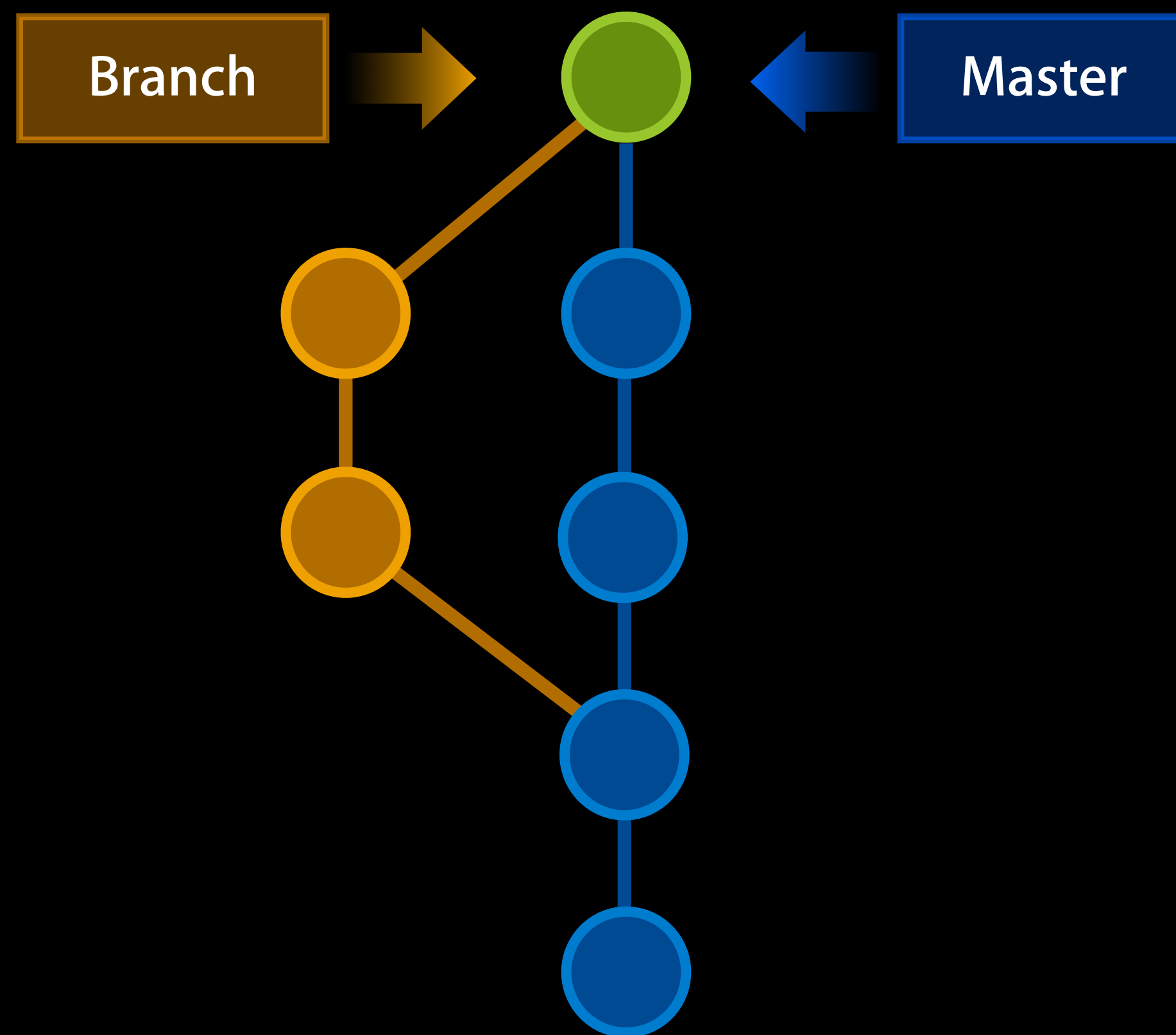


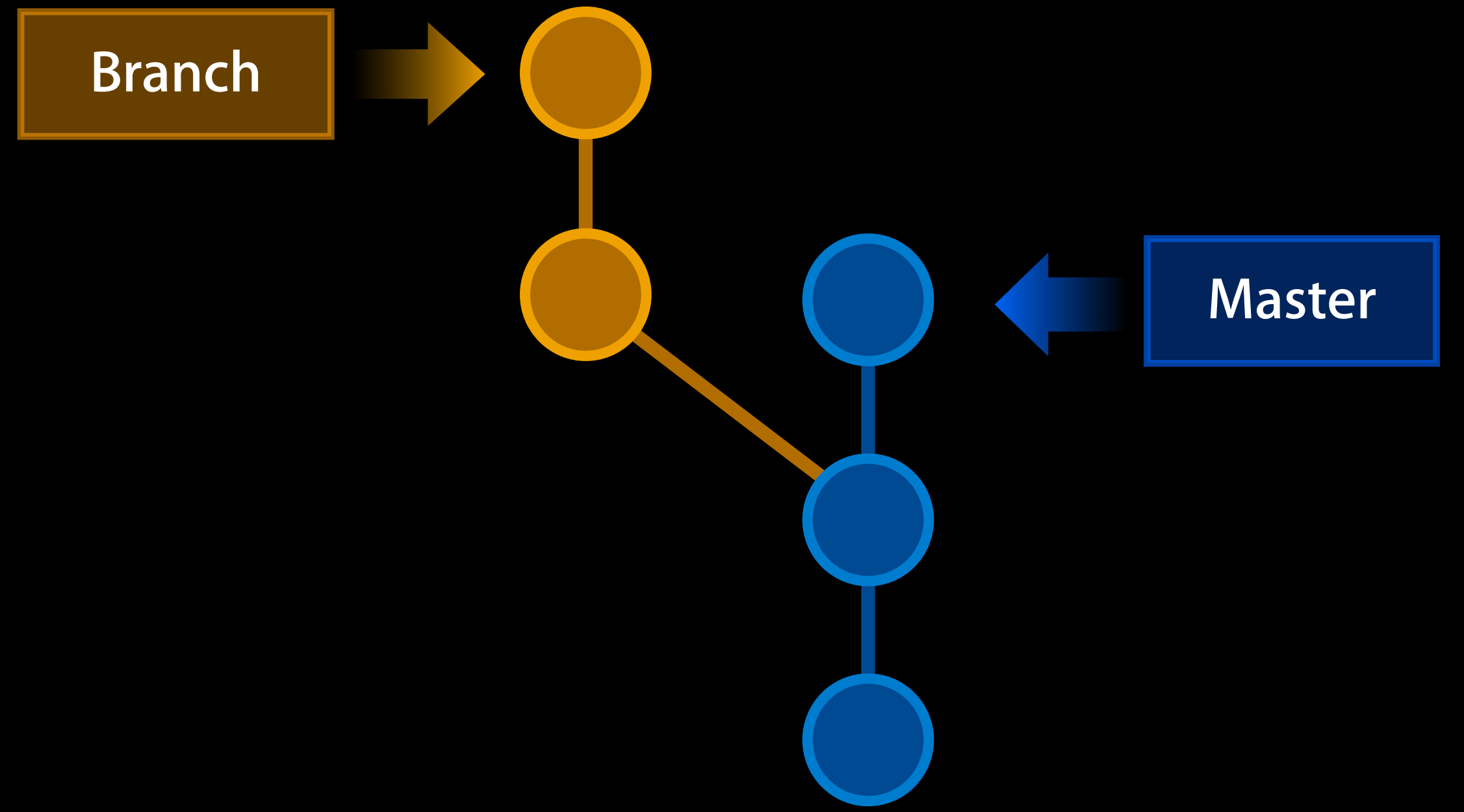
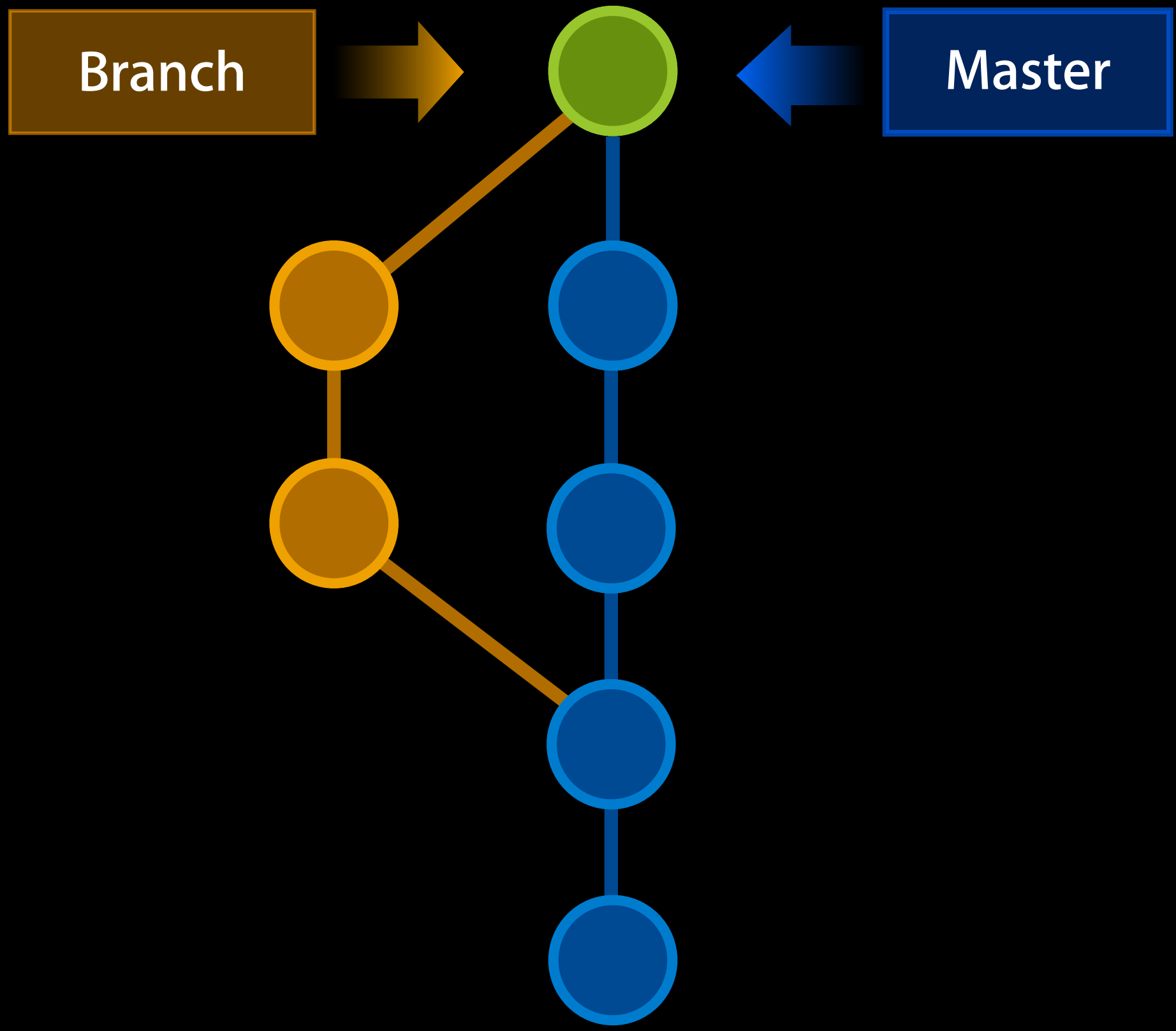


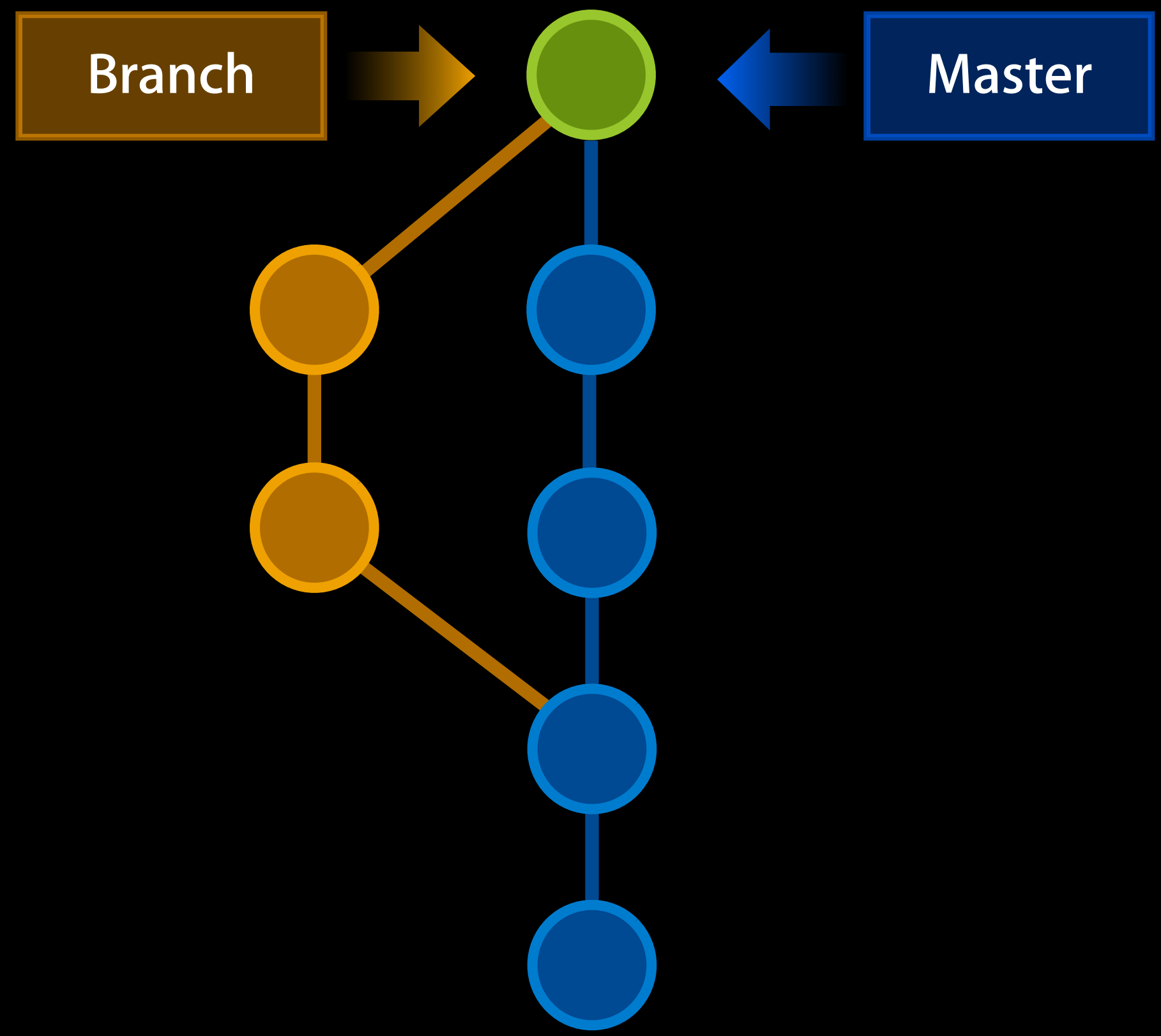
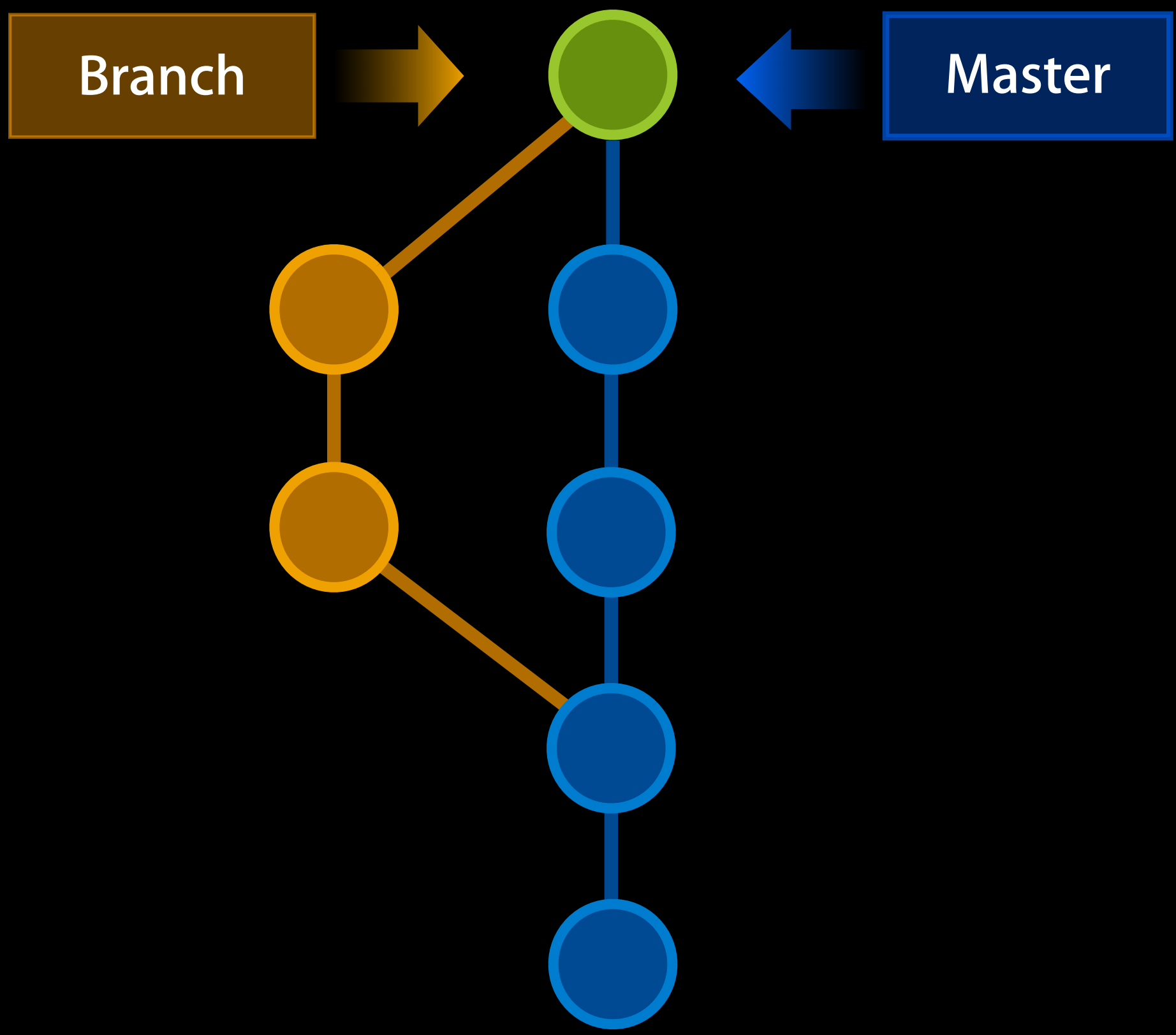


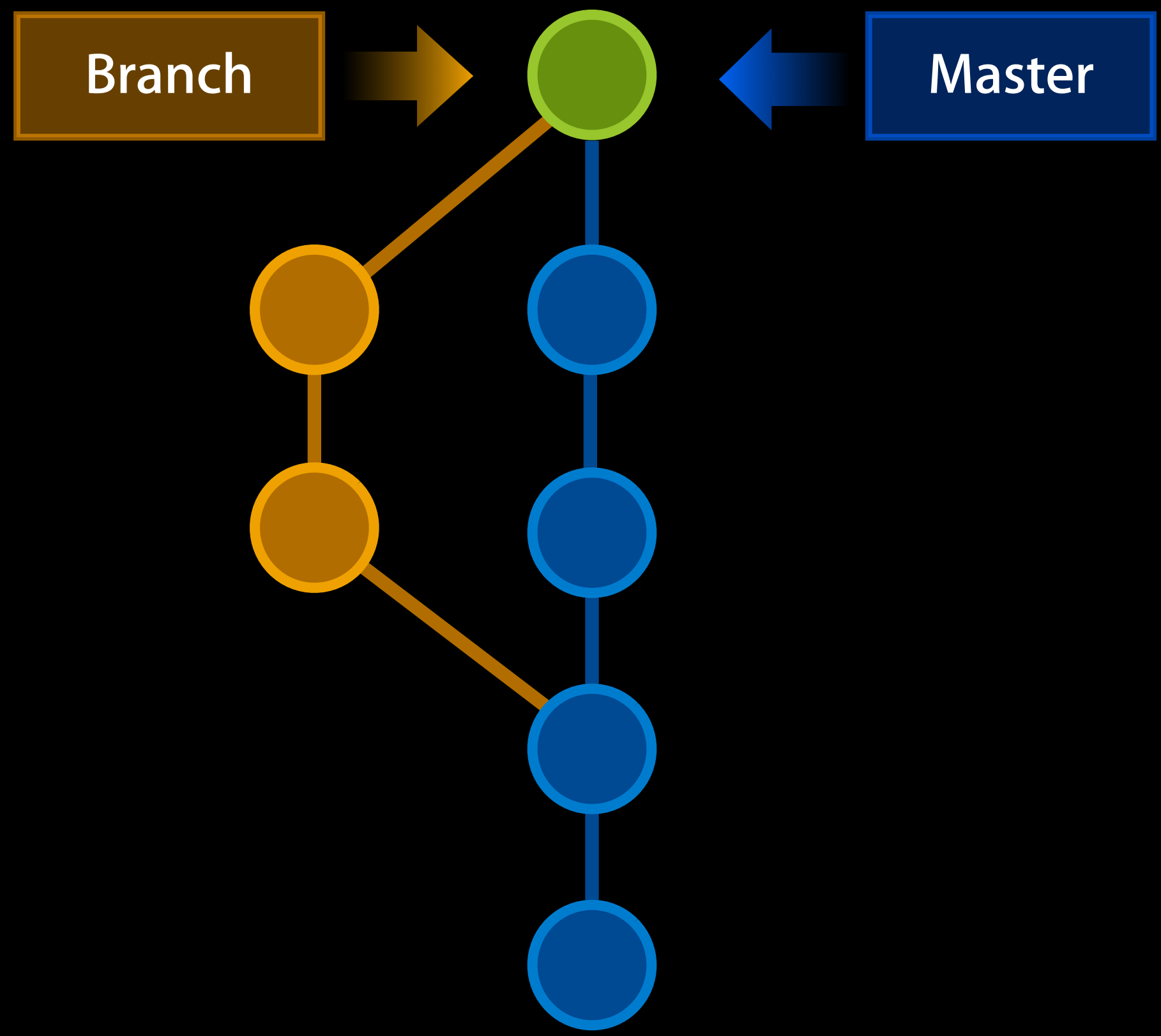
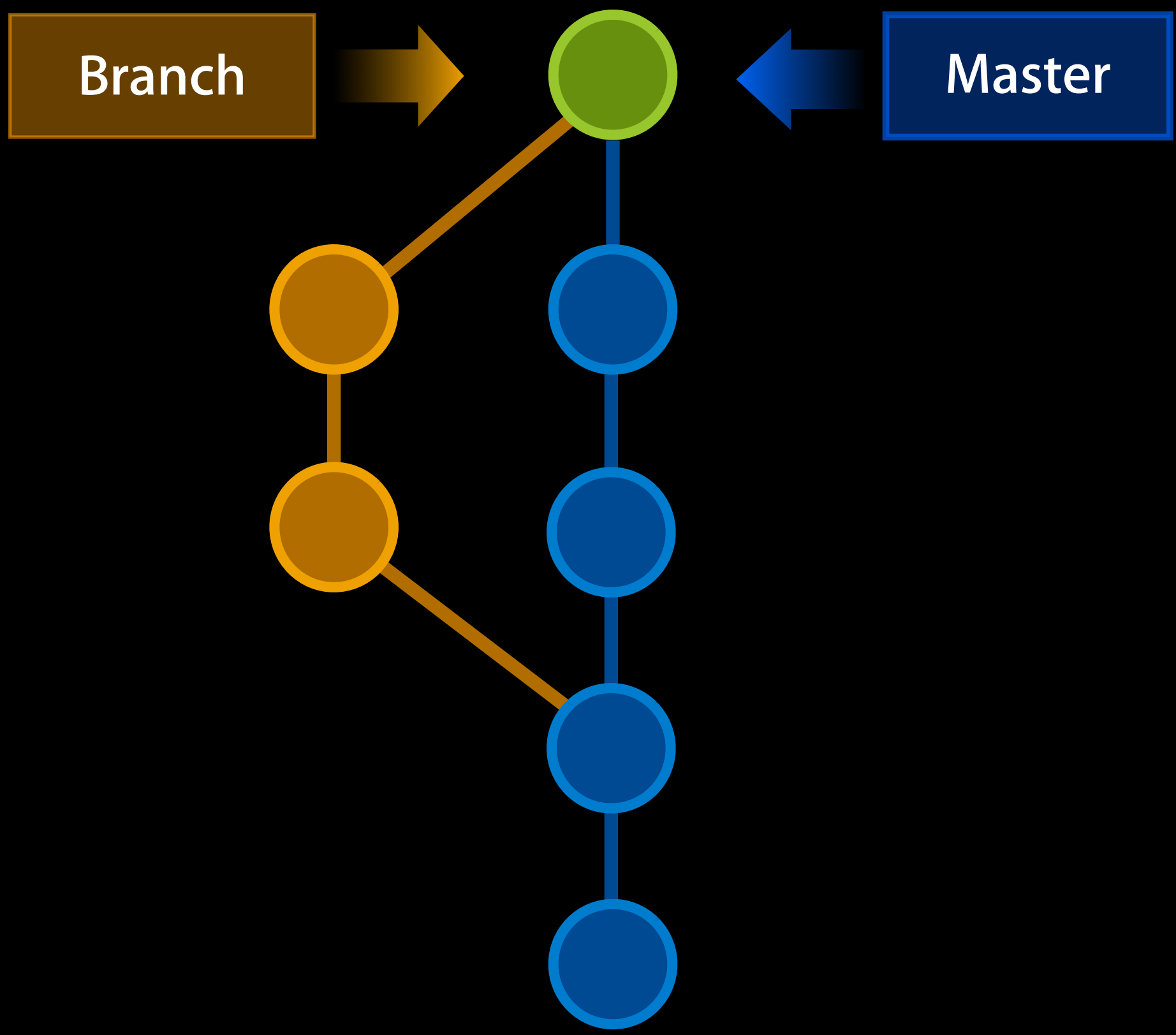


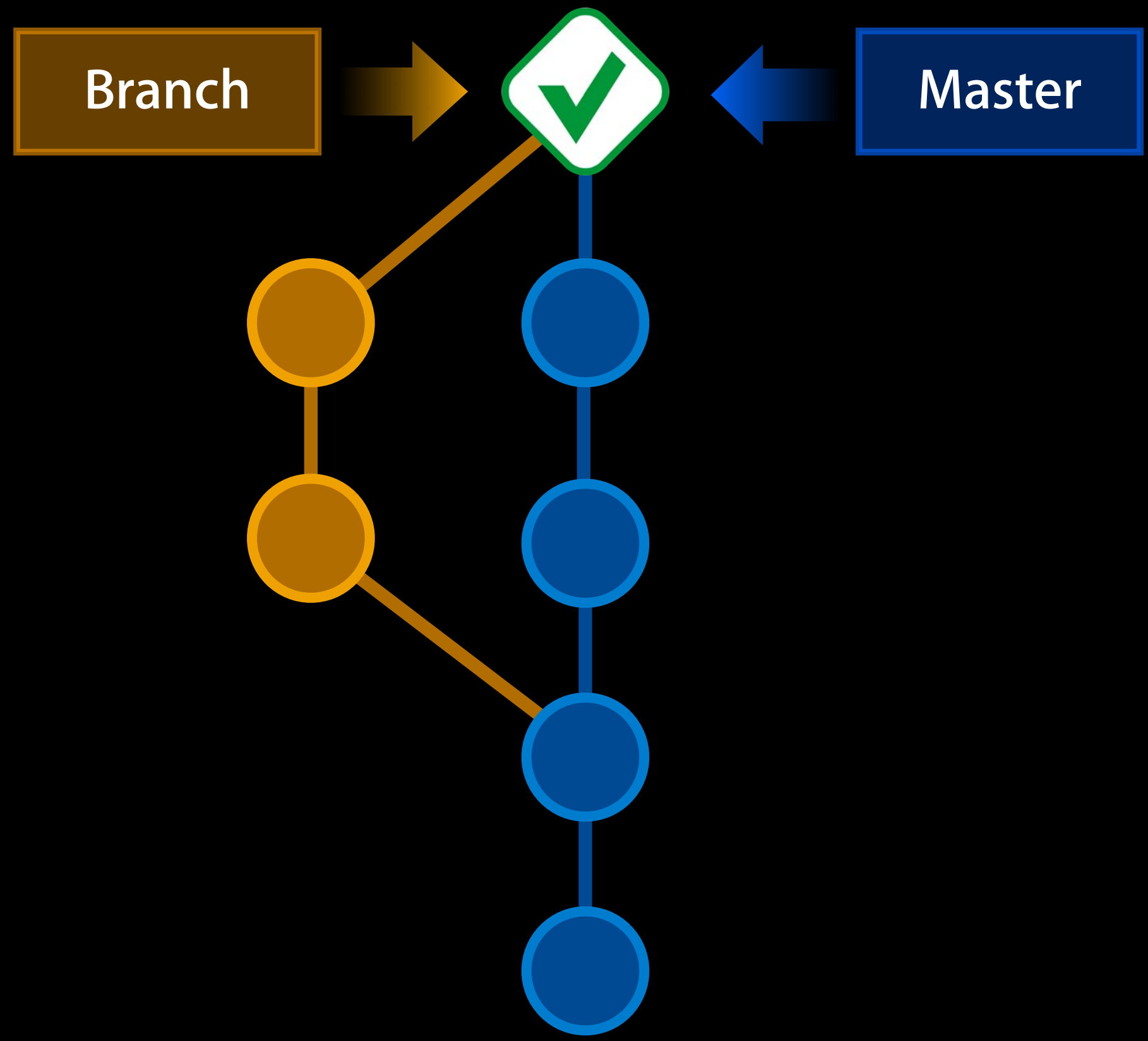
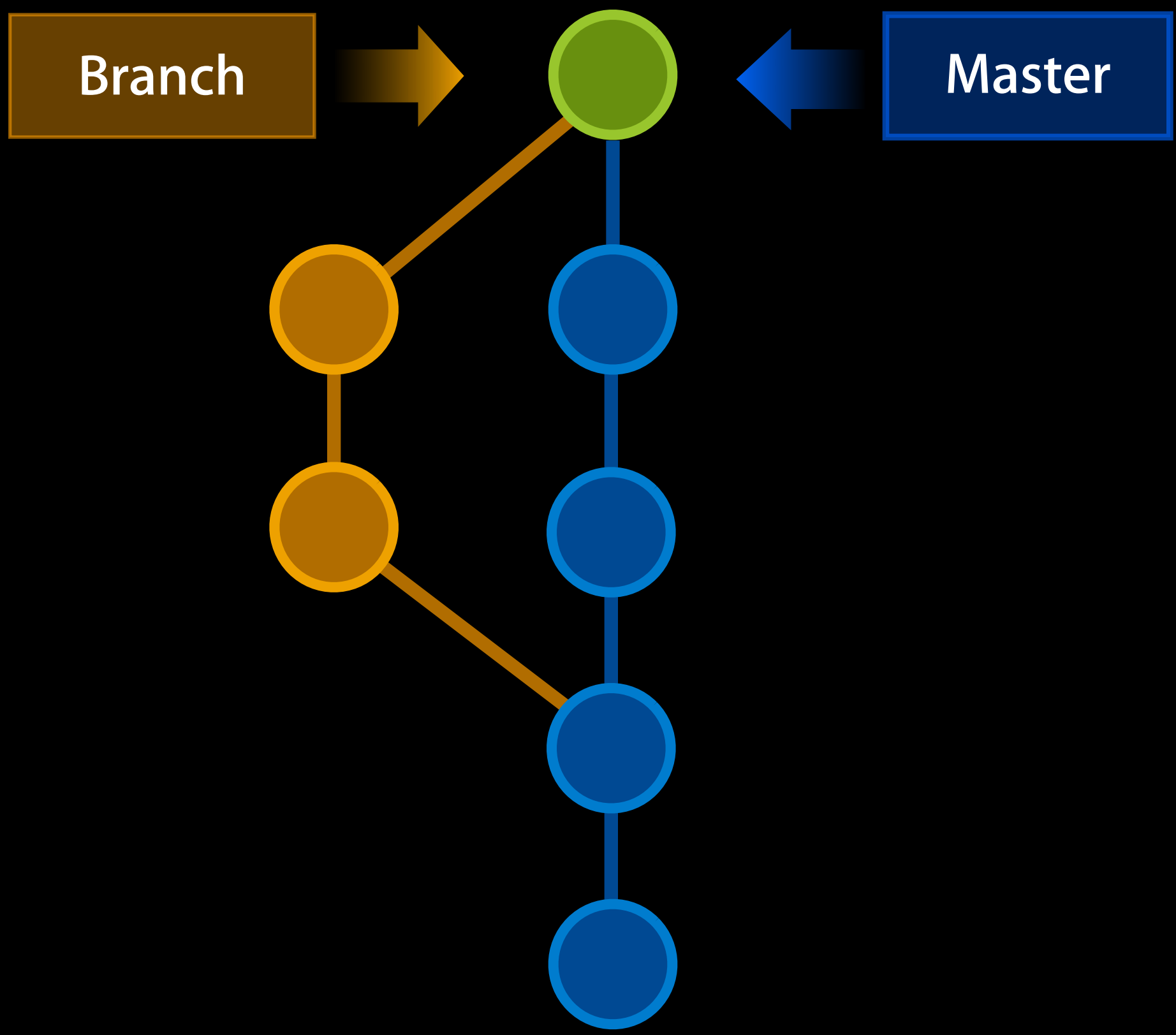




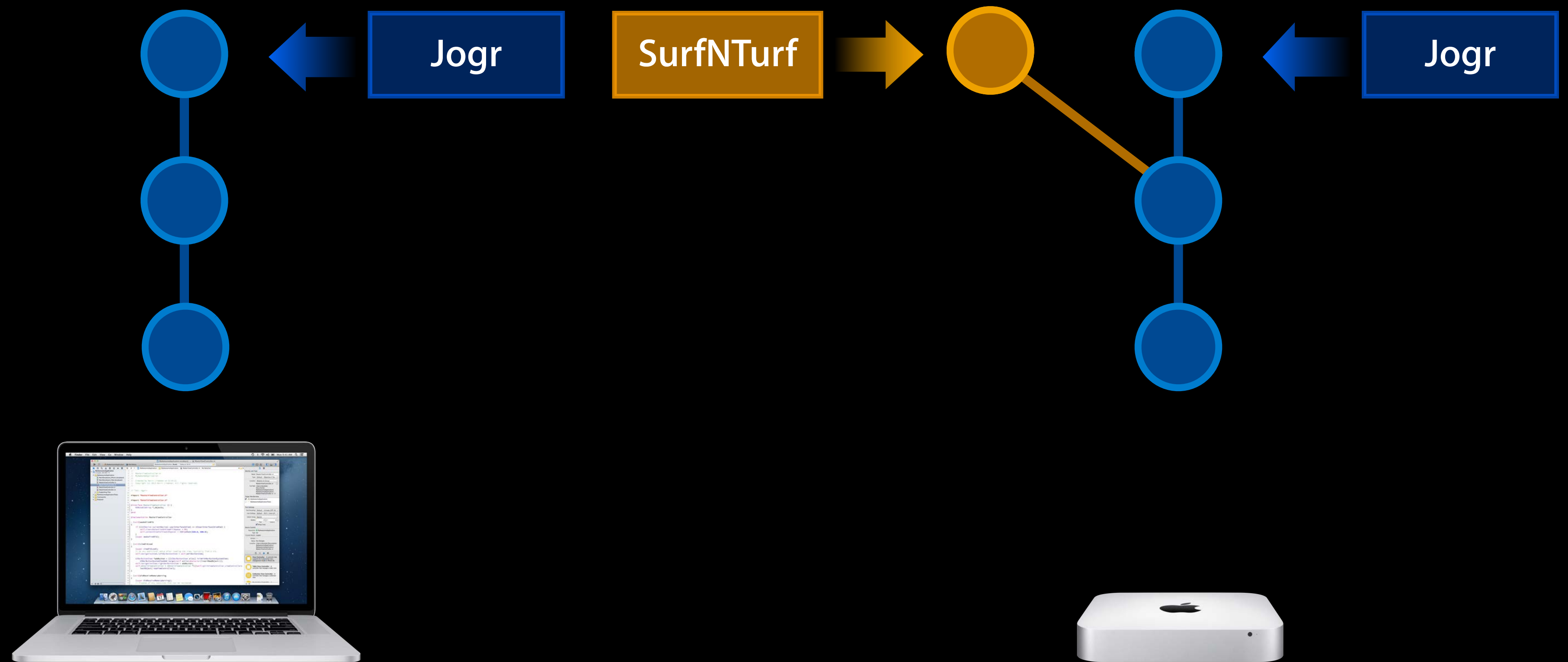




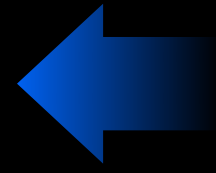
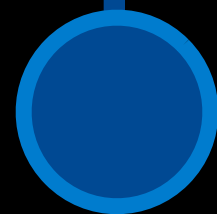
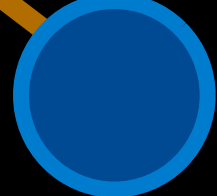
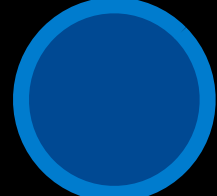
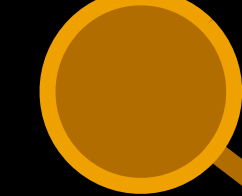
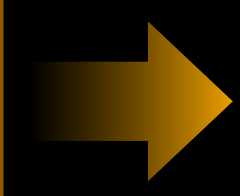




Demo

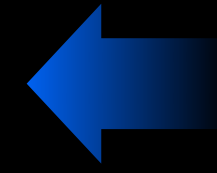
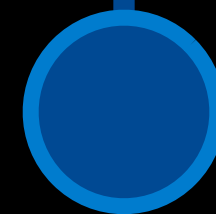
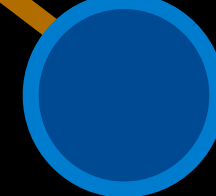
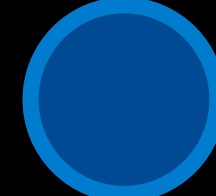
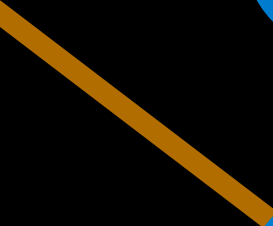
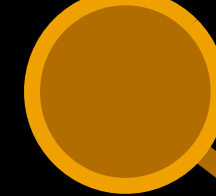
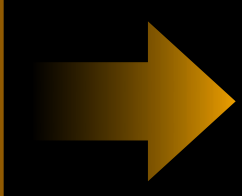


SurfNTurf



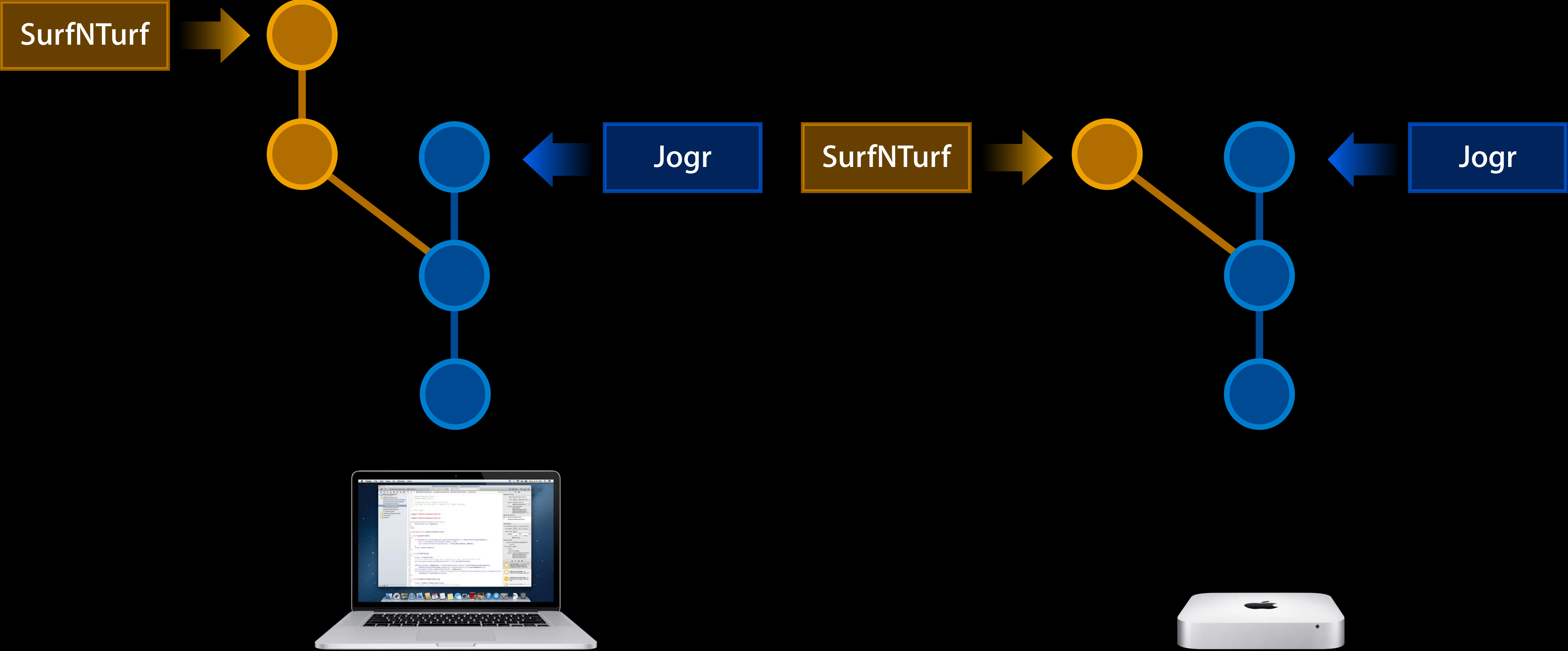
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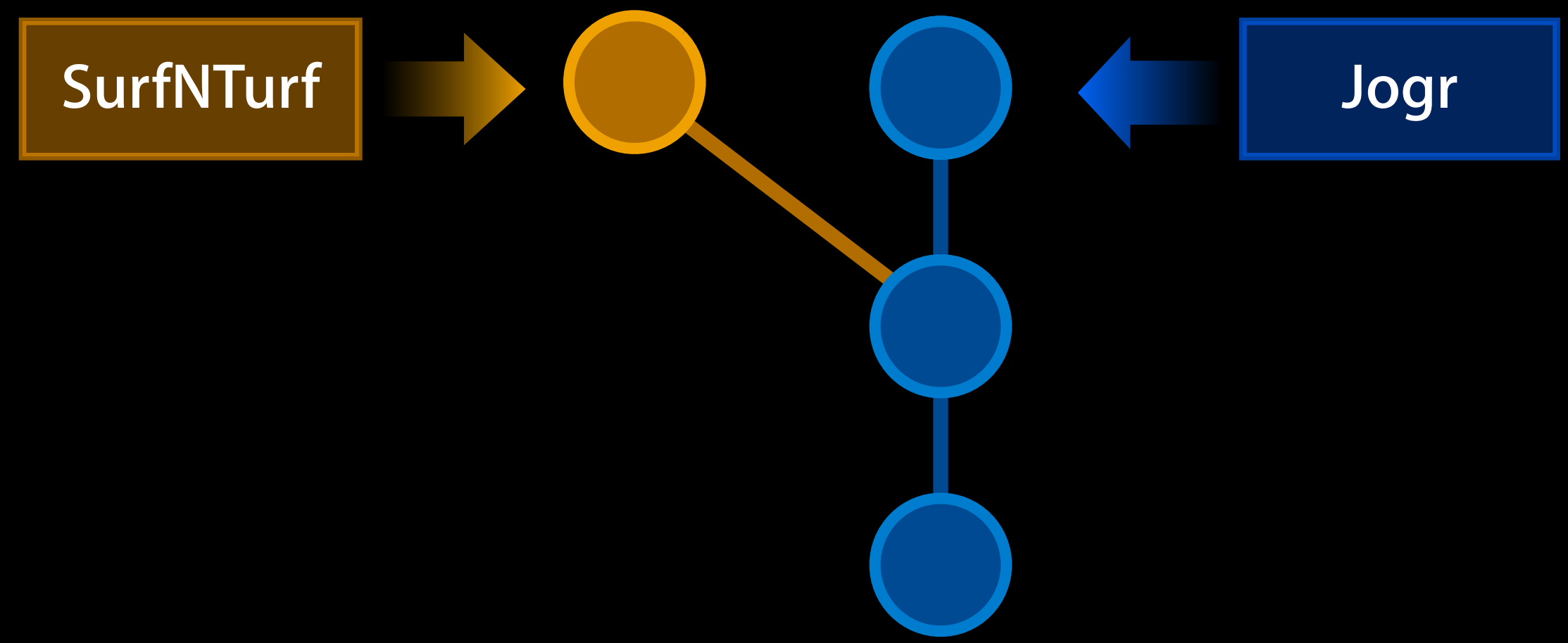
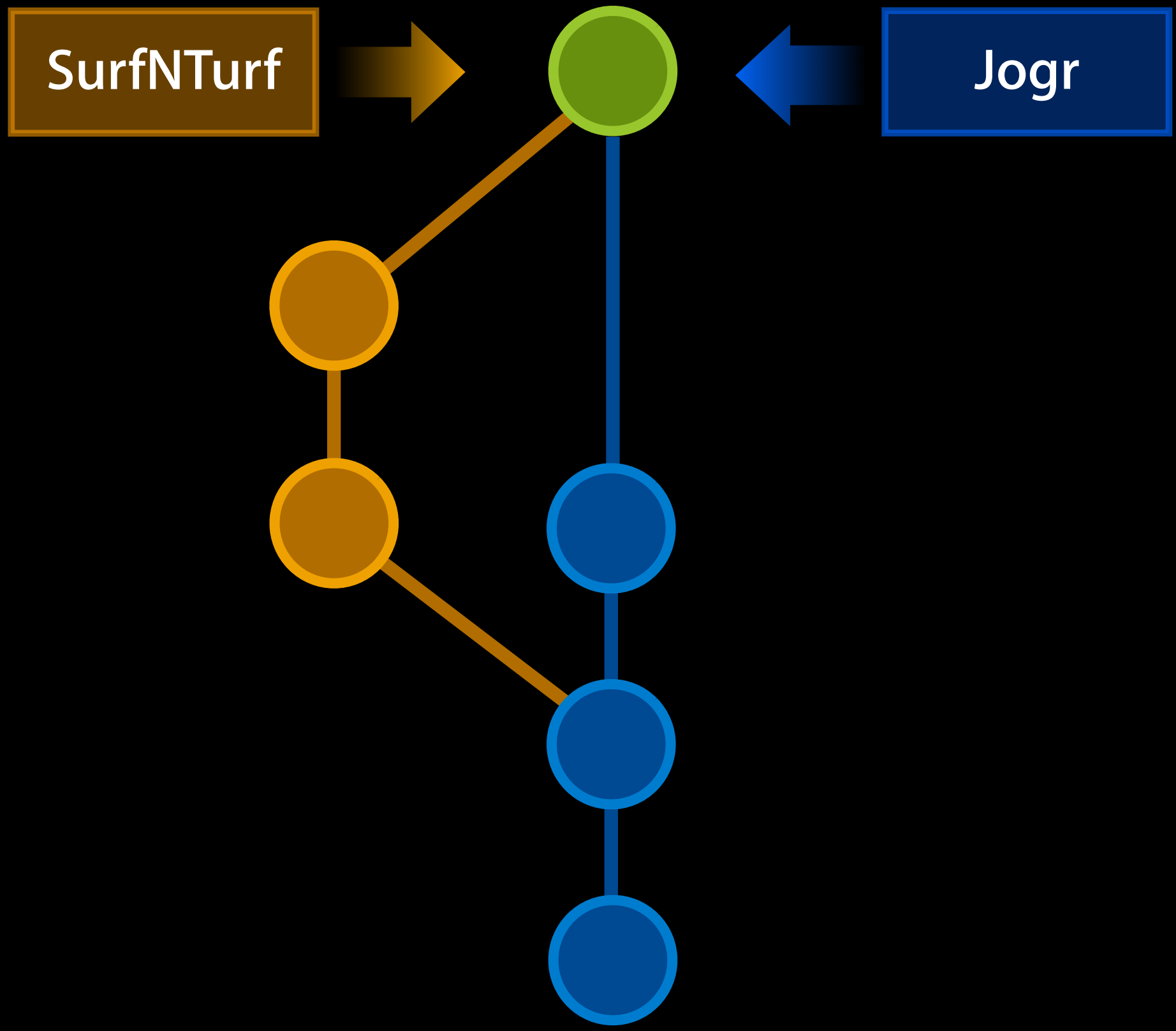
SurfNTurf

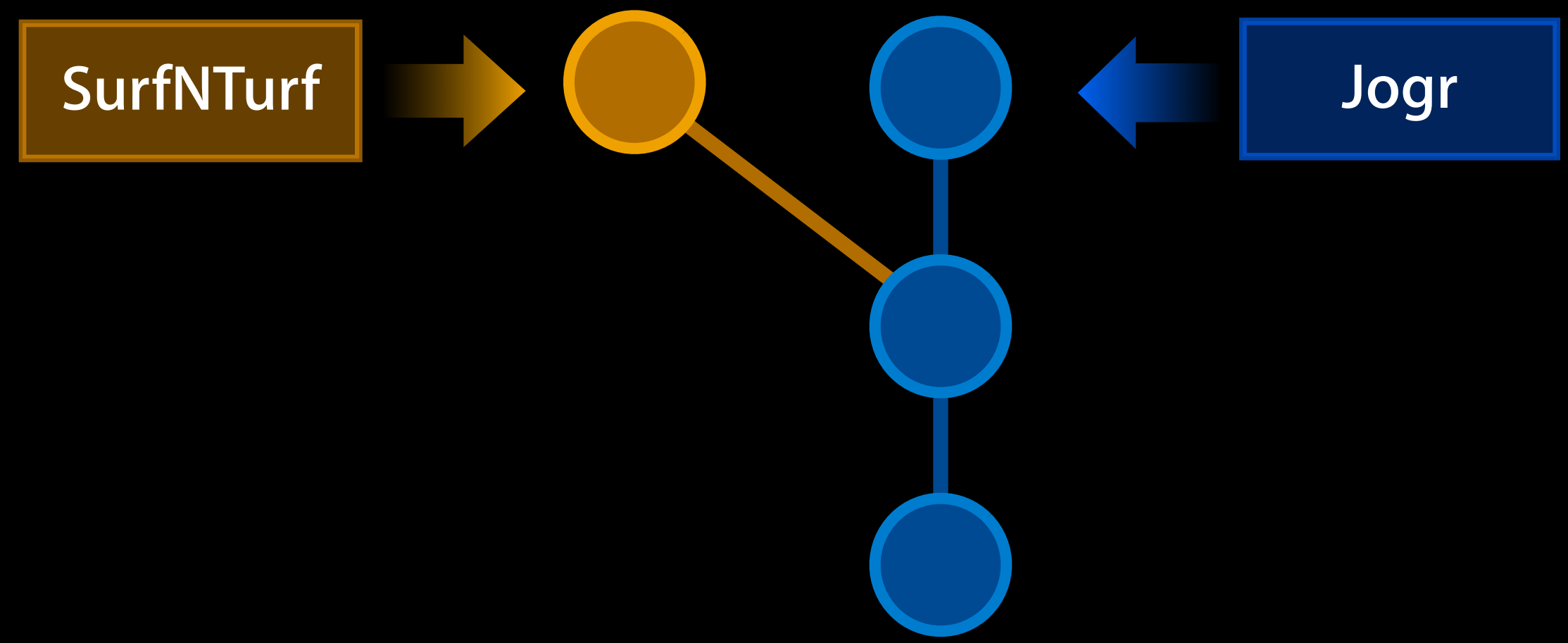
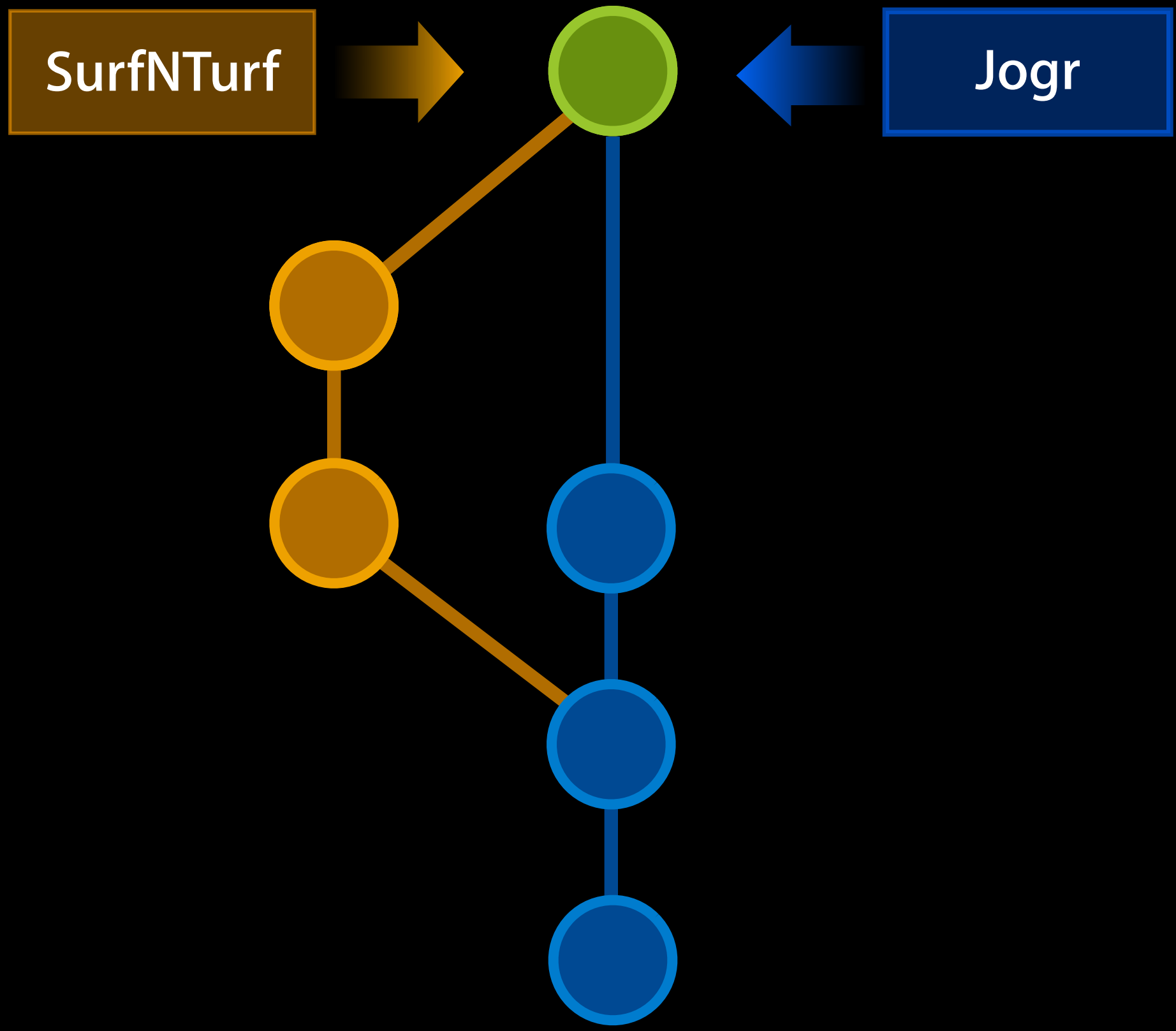


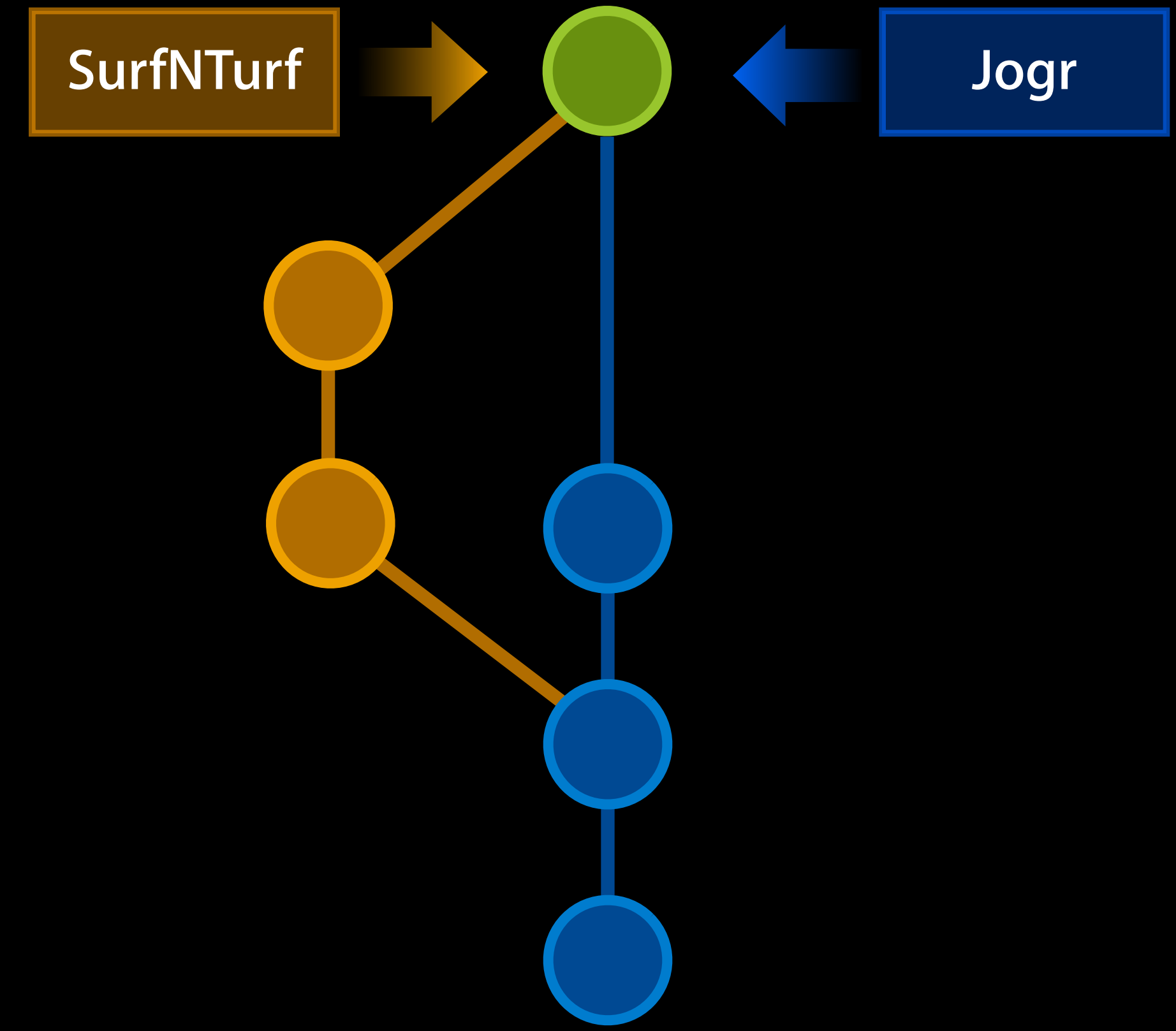
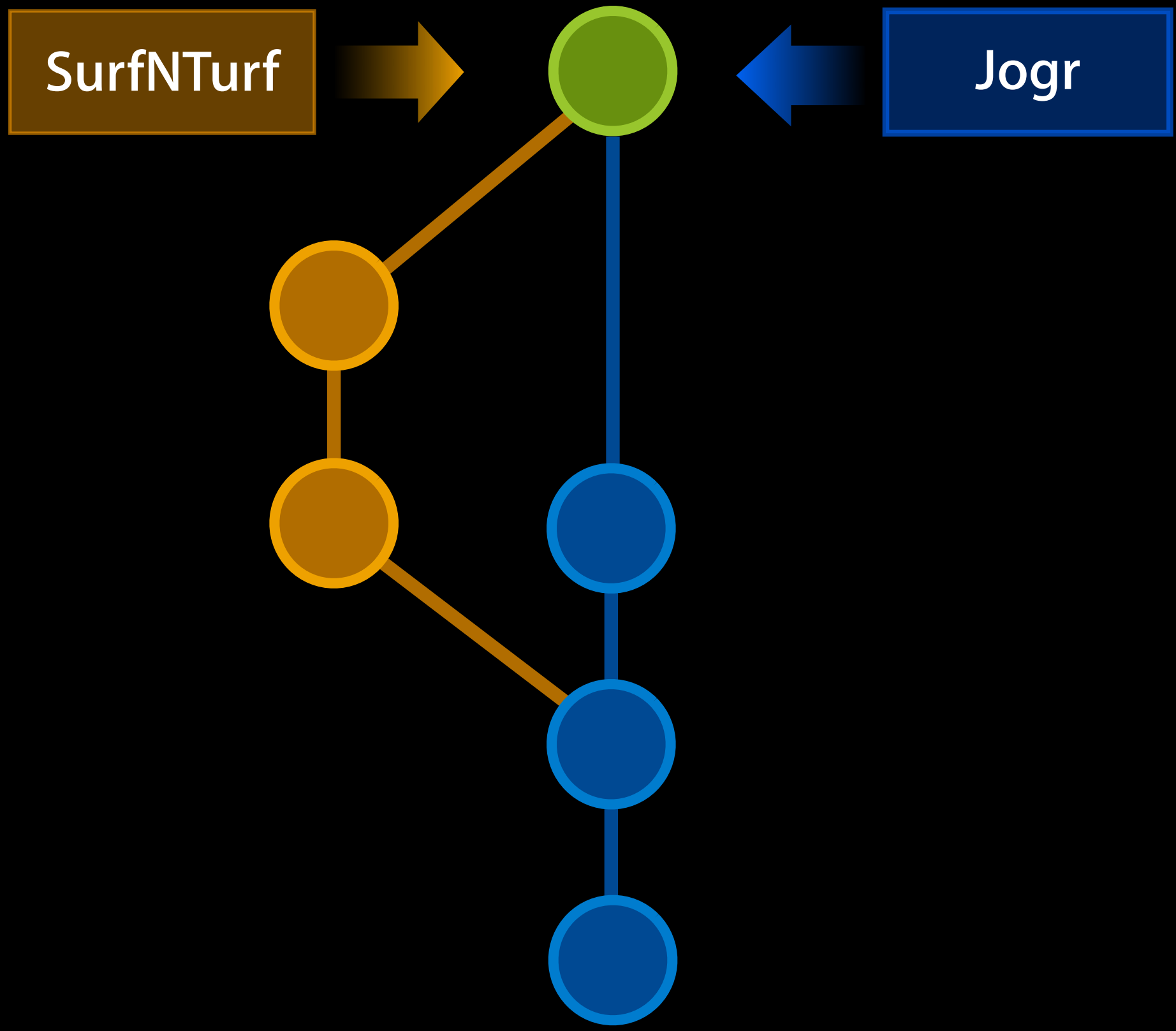
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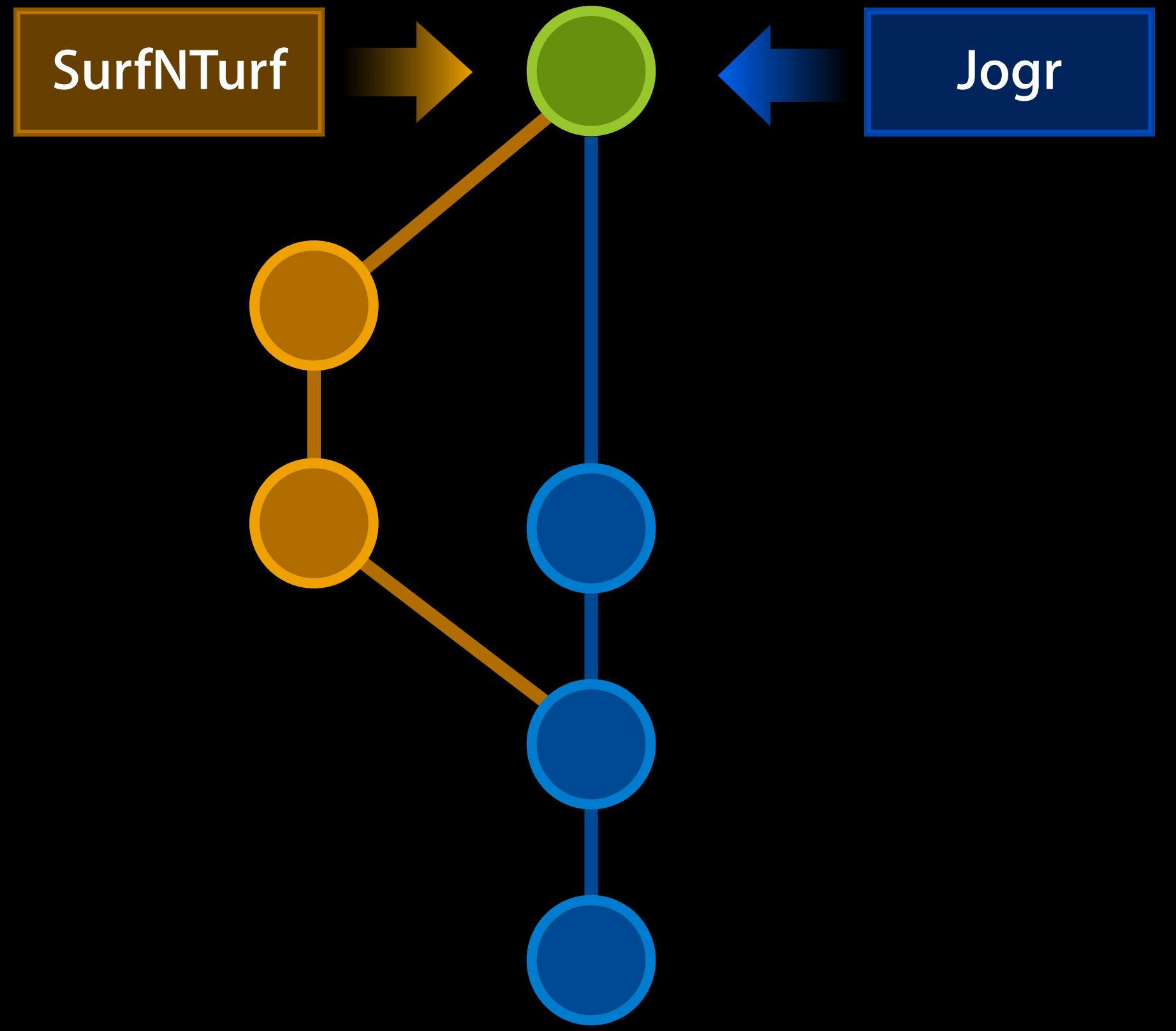
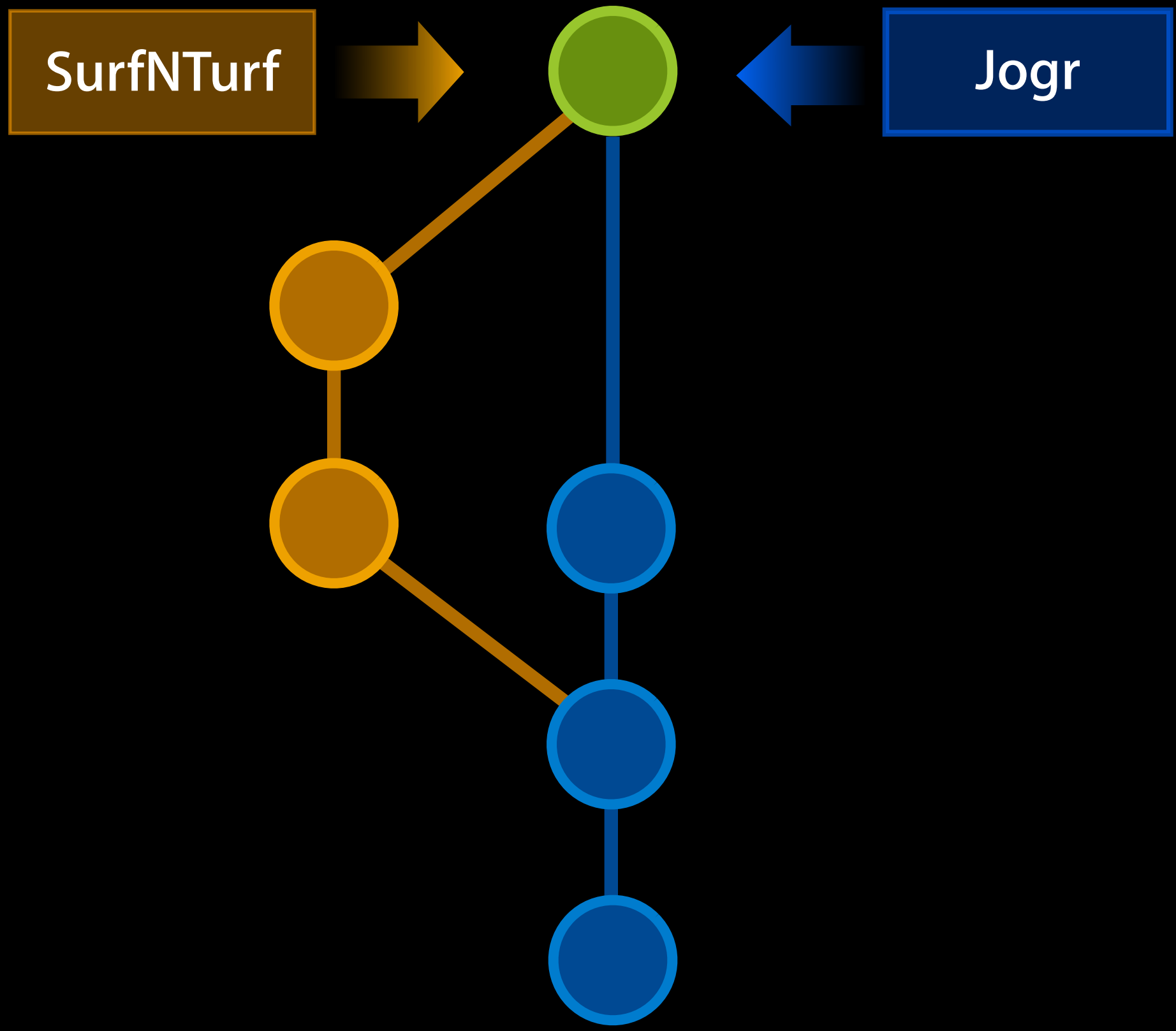


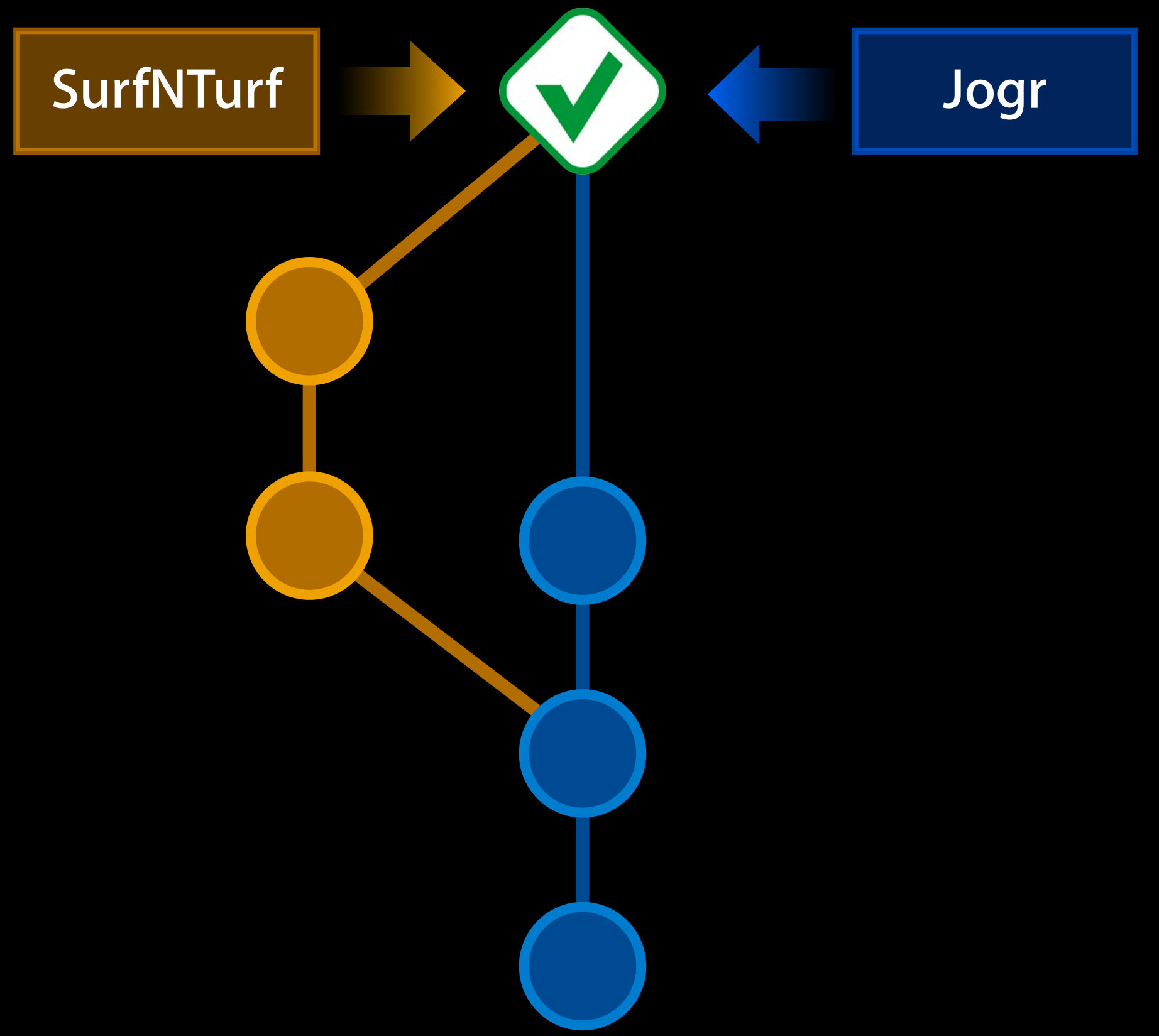
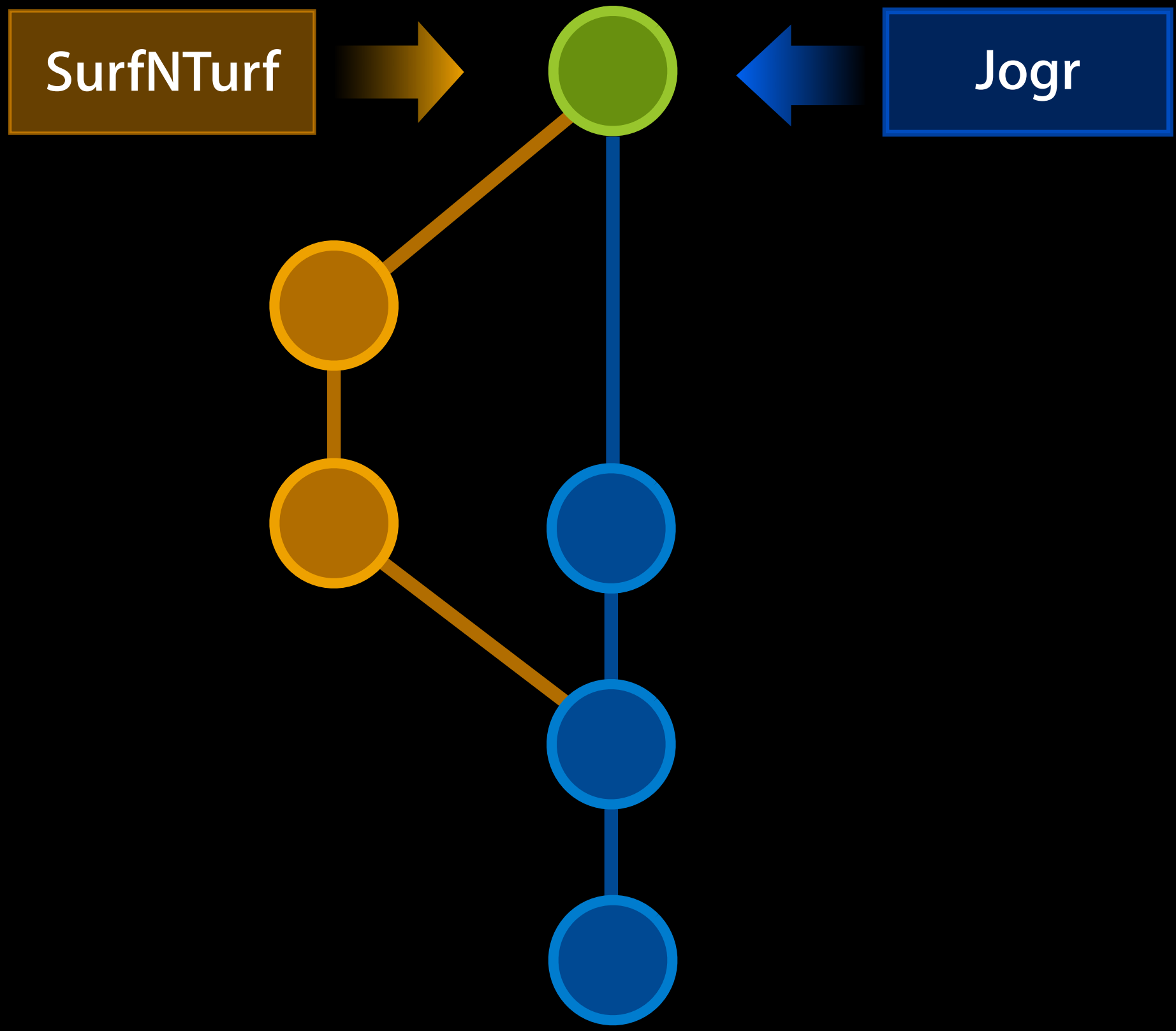








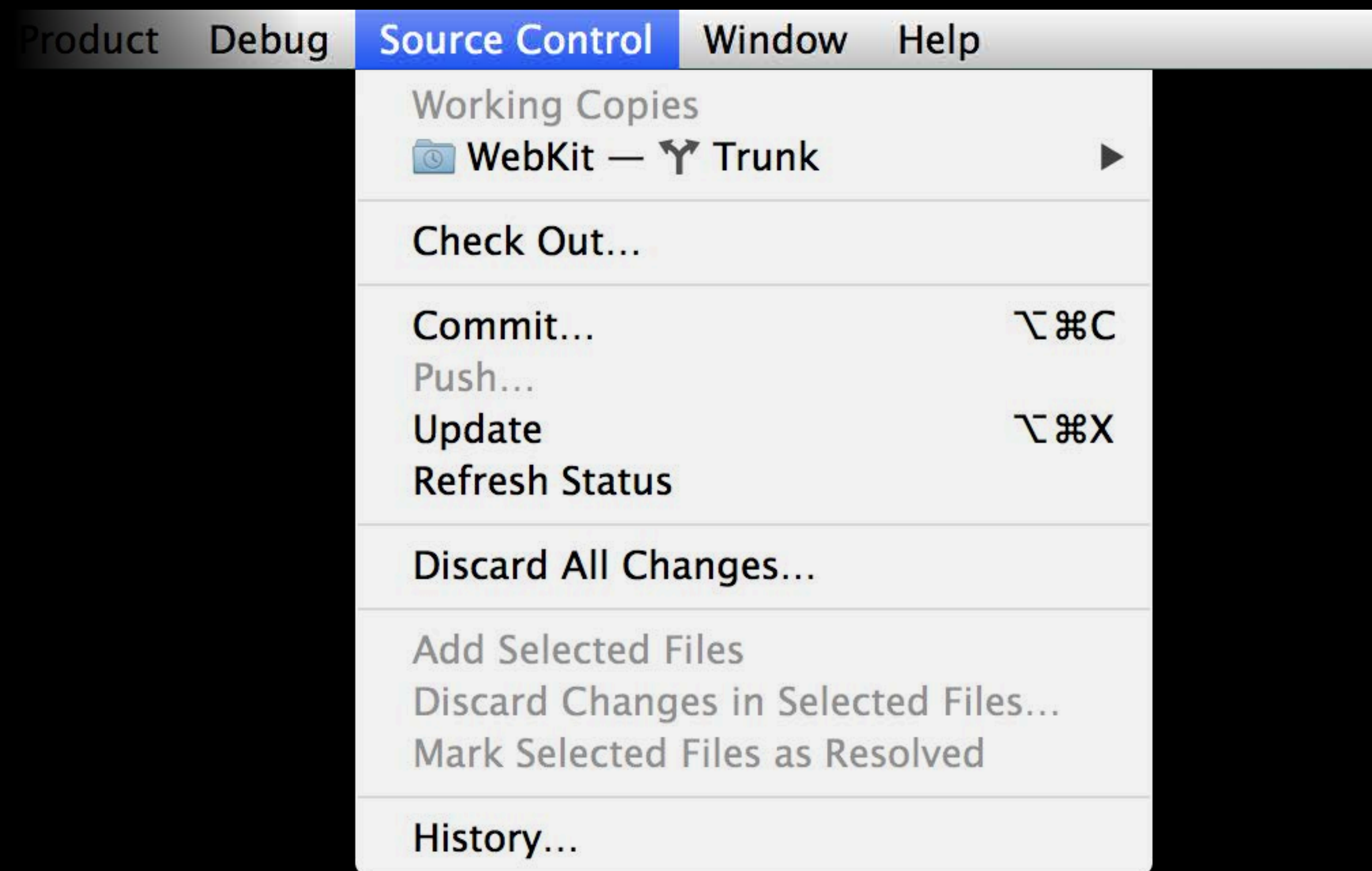




Summary

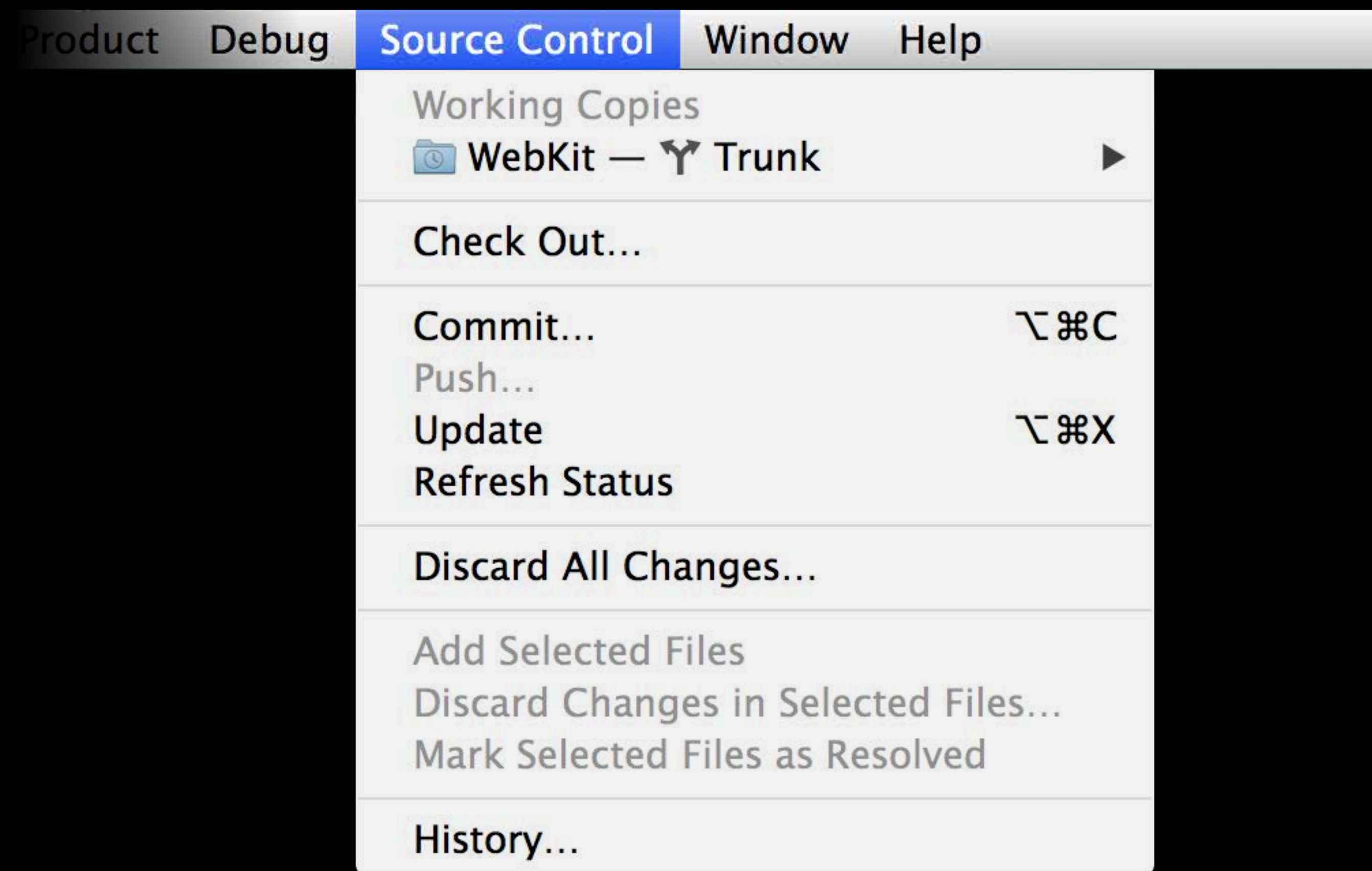
Summary

- Workflow-driven
Source Control interaction



Summary

- Workflow-driven Source Control interaction
 - Access most commands through the top-level menu



Summary

- Workflow-driven
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 - Access most commands
through the top-level menu
- OS X Server integration



Summary

- Workflow-driven Source Control interaction
 - Access most commands through the top-level menu
- OS X Server integration
- Automatic management of multiple working copies



More Information

Dave DeLong

App Frameworks and Developer Tools Evangelist
delong@apple.com

Apple Developer Forums

<http://devforums.apple.com>

Labs

Xcode Lab

Developer Tools Lab
Ongoing



 WWDC2013