SmartGit

SmartGit 23.1

Simplify your workflows with the Standard window

syntevo 25.06.2024, Daniel Siegl

Housekeeping

- Recorded
- Use the Q&A Module to ask questions and share comments
- We will send the Slides and a link to the recording in the next days.

Daniel Siegl - Syntevo

Continuous Improvement

We are happy to hear your feedback!

- https://smartgit.userecho.com/
- smartgit@syntevo.com

Problem Statement

- Complex Git Commands
- Inefficient Workflows – hard to document
- "clean history" goals
- Conflict Resolution Challenges
- Cross-Platform Inconsistencies

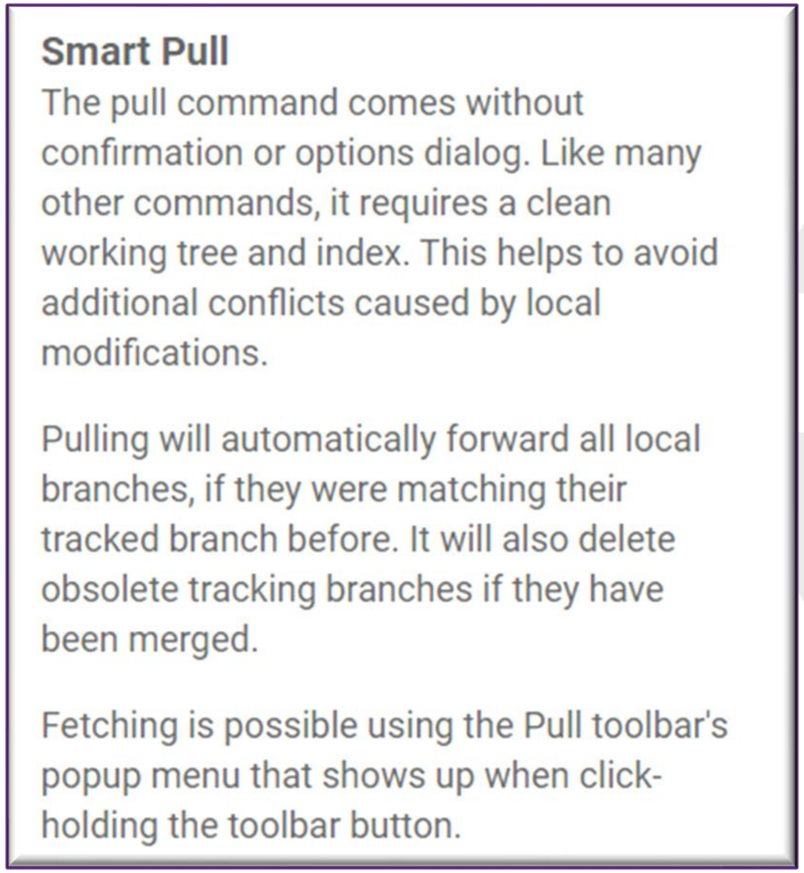
Rationale behind Standard Window (1/2)

- Why Standard Window?
  - Simplification for users
  - Enable standardized processes for organizations
  - Combination of log and working tree – was frequently requested

  https://www.syntevo.com/smartgit/standard-window/

Rationale behind Standard Window (2/2)

- Commercial only
- Feature Branch based workflows
- Tabs for fast navigation
- E.g. Smart Pull
- Easy Setup/Configuration



Smart Pull

The pull command comes without confirmation or options dialog. Like many other commands, it requires a clean working tree and index. This helps to avoid additional conflicts caused by local modifications.

Pulling will automatically forward all local branches, if they were matching their tracked branch before. It will also delete obsolete tracking branches if they have been merged.

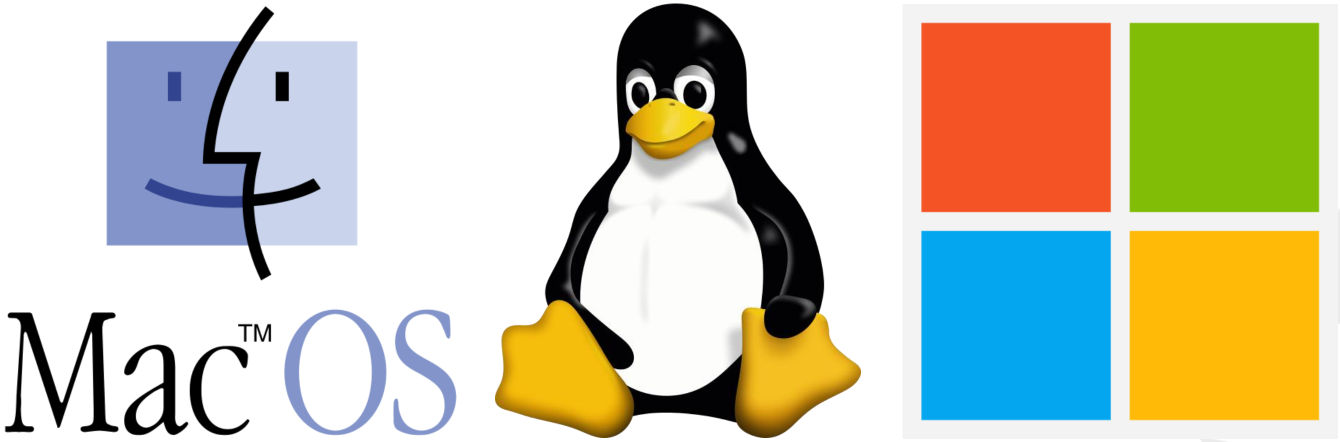
Fetching is possible using the Pull toolbar's popup menu that shows up when click-holding the toolbar button.

SmartGit

We have deliberately restricted freedoms to avoid complex Git states.

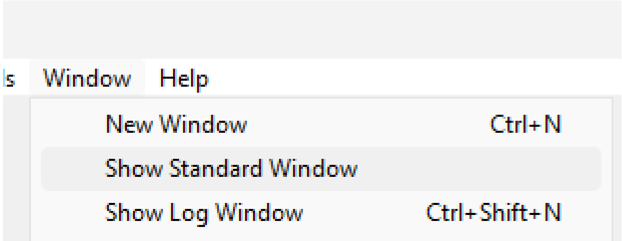
Multiplatform

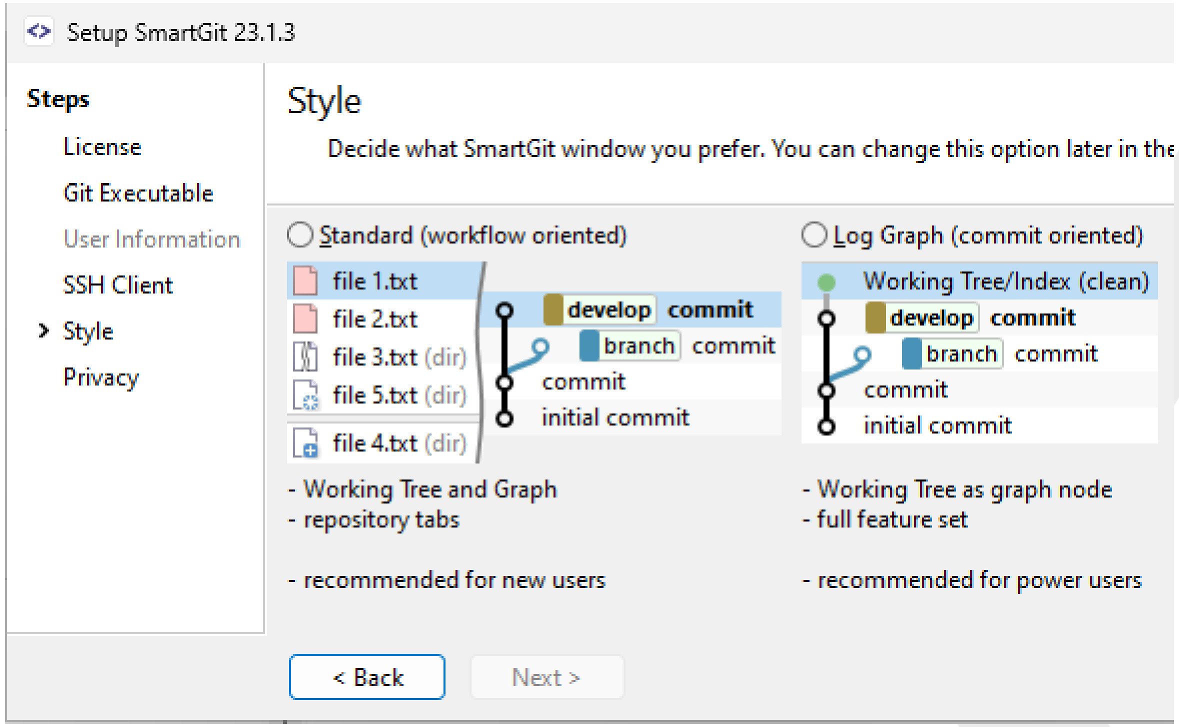
- Mac
- Linux
- Windows
- Same experience across platforms!



How to access

- Start Up Wizard
- Preferences
- Menu





Style

Decide what SmartGit window you prefer. You can change this option later in the

○ Standard (workflow oriented)

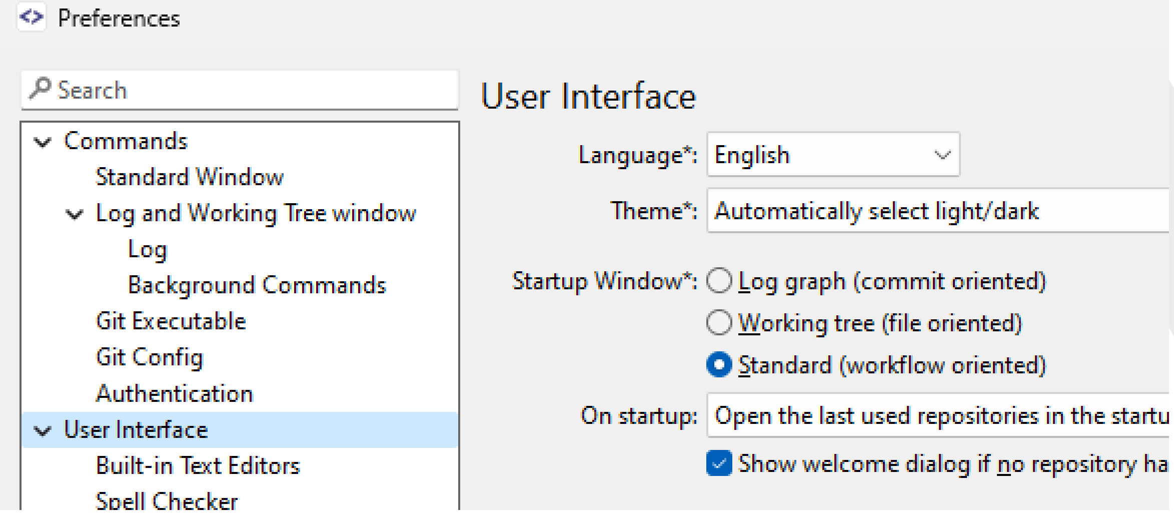
- Working Tree and Graph
- repository tabs

- recommended for new users

○ Log Graph (commit oriented)

- Working Tree as graph node
- full feature set

- recommended for power users



User Interface

Language*: English

Theme*: Automatically select light/dark

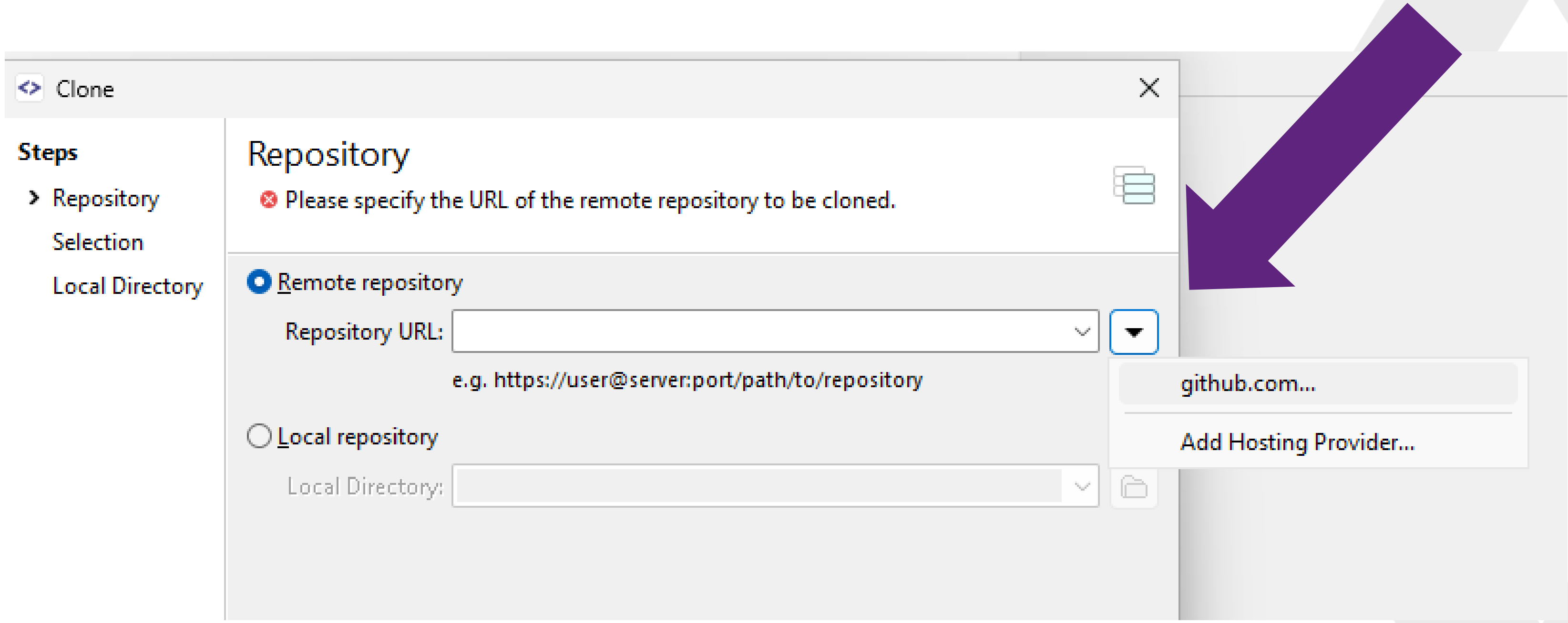
Startup Window*: ○ Log graph (commit oriented)
○ Working tree (file oriented)
● Standard (workflow oriented)

On startup: Open the last used repositories in the startu

☑ Show welcome dialog if no repository ha

Clone with Hosting Provider Integration

- Token based authentication
  - GitHub
  - GitLab
  - Azure DevOps
  - Bitbucket
- Preferences



Repository

Please specify the URL of the remote repository to be cloned.

● Remote repository

Repository URL:

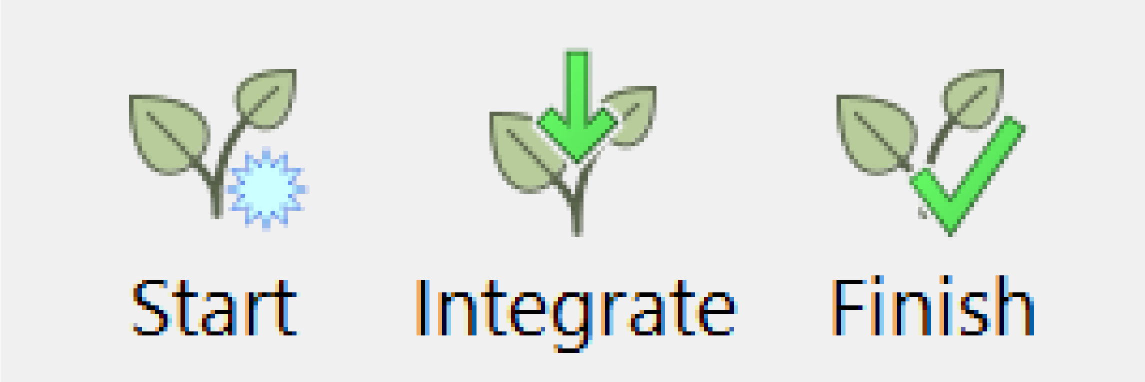
e.g. https://user@server:port/path/to/repository

○ Local repository

Local Directory:

Enhanced Workflow Support

- Start
- Integrate
- Finish

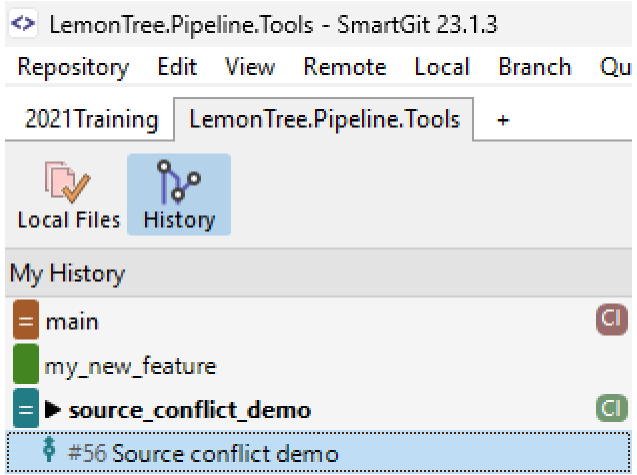


➔ Similar to GitFlow Wizard but easier to set up and use

e.g. Integrate will automatically pull main/develop branch before starting rebase.

GitHub features

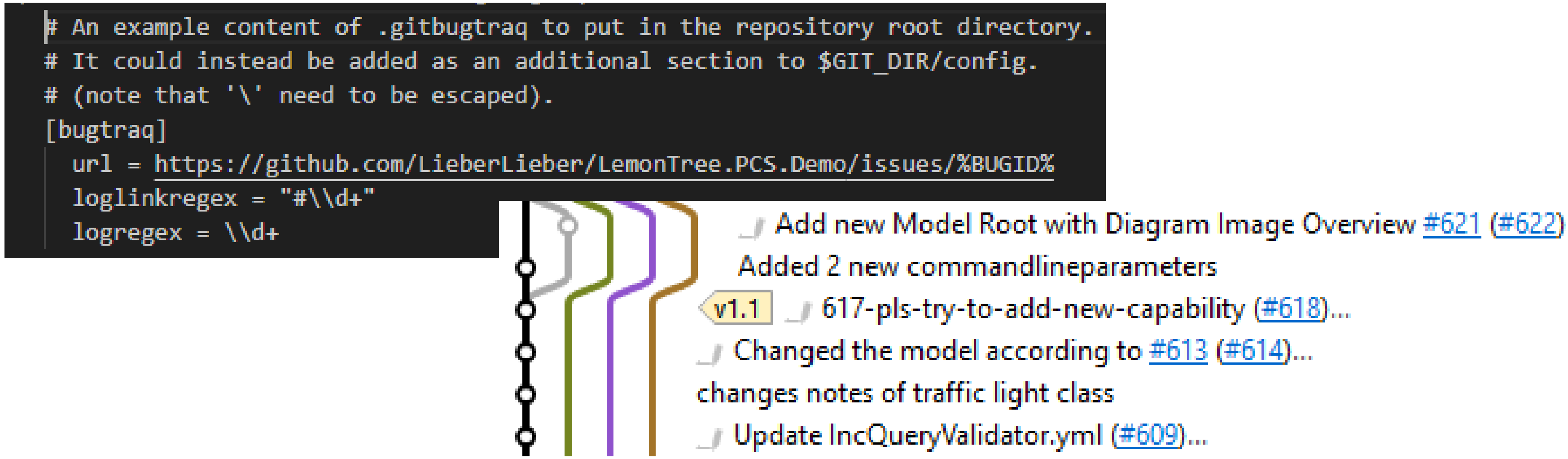
- CI/CD
- PR Integration



LemonTree.Pipeline.Tools - SmartGit 23.1.3

.gitbugtraq

- Universal Issue Tracker Integration
- Definition and samples: https://github.com/mstrap/bugtraq

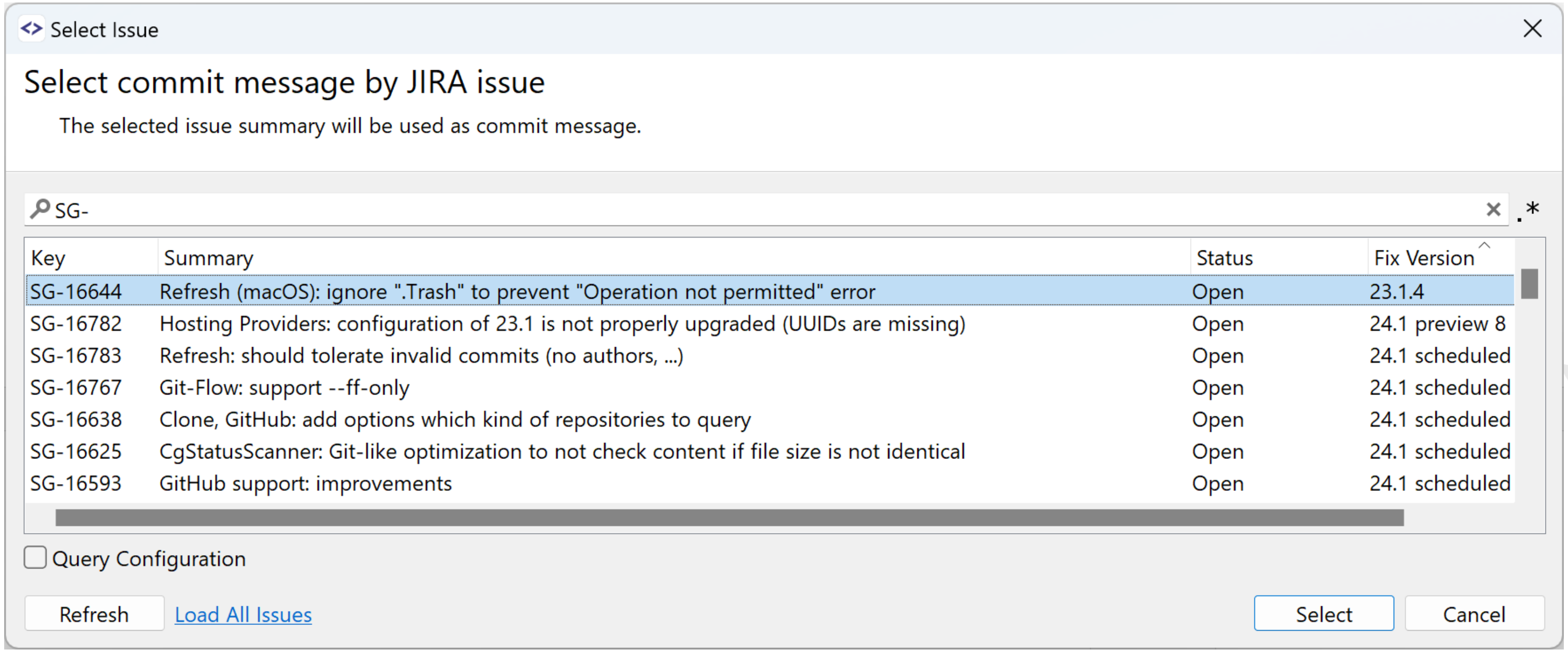


```
# An example content of .gitbugtraq to put in the repository root directory.
# It could instead be added as an additional section to $GIT_DIR/config.
# (note that '\' need to be escaped).
[bugtraq]
  url = https://github.com/LieberLieber/LemonTree.PCS.Demo/issues/%BUGID%
  loglinkregex = "#\\d+"
  logregex = \\d+
```

```
Add new Model Root with Diagram Image Overview #621 (#622)
Added 2 new commandlineparameters
v1.1  617-pls-try-to-add-new-capability (#618)...
Changed the model according to #613 (#614)...
changes notes of traffic light class
Update IncQueryValidator.yml (#609)...
```

- Simply create a .gitbugtraq file for your project

Jira Integration



Select commit message by JIRA issue

The selected issue summary will be used as commit message.

SG-

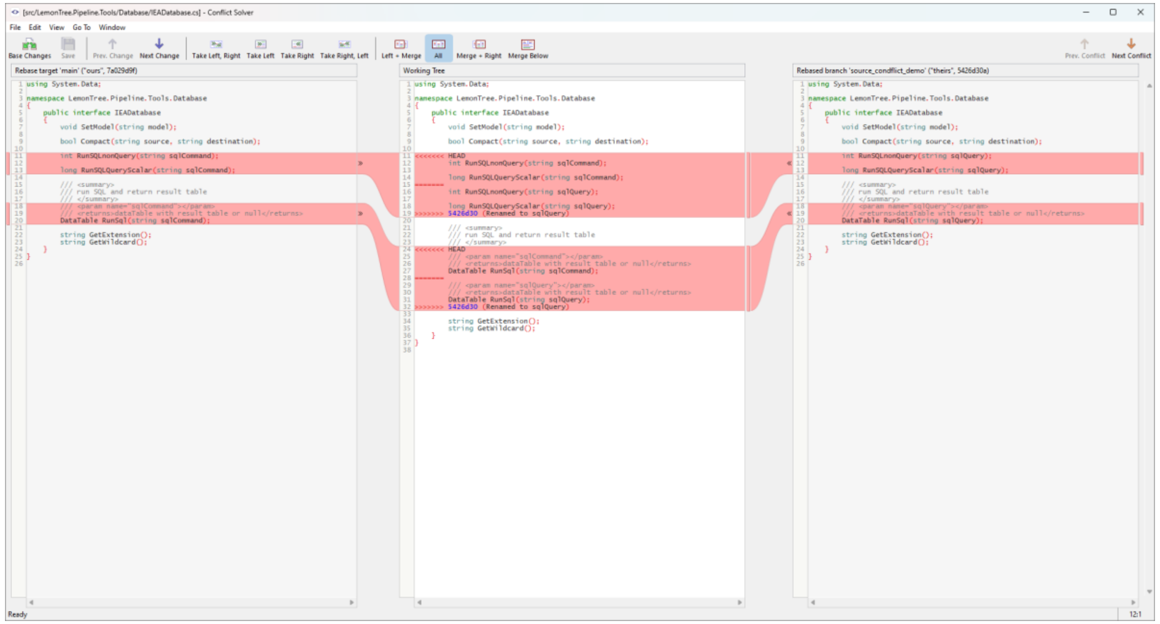
Key	Summary	Status	Fix Version
SG-16644	Refresh (macOS): ignore ".Trash" to prevent "Operation not permitted" error	Open	23.1.4
SG-16782	Hosting Providers: configuration of 23.1 is not properly upgraded (UUIDs are missing)	Open	24.1 preview 8
SG-16783	Refresh: should tolerate invalid commits (no authors, ...)	Open	24.1 scheduled
SG-16767	Git-Flow: support --ff-only	Open	24.1 scheduled
SG-16638	Clone, GitHub: add options which kind of repositories to query	Open	24.1 scheduled
SG-16625	CgStatusScanner: Git-like optimization to not check content if file size is not identical	Open	24.1 scheduled
SG-16593	GitHub support: improvements	Open	24.1 scheduled

☐ Query Configuration

https://docs.syntevo.com/SmartGit/Latest/JIRA.html

Merge view options

- Side by Side vs 3-Way view (Conflict Solver)



Rebase target 'main' ("ours", 7a029d9f)

```
using System.Data;

namespace LemonTree.Pipeline.Tools.Database
{
    public interface IEADatabase
    {
        void SetModel(string model);

        bool Compact(string source, string destination);

        int RunSQLnonQuery(string sqlCommand);

        long RunSQLQueryScalar(string sqlCommand);

        /// <summary>
        /// run SQL and return result table
        /// </summary>
        /// <param name="sqlCommand"></param>
        /// <returns>dataTable with result table or null</returns>
        DataTable RunSql(string sqlCommand);

        string GetExtension();
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    }
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Working Tree

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=======
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        long RunSQLQueryScalar(string sqlQuery);
>>>>>>> 5426d30 (Renamed to sqlQuery)

        /// <summary>
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Rebased branch 'source_condflict_demo' ("theirs", 5426d30a)

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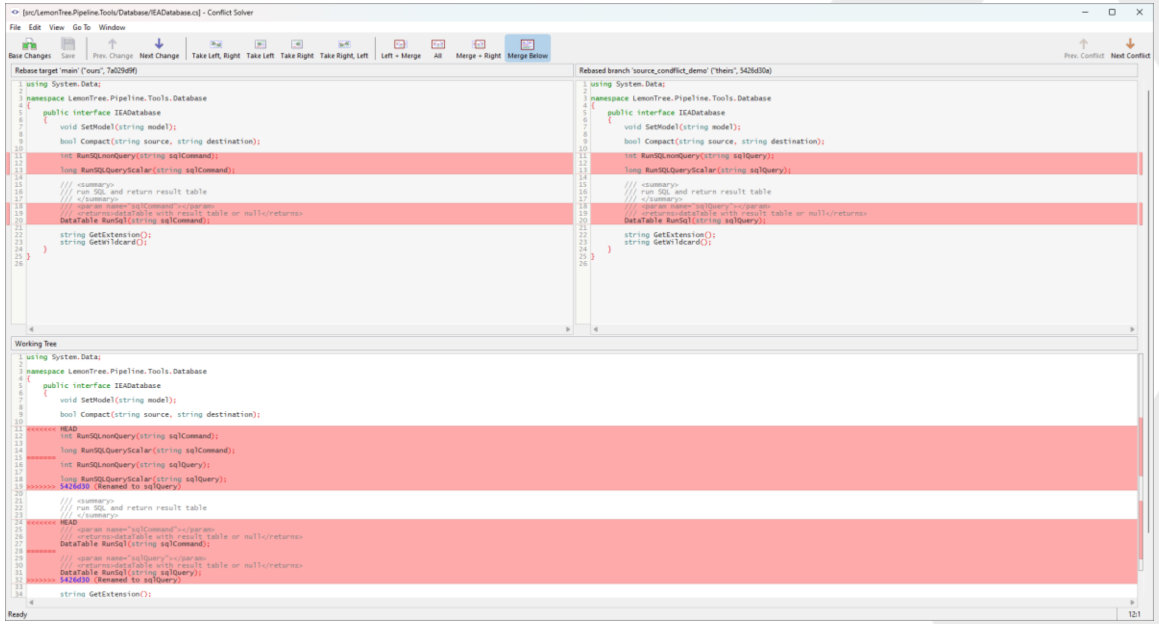

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Working Tree

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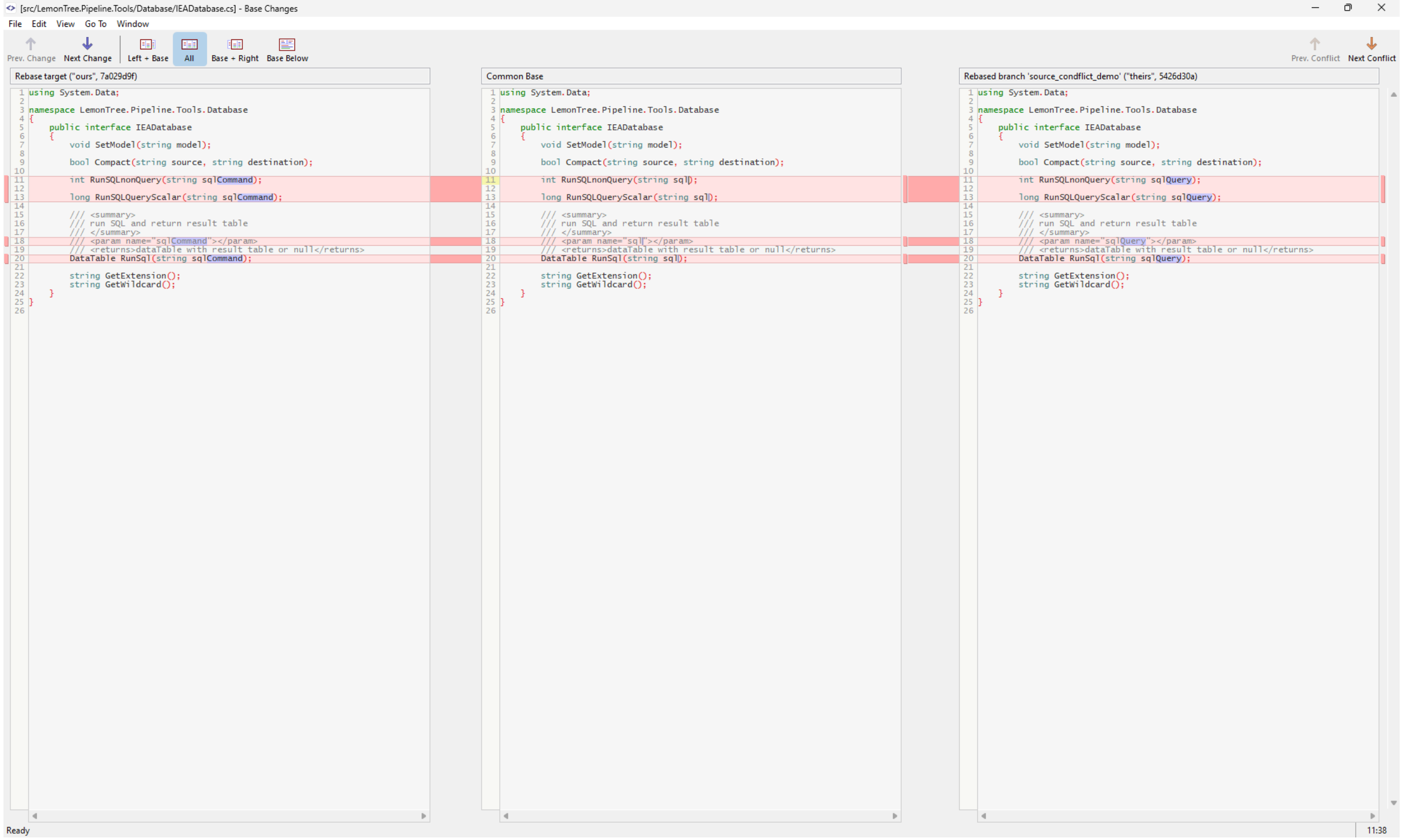
Base Changes



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Common Base

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```
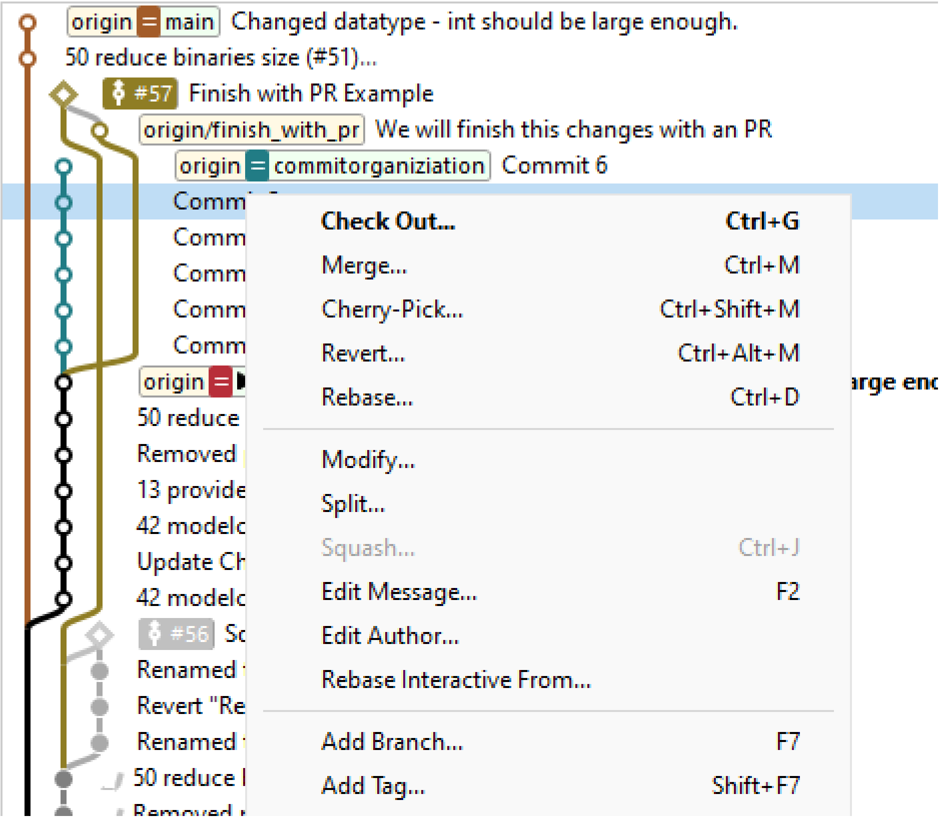

Clean History – Commit Organization

- Start early
- Amend
- Edit commit message
- Reorder
- Edit commit
- Split commit



origin = main Changed datatype - int should be large enough.

50 reduce binaries size (#51)...

#57 Finish with PR Example

origin/finish_with_pr We will finish this changes with an PR

origin = commitorganiziation Commit 6

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50 reduce

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42 modelc

#56 Sc

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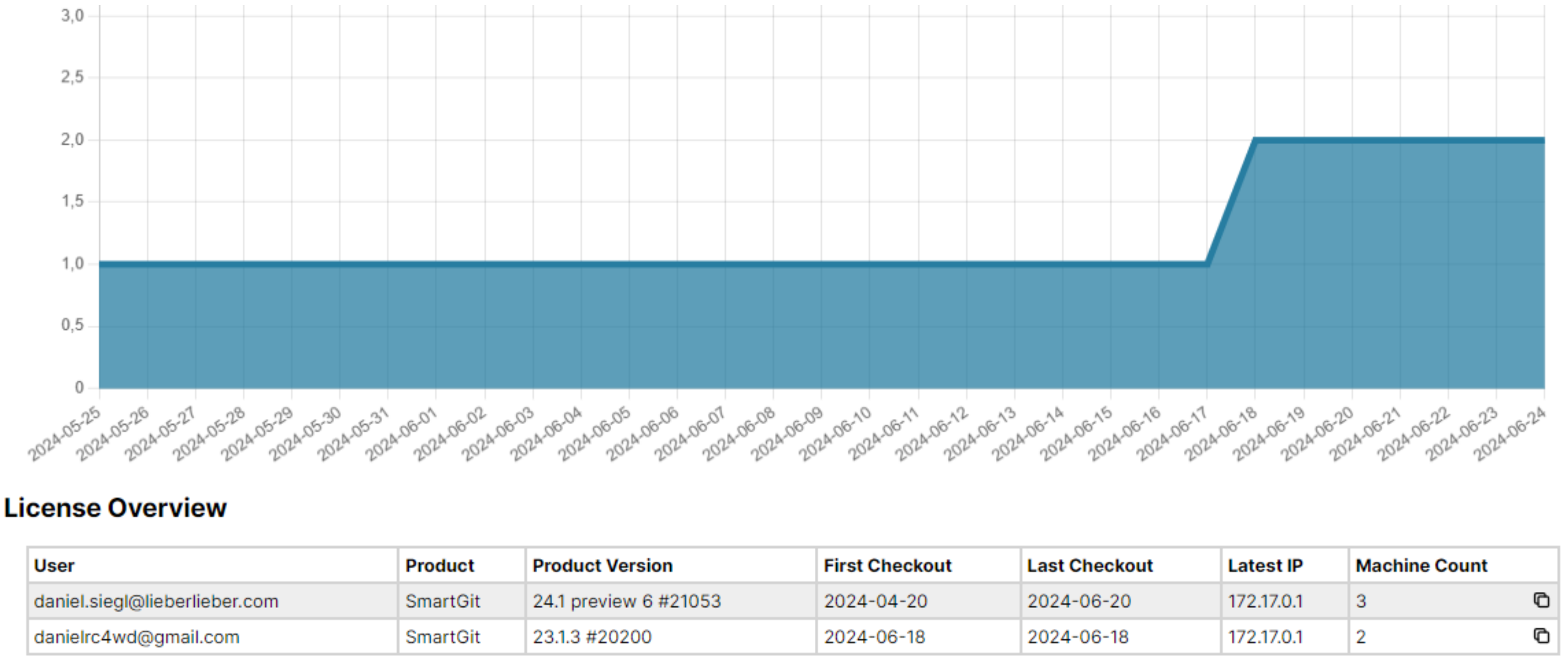
Renamed

50 reduce l

Removed

On premise license server

- For our larger customers



License Overview

User	Product	Product Version	First Checkout	Last Checkout	Latest IP	Machine Count
daniel.siegl@lieberlieber.com	SmartGit	24.1 preview 6 #21053	2024-04-20	2024-06-20	172.17.0.1	3
danielrc4wd@gmail.com	SmartGit	23.1.3 #20200	2024-06-18	2024-06-18	172.17.0.1	2

Demo Process?

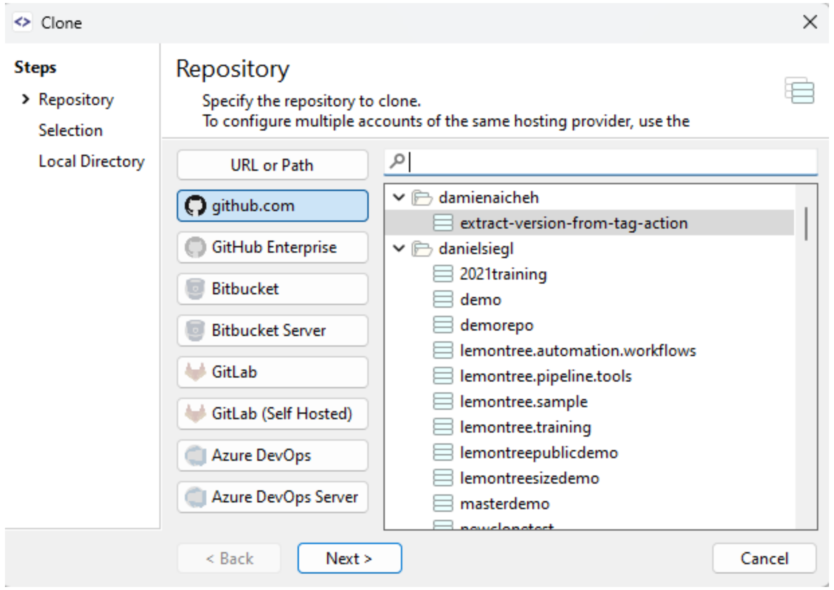
- Setup SmartGit
- Handling Branches
- Merging
- Commit Organization

SmartGit

DEMO

Outlook

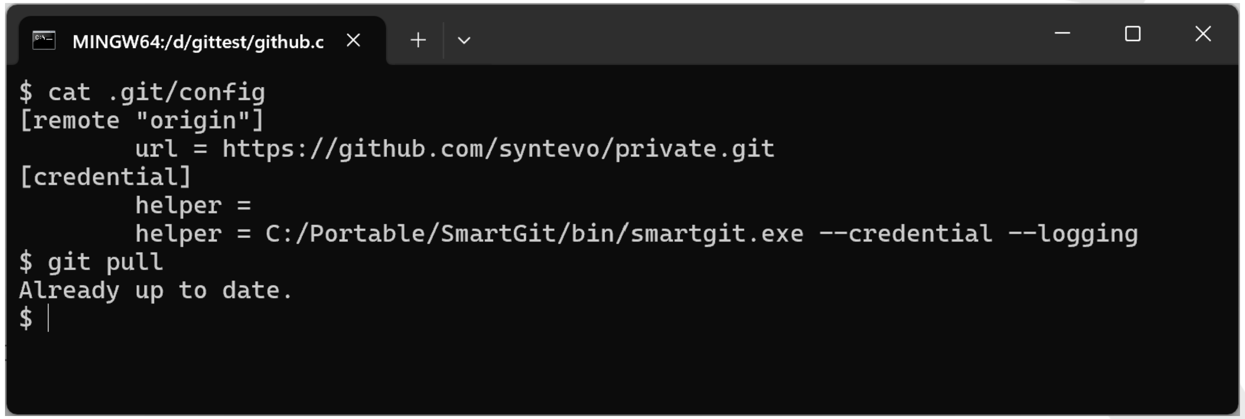
- Full release of 24.1 later in 2024
- Today: https://www.syntevo.com/smartgit/preview/



Repository

Specify the repository to clone.
To configure multiple accounts of the same hosting provider, use the

damienaicheh
extract-version-from-tag-action
danielsiegl
2021training
demo
demorepo
lemontree.automation.workflows
lemontree.pipeline.tools
lemontree.sample
lemontree.training
lemontreepublicdemo
lemontreesizedemo
masterdemo



```
$ cat .git/config
[remote "origin"]
        url = https://github.com/syntevo/private.git
[credential]
        helper =
        helper = C:/Portable/SmartGit/bin/smartgit.exe --credential --logging
$ git pull
Already up to date.
$
```

Summary

- SmartGit Standard Window
  - Reduces complexity
  - Makes it easy to work with mixed experienced Team
  - Loads of tools for your clean history goals
- Install SmartGit 23.1 or 24.1 Preview
- Start working with the Standard Window

SmartGit

Thank you!
Let’s keep in touch!

https://smartgit.userecho.com/

smartgit@syntevo.com