

# Data Sheet CODESYS Git

CODESYS Git enables the integrated use of the distributed version control system Git<sup>™</sup> for all application objects.

CODESYS Git is part of the tool bundle CODESYS Professional Developer Edition.

# **Product description**

CODESYS Git seamlessly integrates the use of the distributed version control system Git<sup>™</sup> into the CODESYS development environment. The functionality of Git is directly available in CODESYS. A local Git installation is not required.

Git<sup>™</sup> is a software for distributed version control. Version control is a class of systems responsible for managing changes to documents, programs, and other information stored in files. It involves logging changes to one or a series of files over time so that a specific version can be reverted to later. In software development, version control systems are also used where a team of developers work together on the managed files.

The main tasks of a version control system are:

- Logging of changes: It can be traced at any time who made which changes and when.
- Restoring old statuses of individual files: Accidental changes can be undone at any time.
- Archiving the individual statuses of a project: All versions can be accessed at any time.
- · Coordination of shared access to files by several developers
- Simultaneous development of several development branches of a project

Distributed version control does not use a central repository. Each developer working on the managed project has their own repository and can synchronize it with any other repository. Version history is also distributed. Changes can be tracked locally without having to connect to a server.

Further information on Git can be found at https://git-scm.com/.

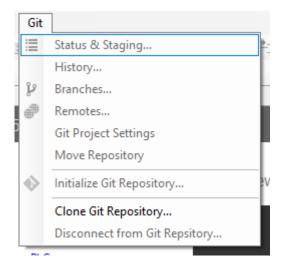
The project storage used by CODESYS is not suitable for use in a version control system. Therefore a special project storage was developed for CODESYS Git. The use of a text format (JSON) ensures the readability of the content of the stored files. In addition, there is a clear allocation between a CODESYS object within the CODESYS project and the storage location of the object's data within the CODESYS Git project storage.

Since CODESYS Git optimally supports ensuring the consistency of CODESYS projects as well as the correct handling of dependencies between CODESYS objects, editing of the stored files outside CODESYS Git should be avoided. This applies in particular to typical Git workflows such as branching and merging.

CODESYS Git supports the use of Git hosting services such as GitHub and GitLab for storing Git repositories. Due to the special CODESYS Git project storage, editing the data using the tools offered by some Git hosting services is only possible to a very limited extent.

The functions of Git are available via the Git menu and in the respective views.

## Menü Git



To manage a project in Git, it must be imported into Git or cloned from an existing Git repository.

Dialog for initialization of the Git repository

🚸 Initialize Git Repository	×
This will initialize a Git repository for the project. The Git reposidedicated location. Please specify a path for it.	sitory must be saved in a
	•
	OK Cancel

## Dialog for cloning a Git repository

⊕ Git Clone	×
Source URL	•
Destination	
Git repository location	• • •
Project file	•••
Project file type   Project  Library	,
	OK Cancel

As soon as the project is running under Git version control, the views relevant to working with Git are available.

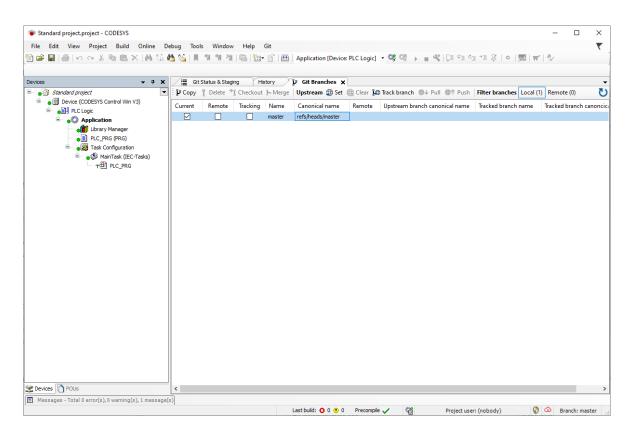
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## History view

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	Committer: Armin Kurz <a.kurz@codesys.com> 17.06.2021 12:1</a.kurz@codesys.com>	$\vee$
	Path Object name Object type Kind of change	
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	Project\device\plc_logic PlcLogic PlcLogic Object Added	
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Branch view



# **General information**

## Supplier:

CODESYS GmbH Memminger Strasse 151 87439 Kempten Germany

## Support:

This product includes a free addition to an otherwise paid support entitlement of one hour of support.

The redemption must be made within 1 year from the date of purchase. After this time, the support entitlement expires.

## https://support.codesys.com

Item:

**CODESYS** Git

Item number:

2101000015

Sales/Source of supply:

# CODESYS Store https://store.codesys.com

## Included in delivery:

- Package consisting of the CODESYS Development System including license agreement and online help
- License key

# System requirements and restrictions

Programming System	CODESYS Development System V3.5.19.30 or higher
Runtime System	-
Supported Platforms/ Devices	-
Additional Requirements	Subscription of the CODESYS Professional Developer Edition
	In order to enable collaboration in Git, it is recommended to use a Git server.
	For information on how to work with Git or how to install the required software, please refer to the IT specialist in your company.

Restrictions	None
Licensing	see CODESYS Professional Developer Edition
Required accessories	Optional: CODESYS Key

## Detailed compatibility information

Version	Programming System Version
1.7.0.0	3.5.19.30 - most recent release
1.6.0.0	3.5.19.30 - most recent release
1.5.0.0	3.5.19.30 - most recent release
1.4.0.0	3.5.19.30 - most recent release
1.3.0.0	3.5.19.30 - most recent release
1.2.1.0	3.5.18.20 - 3.5.19.20
1.1.0.0	3.5.17.0 - 3.5.19.20
1.0.0.0	3.5.17.0 - 3.5.19.20

Note: Technical specifications are subject to change. Errors and omissions excepted. The content of the current online version of this document applies.

Creation date: 2024-12-20