Table of contents

Feature 886720: Support for Node-RED Projects

Feature 886720: Support for Node-RED Projects

Description

This version supports Node-RED Projects.

Benefit from version control of your flows: History, Branches, Remotes, Clone, Pull, Push, ...

Node-RED Projects is a new way to manage your flow files to create a deployable Node-RED application. They are supported by a Git repository, which means that all files are fully version controlled and allow developers to use familiar workflows to collaborate with others.

Node-RED Projects is disabled by default.

After Node-RED Projects has been enabled, there is a new Projects menu item in the menu. You are then asked whether you want to use the feature when starting the Node-RED editor. Select “Not now” to work conventionally, but you can use Node-RED project functionality from the menu at any time.

Enabling/disabling Node-RED Projects

1. Create a new file named projects_enabled in the root directory of the Node-RED App data configuration with the content true or false.
2. Subsequently, restart the Node-RED app under: Settings->Apps->Node-RED->Restart

File storage

Projects are stored in the projects folder in the Node-RED app data configuration.

HTTPS Remotes

For connections to GitHub, a previously generated personal access token (profile settings, developer settings, personal access token (classic)) has to be used instead of the password.

SSH remotes

As mentioned in the official Node-RED application manual in the chapter „Clone a project repository“:

- For SSH URLs from GitHub, they have to be changed from git@github.com:username/project to ssh://git@github.com/username/project.
- The known_hosts file is located in the Node-RED app data configuration in the /projects/.ssh folder and can be edited there when prompted and used to check the host key of your connected SSH remote.

Important safety information

The SSH host check is set to „accept-new“ which can pose a security risk for man-in-the-middle attacks (MITM).

Recommended safety measures

- Make sure that you always connect to a trusted SSH remote (e.g. github) and check the key of the connected SSH host (see file known_hosts).
- Check whether the risk for the application is acceptable. If not, please use HTTPS remotes.

SSH key

- Load existing SSH keys (PEM format) into the private area of the Node-RED Key Store or generate a new key (PEM format) under: ctrlX Login -> Settings -> Certificates & Keys -> Node-RED->Keys
- Open the Node-RED Editor and navigate to Git-config->SSH-Keys in the menu. When the dialog is opened for the first time, the existing keys in PEM format are copied to Node-RED Projects usable SSH keys and renamed (old keys are retained).
- Copy the public key to the clipboard and register it on the git control system used (e.g. github, bitbucket, etc.) under your account with access to the repository used as a known SSH key.
- Select this SSH key for your SSH remote connection (clone, pull, push, ...)
- Note: Copied SSH URLs from github have to be changed for the entry as SSH Remote from git@github... -> ssh://git@github...

Further information on Node-RED Projects

Official documentation: Projects : Node-RED (nodered.org)

Short introduction (Youtube Video): Introduction to Node-RED Projects