

CODESYS

AUTOMATION SERVER

The Industry 4.0 platform

Device management. Engineering. Data analysis.

CODESYS Feature Briefing | Spring 2024, March 20

Martin Decker, Product Manager

Recent developments

+

Future developments

=

Your benefit

Remote control: start, reset, stop applications

Requirement

- Remote change of the execution state of a PLC
- Display of applications on the PLC
- No need for the CODESYS Development System
- No need to log in to a PLC

Solution

- Control panel to start, stop and reset applications in defined ways directly from the browser

Benefit

- Application control by any device with a browser
- High time savings



List View

Applications

CODESYS Projects

Schedules

Licenses

Template

Tickets

Search

Manage Applications

Name ↑	Version	Status	Project	Commit	Sync	Actions
DevVmVirtualControl	4.9.0.0	🔴	NewHugo	new commit ...	↻	⚙️ 📄 🔒 🗑️ ☑️
EdgeRework_VControl13	4.9.0.0	🔴	NewHugo	new commit ...	↻	⚙️ 📄 🔒 🗑️ ☑️
EdgeRework_VControl14	4.9.0.0	🔴	NewHugo	new commit ...	↻	⚙️ 📄 🔒 🗑️ ☑️
EdgeRework_VControl15	4.9.0.0	🔴	NewHugo	new commit ...	↻	⚙️ 📄 🔒 🗑️ ☑️
schiess-developer-vm	4.9.0.0	🟢	NewHugo	new commit ...	↻	⚙️ 📄 🔒 🗑️ ☑️
SCHIESSMANB	3.5.19.50	🟢	NewHugo	added complex symbol ...	↻	⚙️ 📄 🔒 🗑️ ☑️

Items per page: 25 | 1 - 6 of 6

Manage Applications

PLC

State ?

Application

Project

Commit

Execute Clear

schiess-developer-vm	🟢	Application ⓘ ⏴	NewHugo	new commit ...	Stop ▾ 📄
SCHIESSMANB	🟢	Application ⓘ	NewHugo	added complex symbol ...	Reset Warm ▾ 📄

Items per page: 25 | 1 - 2 of 2

File transfer via remote WebVisu (1.33.0)

Requirement

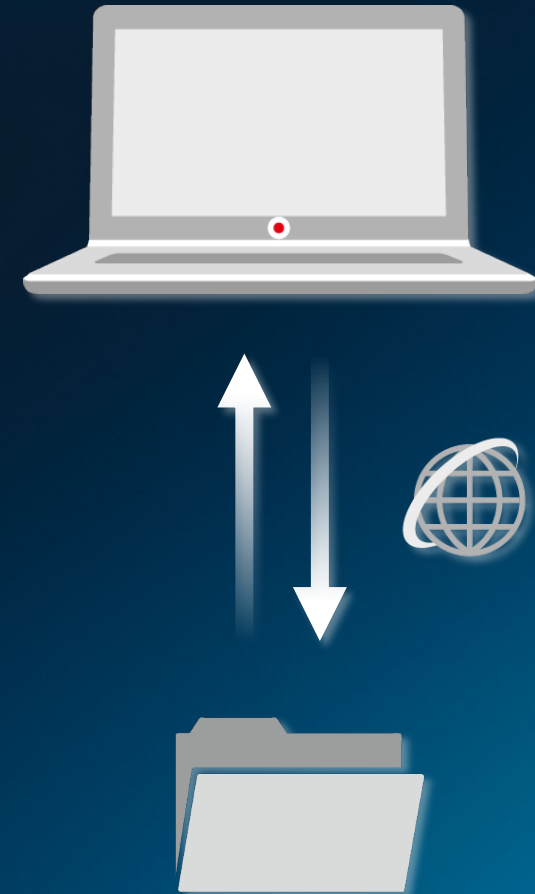
- Transfer files securely between PLC and remote WebVisu client

Solution

- Remote file transfer via WebVisu allowed for runtime version $\geq 3.5.18.0$
- Configuration prerequisite:
[CmpWebServerHandlerV3]
AllowFileTransferServices=1

Benefit

- Easy remote file exchange via WebVisu
- Secure due to binding to device user management



Visu File Transfer Example

Transfer type File

VISU TO PLC

Transfer Control Flags (VISU_TC)

- UseOriginalFileName
- ConfirmFileOverwriteInPlc

FileName

VisuData/dummy.txt

PLC TO VISU

active

successful

error

error code:
6

Transfer type Streaming

VISU TO PLC

Transfer Control Flags (VISU_TC)

- UseOriginalFileName

FileName

testdatei.txt

PLC TO VISU

active

successful

error

error code:
0

Choose file to transfer...

Browse... Cancel

CODESYS Edge Gateway replacement

Requirement

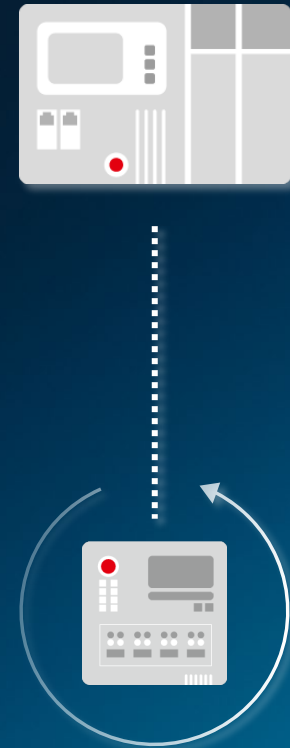
- Move PLC to another or new Edge Gateway
- Keep existing Edge Gateway

Solution

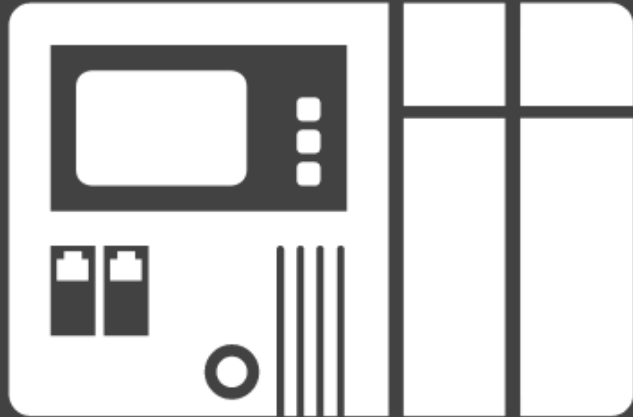
- Edge Gateway change via drop-down menu


Benefit

- Keep existing PLCs despite changes to connection or name
- Easy transition from test to productive operation



List View / PLC Details: Testrack_1_PLC



 Debug mode


New tag



General State Information Configuration Analyzer Projects

Testrack_1_PLC

PLC Information

Device name DECKERMNB 
Gateways Edge_MDe_local_3.5.18.0

Serial number 00978600-83968B3A-536C5887-16D2FB35
Connection state Disconnected

Device Identification

Name CODESYS Control Win V3 x64
Vendor 3S - Smart Software Solutions GmbH
Device type Programmable
Firmware version 3.5.18.0
Runtime version 3.5.18.0
Target ID 4




Edit

Testrack_1_PLC

PLC Information

Device name DECKERMNB
Gateways Edge_MDe_local_3.5.18.0

Search 
Office_Gateway 5C5887-16D2FB35

My new Gateway

PiHome

MDe_NB_local

Edge_MDe_local_3.5.18.0



Edge communication rework [back end]

Requirement

- State-of-the-art communication service between Automation Server and Edge Gateways
- Higher scalability
- Better maintainability

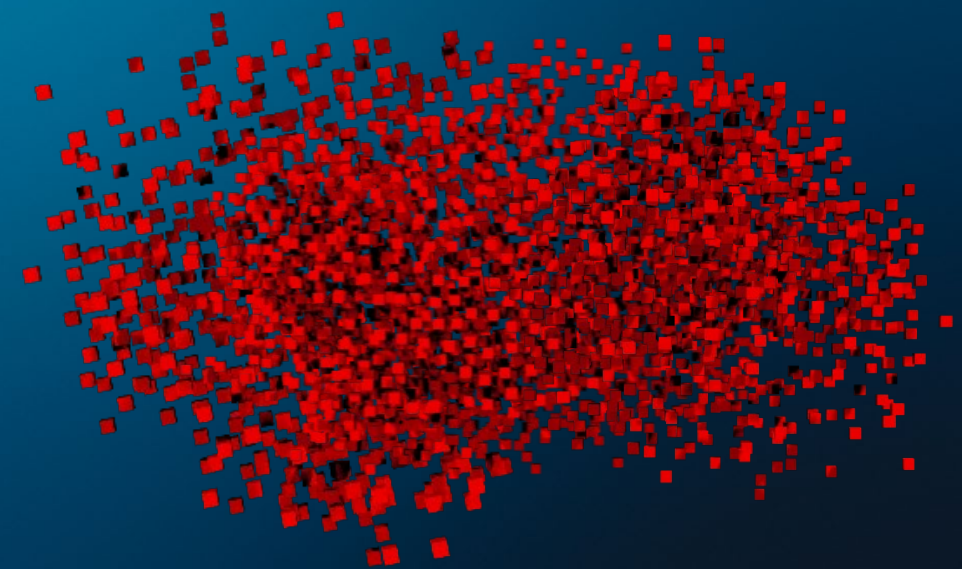
Solution

- Complete re-implementation of the service

Your benefit

- Increased stability
- Easier extensibility





CODESYS Automation Server on-premises

File & recipe management

CODESYS Manager

... more to come

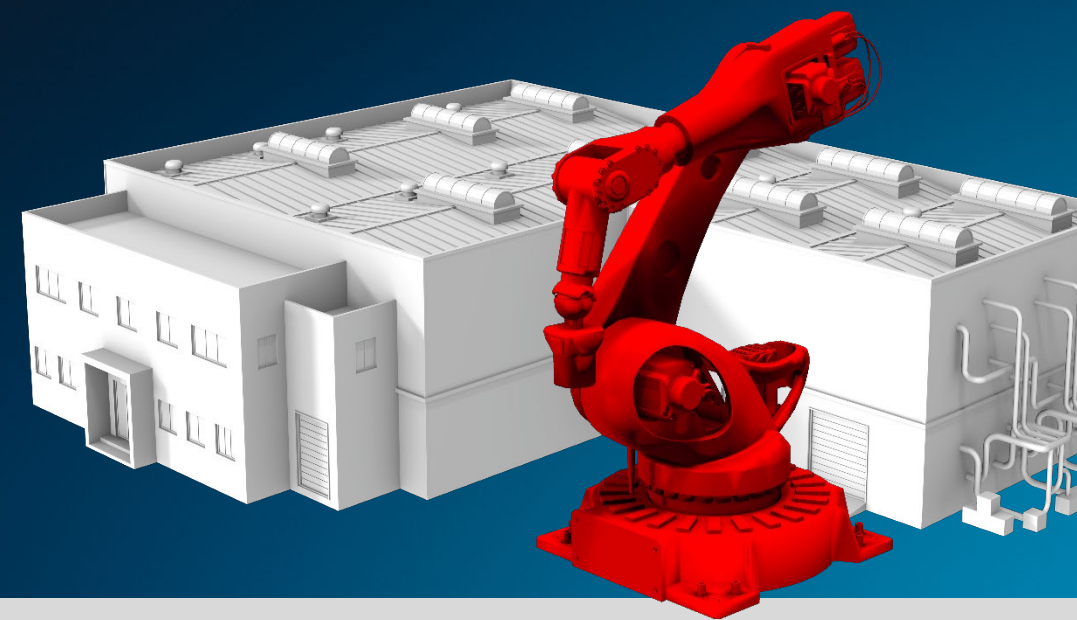
Now

Edge communication rework

File transfer via remote WebVisu

CODESYS Edge Gateway replacement

Remote control: start, reset, stop applications



File & recipe management [work in progress]

Requirement

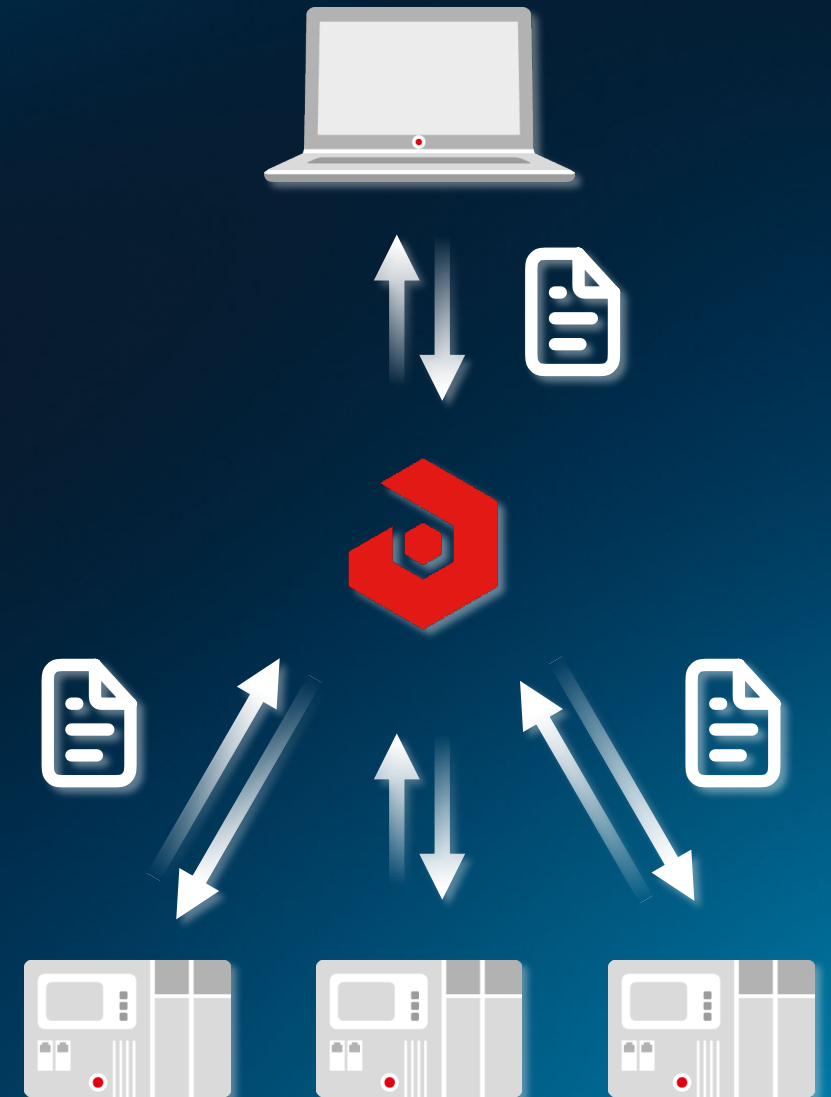
- Manage files on PLCs remotely
- Usage of custom files supplementing applications

Solution

- Extensive file management possibilities
- Development in three stages
 - I) File transfer to PLCs
 - II) Deployment of additional files & central file management
 - III) Backup & restore of files

Your benefit

- Control of recipe management from the browser
- Enhanced capabilities through support of user-defined files on PLCs



CODESYS Automation Server on-premises + CODESYS Manager [work in progress]

Requirement

- Sovereignty over infrastructure and data
- Air gap operation
- Compliance with defined security requirements

Solution

- Locally self-hosted CODESYS Automation Server

Your benefit

- Full control (and responsibility) over the entire system
- Independence from third parties
- No internet connection necessary





Enjoy the new features!

www.automation-server.com

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