

# Roadmap CODESYS 2016



# Agenda

1

Overview

2

Planned Features – grouped by product fields



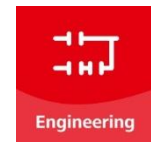
- Roadmap is a general outlook of the next year, not a commitment of availability. We reserve the right to change the roadmap due to recent requests.
- Covers all features which are scheduled for a release 2016
- Presentation is grouped by product fields



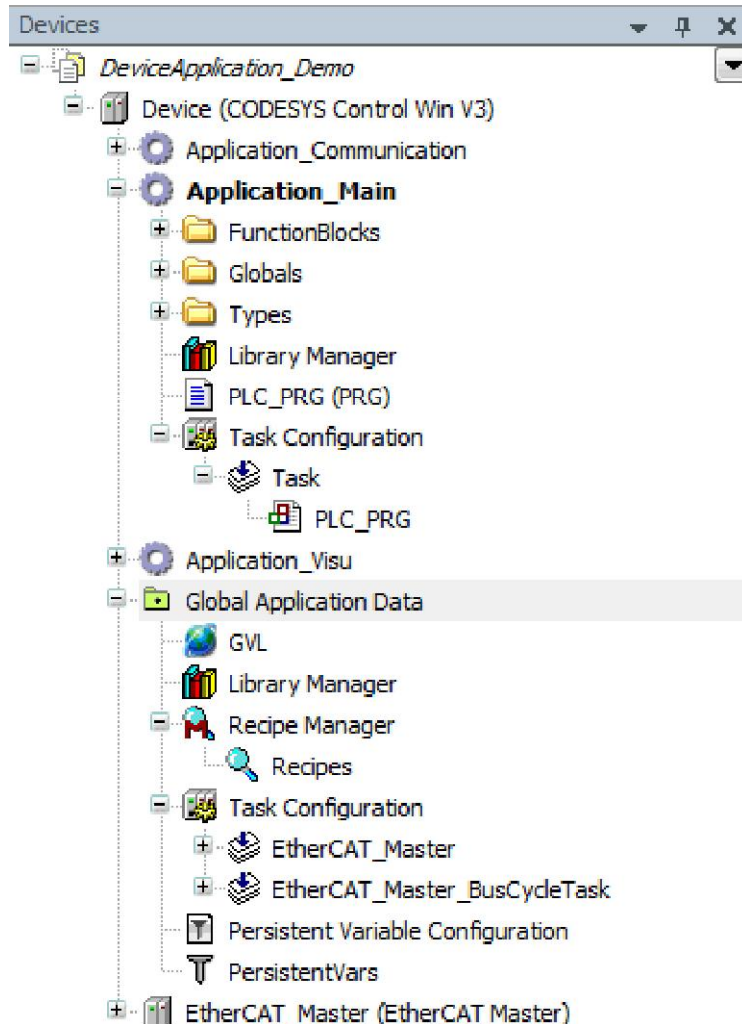
## Planned Features

### Compiler / Code Generator

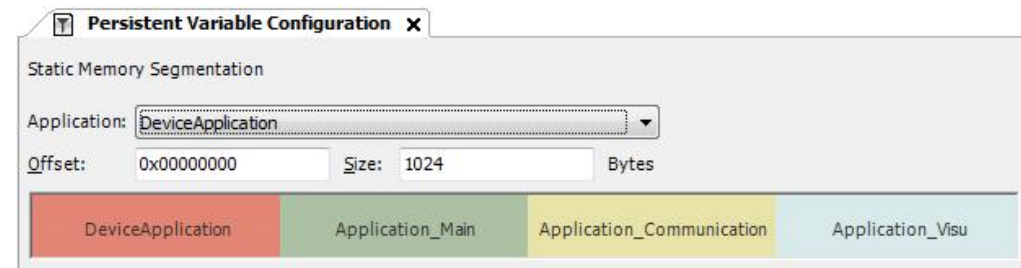
Feature	Description
Device application (June 2016)	Easier use of applications <ul style="list-style-type: none"><li>- Shorter download times</li><li>- Multi user operation on one controller</li></ul>



# Preview Device Application



- No more „PLCLogic“ object
- Device Application implicitly generated
- New node „Global Application Data“
- Applications now directly below the device
- New: „Persistent Variable Configuration“





## Preview Device Application

- Advantages:
  - Smaller application code that is downloaded to the target
  - ➔ Download / Online Change of the application
  - Independent changes of applications
  - Logical separation of global and local structures
- Limitations:
  - No Online Change of the Device Application
  - Changes of the Device Application require a download of all applications



## Planned Features

### Compiler / Code Generator

Feature	Description
Profiler (User add-on) (September 2016)	Update for runtime measurement and path coverage in applications
Hardware Breakpoints (July 2016)	Breakpoints in small systems with flash and in data items (value change of variable)
CODESYS Runtime Test Package (Dec 2016)	Extension Package for CODESYS Test Manager, ready-to-use test cases for Automation Platform Plug-in and Runtime Tests





## Planned Features

### Automation Platform / User Interface

Feature	Description
Graphical network and I/O topology (2016)	PLCs, I/Os, HMIs and Programming PC with network connection in a overall diagram
64 Bit CODESYS (not decided)	No more storage problems (final decision done after feasibility study)
Library Documentation (June 2016)	Automatic generation of Library Documentation out of comments by means of a ready-to-use tool chain (available as web installer)
Web based online help (June 2016)	Publication of the CODESYS online help on a web server, Including server technologie, adaptation and offline fallback strategies

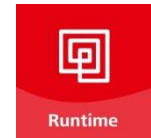






# Planned Features

## Runtime



Feature	Description
Security (June 2016)	<ul style="list-style-type: none"><li>- Encrypted connections</li><li>- Certificate Management</li><li>- Audit Trail</li></ul>
OPC UA (Dec 2016)	OPC UA Client
Multi Core (Dec 2016)	Reasonable use of multiple cores in the application and runtime
CODESYS Control for Beagle Bone Black SL (June 2016)	Ready-to-use SoftPLC for the standard platform available in the CODESYS Store
CODESYS Control for Linux SL (Dec 2016)	Ready-to-use SoftPLC for PCs with preinstalled Linux available in the CODESYS Store

## Planned Features

### Fieldbus

Feature	Description
PROFINET Slave Stack (June 2016)	Software stack for PROFINET IO/RT Slave (no NetX/CIFx required, just a Ethernet port)
Online Change for I/O configuration (2016)	Change parameter, add / remove device and simply do an online change





## Planned Features

### Visualization

Feature	Description
Standalone HMI (Dec 2016)	HMI (SL) for all PLCs with OPC UA Server independent from CODESYS project
Event Log (2016)	Logging of all user events, to track manipulations of the process





## Planned Features

### Application Composer

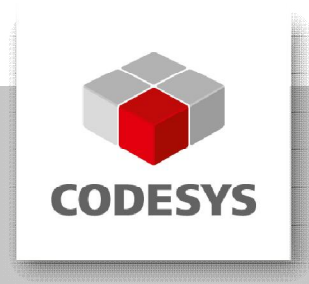
Feature	Description
Debug View (June 2016)	Tab page with online info: <ul style="list-style-type: none"><li>- Parameter</li><li>- I/Os with values</li><li>- Faceplate</li><li>- Trend view</li><li>- CFC view</li></ul>



## Safety

Feature	Description
Cross Communication (June 2016)	Communication between safety controllers via black channel
Safety SIL 2 PSP for TI Hercules (July 2015)	Ready to use, tested binary of SIL 2 runtime on TI Hercules/RM48 controller
Separation of Safety from the CODESYS version (June 2016)	CODESYS can be updated and extended without risking to lose the Safety certificate





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