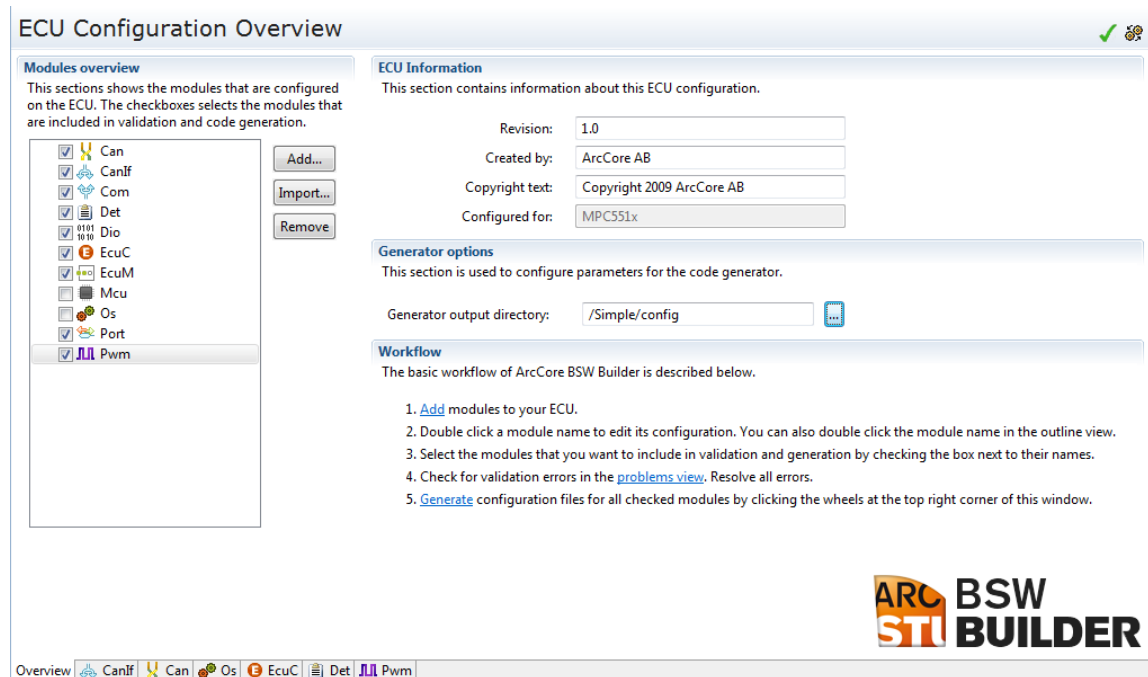


The Professional Arctic Studio BSW tool

The Arctic Studio BSW Builder is a complete tool for editing and generating BSW configurations for AUTOSAR platforms. The BSW Builder is designed to simplify the development of professional automotive ECUs and is tailored to take advantage of the Arctic Core AUTOSAR platform. Together with the renowned Arctic Studio IDE platform – free to download at www.arccore.com – the BSW Builder makes AUTOSAR development easier and improves quality.

The BSW Builder editor supports editing of most of the BSW modules included in the Arctic Core platform. Using the ECU Configuration Overview the developer selects which BSW modules that should be included in the ECU platform.



ECU Configuration Overview

Modules overview
This section shows the modules that are configured on the ECU. The checkboxes select the modules that are included in validation and code generation.

- Can
- CanIf
- Com
- Det
- Dio
- EcuC
- EcuM
- Mcu
- Os
- Port
- Pwm

Buttons: Add..., Import..., Remove

ECU Information
This section contains information about this ECU configuration.

Revision: 1.0
Created by: ArcCore AB
Copyright text: Copyright 2009 ArcCore AB
Configured for: MPC551x

Generator options
This section is used to configure parameters for the code generator.

Generator output directory: /Simple/config

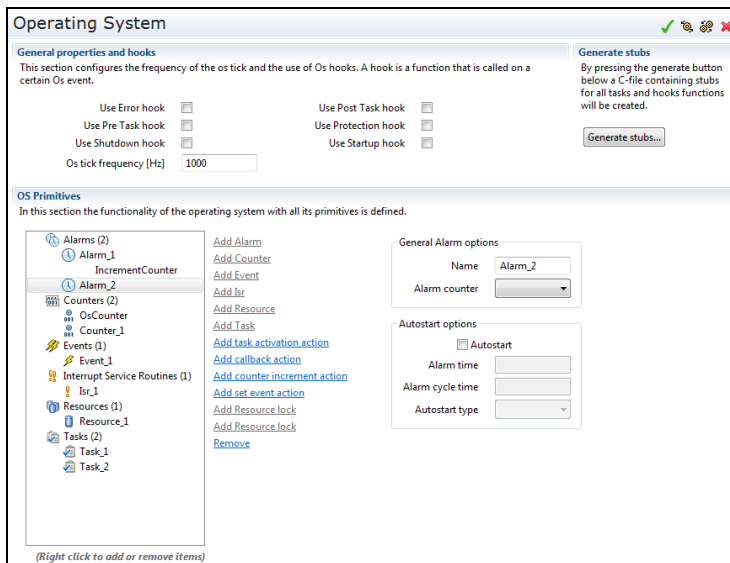
Workflow
The basic workflow of ArcCore BSW Builder is described below.

1. [Add](#) modules to your ECU.
2. Double click a module name to edit its configuration. You can also double click the module name in the outline view.
3. Select the modules that you want to include in validation and generation by checking the box next to their names.
4. Check for validation errors in the [problems view](#). Resolve all errors.
5. [Generate](#) configuration files for all checked modules by clicking the wheels at the top right corner of this window.

Overview > CanIf > Can > Os > EcuC > Det > Pwm

The BSW Builder ECU Configuration Overview.

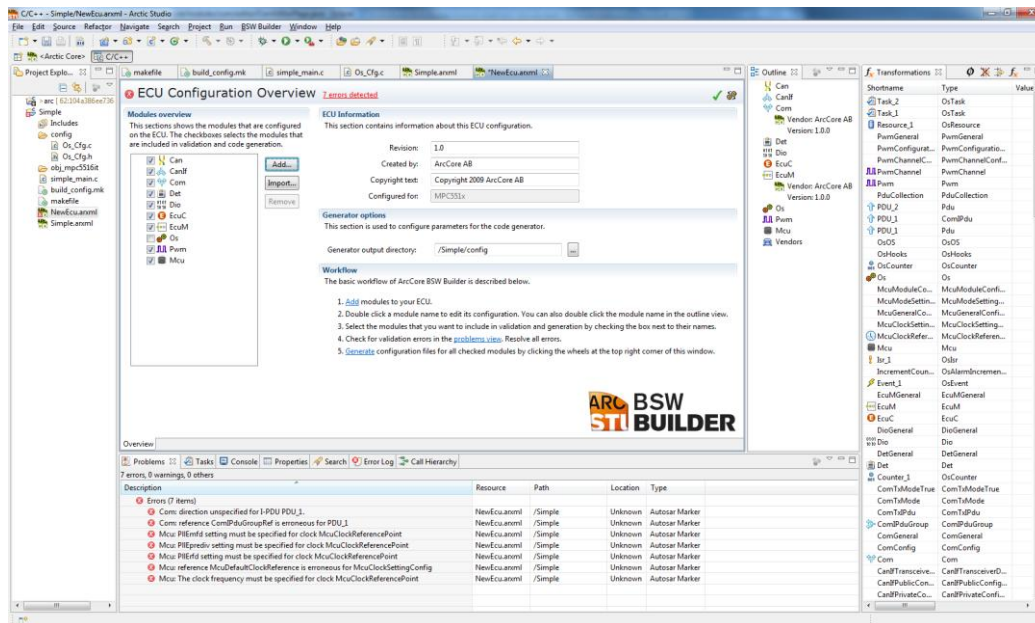
Each of the BSW modules that are selected in the ECU platform can then be configured separately through the tailored module editors. The BSW Builder supports quick and easy configuration of the Arctic Core modules MCU, OS, DET, EcuC, EcuM, COM, CANIF, CAN, PORT, DIO and PWM.



Example of the BSW Builder module configuration view (the OS editor).

The BSW Builder validator continuously validates the configured values to the complete configuration and reports error or missing parameters to the user.

When the configuration is finished the BSW Builder generates new configuration files to be used in building a new AUTOSAR platform based on Arctic Core. The BSW Builder supports both a complete generation of all configuration files or for a selected AUTOSAR BSW module.

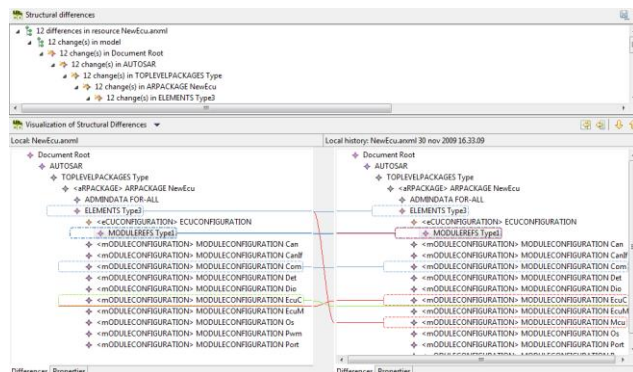
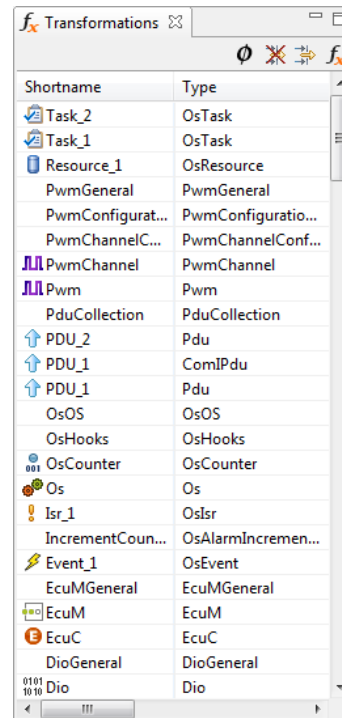


The BSW Builder Generator phase.

The BSW Builder is designed to support fast development of both small and large systems. Included in the BSW Builder are features that makes configuration and reconfiguration of AUTOSAR platforms quick and easy - even large platforms based on large AUTOSAR models can be easily reconfigured.

The Transformation feature in the BSW Builder is a powerful tool to configure or reconfigure multiple elements simultaneously. The Transformation view includes filtering features to easily select which elements to be reconfigured and transformation directives for a quick reconfiguration of selected elements.

The BSW Builder Transformation tool.



The BSW Builder includes a compare and merge feature that lets the user compare different versions of configurations and to merge these versions to a new final version

The BSW Builder compare and merge tool.

As all ArcCore products, the BSW Builder is based on the principle of openness. This means that the BSW Builder provides opportunities to add customer specific tools for streamlining the development process to the user's needs. The use of AUTOSAR standard XML-format and extension points in Eclipse provides extensive possibilities for the users to integrate their own tools to the Arctic Studio and the BSW Builder.

The BSW Builder is provided as a professional plug-in to the Arctic Studio IDE. New versions of the BSW Builder are made immediately available through the update service provided by ArcCore.