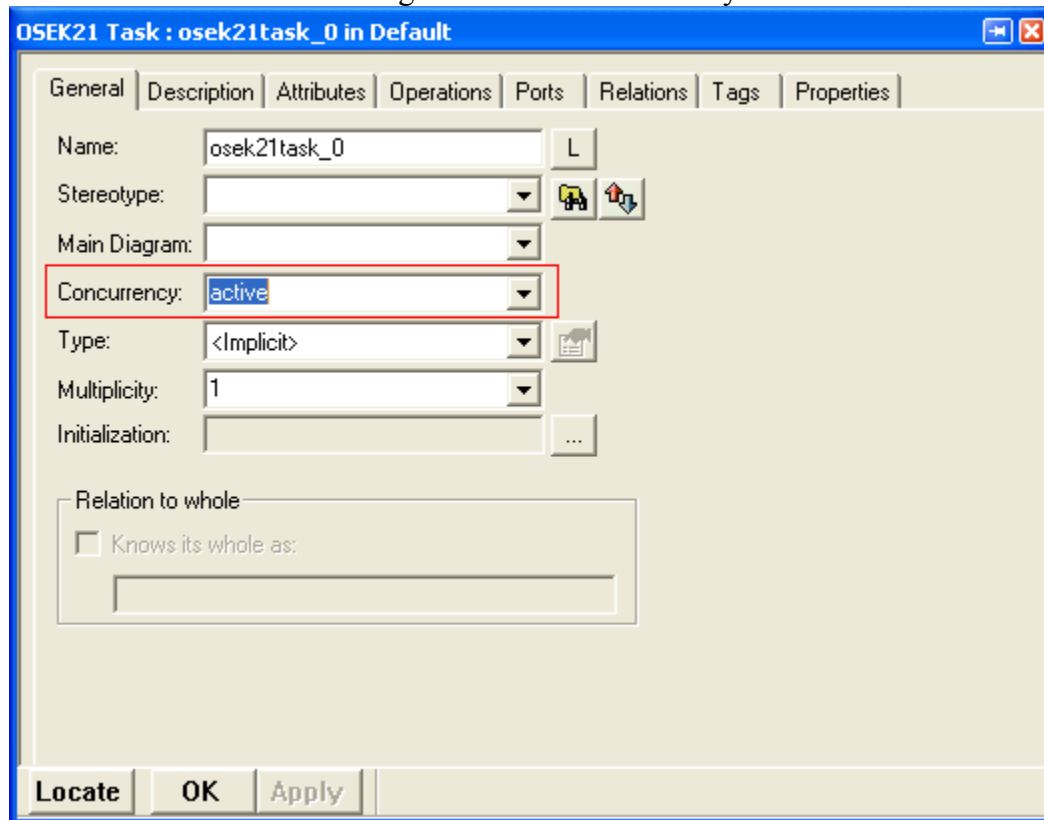# Application Notes

Rhapsody OSEK21 Package – Workflows

The OSEK21 package provides a development environment for users who use the Metrowerks OSEK 21 operating system, and the Hiware tools.
Supported OSEK conformance classes: ECC1 and ECC2

The following is a suggested workflow to be used with this package:
- Create a new project of type "OSEK21"
- Add OSEK Tasks to the model by selecting: Add New > OSEK21 > OSEK21Task.
- For each OSEK Task change the field: "Concurrency" to be "active":

OSEK21 Task : osek21task_0 in Default

General | Description | Attributes | Operations | Ports | Relations | Tags | Properties

Name: osek21task_0

Stereotype:

Main Diagram:

Concurrency: active

Type: <Implicit>

Multiplicity: 1

Initialization:

Relation to whole
☐ Knows its whole as:

Locate | OK | Apply

- For each OSEK Task set the appropriate values for the OIL definition in the features dialog, "Tags" tab.
- Add to the Task the needed Attributes, Operations etc.
- Create a new OSEK21HC12Configuration configuration by selecting a component and then: Add New > OSEK21 > OSEK21HC12Configuration
- Set the newly created configuration to be the active configuration.
- In the OSEK21HC12Configuration configuration set the property: C_CG:OSEK21HC12:OSEKDIR with the path to the OSEK 21 for HC12

- In the OSEK21HC12Configuration configuration set the property: C_CG:OSEK21HC12: HICROSSDIR with the path to the Hiware tools
- Other available customizations are:
  - C_CG: OSEK21HC12:OsekMainFileDefinition – The content of a C source file with the main entry of the OSEK application, and the framework's Tasks definition.
  - C_CG: OSEK21HC12:OilDefinitionTemplate – The content of the generated cfg.oil OIL file, which has some "#include" statements to include the model element's specific oil definition.
- Also available in the OSEK21 is the OSEK21NTConfiguration configuration for using with OSEK21 for NT:
  - Create a new OSEK21NTConfiguration configuration by selecting a component and then: Add New > OSEK21 > OSEK21NTConfiguration
  - Set the newly created configuration to be the active configuration.
  - In the OSEK21NTConfiguration configuration set the property: C_CG:OSEK21NT:OSEKDIR with the path to the OSEK 21 for NT

System Requirements

Hardware requirements:
- Target NT: PC
- Target HC12: Motorola HC12dg128 Evaluation board.

Software requirements:
- Target NT: Windows (2000, XP), Metrowerks OSEK 21 OS for NT, Visual Studio (nmake utility, Compiler, Linker etc.)
- Windows (2000, XP), Metrowerks OSEK 21 OS for HC12, Hiware tools for the Motorola HC12 target (Compiler, Linker etc.), Visual Studio (nmake utility)