

Developer Guide

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Contents

Chapter 1

Pop Developer guide

This document is a developer manual for the Pop Platform, a component of the **Polychrony Toolset** (see next figure).

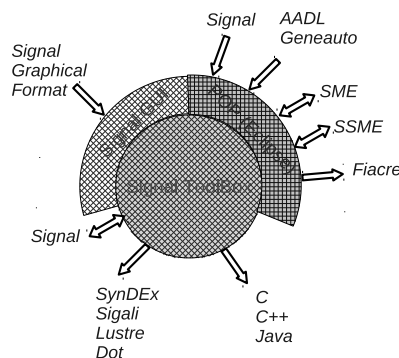


Figure 1.1: Polychrony/Pop environment

POP constitutes a development environment for critical systems, from abstract specification until deployment on distributed systems. It relies on the application of formal methods, allowed by the representation of a system, at the different steps of its development, in the **Signal** polychronous semantic model.

The user will find [here, many publications](#) on Signal language (introductory papers, formal semantics), synchronous languages, case studies, domain application (Architecture and OS modeling, Avionics applications) and more technical documents (clock calculus, representation of a Signal Program).

The user will find in the **org.eclipse.pop.ssme.documentation** plugin technical documentations, defined during the **OPEES project** for the *experiment Polarsys platform*, and adapted for POP platform:

- the POP Specification: POP_Spec*.odt, POP_Spec*.pdf. It defines the requirements for the tool.
- the POP tool design: POP_Design*.odt, POP_Design*.pdf. It defines the API and the detailed design.
- the POP SCP (Software Configuration Plan): POP_SCP*.odt, POP_SCP*.pdf.

and some other documents provided during the **OPEES project** for the qualification of Polychrony for the *experiment Polarsys platform*:

- The Polychrony TVCP (Tool Verification Case and Procedures): POLYCHRONYVERIFIER-TVCP*.doc, POLYCHRONYVERIFIER-TVCP*.pdf. This document presents the tests cases to be performed for the qualification of Polarsys Polychrony Verifier component as described in the Generic Developer Tool Qualification Plan of Polychrony Verifier document.

- The Polychrony TVR (Tool Verification Results): POLYCHRONYVERIFIER-TVR*.doc, POLYCHRONYVERIFIER-TVR*.pdf. This document presents the results of tests performed for the qualification of Polychrony Verifier, as described in the Generic Developer Tool Qualification Plan of Polychrony Verifier document.