



Zeligsoft SDR Development Suite

Turn-key Solution for SCA Development

Zeligsoft CE™ is a model-driven development tool that forms the backbone of the Software Communications Architecture (SCA) development process. Zeligsoft has teamed up with other best-in-class SCA software and platform vendors to provide and support a complete SDR development suite for SCA-based Software Defined Radio. With Zeligsoft, development is de-risked and products move from design to deployment quickly.

The Proven Development Environment

Central to Zeligsoft's solution for SCA development is the Harris dmTK™ Core Framework, a mature, commercial grade SCA Core Framework (CF) designed to run on MS-Windows operating systems. Zeligsoft CE is tightly integrated with the dmTK CF and CORBA middleware (TAO ORB or OIS ORBexpress) to deliver a complete COTS tool suite and radio operating environment (OE) running on a PC host.

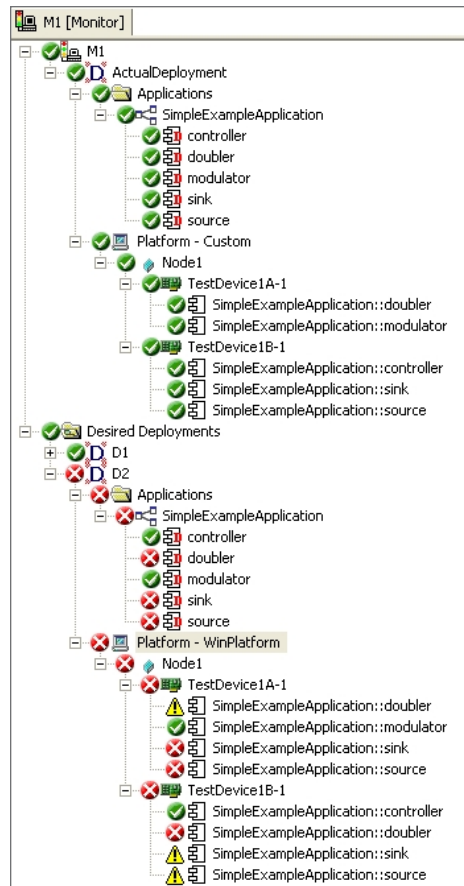
This superior out-of-the-box experience ensures SCA standards compliance, while allowing designers to skip the time consuming task of evaluating and integrating their ORB and SCA Core Framework OE elements. Everything needed for rapid development is provided, integrated, and ready to go!

Zeligsoft and Harris offer a complete COTS development and test environment for simplified and rapid development of Software Defined Radios conforming to the SCA.

Risk Reduction from the Start

The integrated Zeligsoft-Harris solution reduces risk in SCA development and improves software quality. Designers benefit from conducting an iterative software development process using a runtime target that is a true Core Framework on host — not a simulation.

Using the ubiquitous PC host, designers can validate and test their components running within an SCA OE



Runtime view of SCA application on PC platform

early on and continuously throughout the development cycle. Execution is the pillar of risk reduction. By integrating early and executing often, designers demonstrate proof of progress, gain understanding of the system and increase their confidence in the radio architecture.

With the ability to develop, test and validate on an SCA host, SCA adherence and functional quality are both improved.

Migration to the Embedded Target

With Zeligsoft, bringing SCA software from development host to embedded target can be accomplished efficiently. Integration is not subject to the risks always associated with late-in-the-process, large scale integration work.

The SCA components have already been tested and debugged on a true SCA compliant radio OE. In itself, this will dramatically reduce the cost of integration with the embedded target.

In addition, designers take the stable and predictable OE and tool set with them as they transition from development on host to the final deployable product. Developers continue to use Zeligsoft CE to amend their deployment models for the embedded target, validate for SCA compliance, and compile SCA artifacts specific to the embedded target.

Risk is reduced because Zeligsoft enables developers to stay within the same tool environment as they migrate to any CF and ORB chosen for the embedded target. CE validates all system models and descriptor files for continued SCA compliance, and it enables users to control and monitor their SCA system on the embedded platform within the tool environment.

Zeligsoft's integrated development environment combines proven products from companies fully invested in their core area of expertise. The solution provides designers with a stable operating platform and tool suite that simplifies and accelerates SDR development, while ensuring SCA standards compliance.

Proven development tools and a pre-integrated, industrial strength Core Framework ensures a stable and predictable development environment on both PC host and embedded target for improved software quality and reduced project risk.

Features

- **Harris dmTK SCA Core Framework included**
Mature commercial-grade SCA operating environment
Runs on both embedded targets and development hosts

- **TAO open source ACE ORB included**
V2.6 CORBA compliant
Runs on both embedded targets and development hosts
(OIS ORBexpress RT and other ORBs available upon request)
- **Code generation***
Push-button code generation of SCA component implementations for the OE
*Per user license required
- **Deployment Selection and Enforcement**
Enforce only tested deployments in lab and field systems
- **Runtime Monitoring**
Observe the runtime execution of the application deployed to target
- **Portability**
Seamless evolution onto actual radio hardware
Port to any embedded system CF for field deployment

Support and Professional Services

Zeligsoft provides 1st line support for customers developing with Zeligsoft CE + Harris dmTK SCA Core Framework.

Zeligsoft offers comprehensive professional services and training for the best-in-class software and hardware elements making up Zeligsoft's integrated design and development solutions.

System Requirements

- CPU speed 1.6 Ghz
- Windows 2000 Professional service pack 4
- Windows XP Professional service pack 2
- MS .NET Framework 1.1 Service Pack 1
- 512 MB Memory
- 100 MB free hard disk space

Ordering Information

Upgrade for current CE users..... ZSCF-1000
SDR-CE Starter Suite ZSCF-2000
SDR-CE Project Suite..... ZSCF-3000