ESROS: Test Tools Source

Efficient Short Remote Operation Services

MobileMsgWare
Developer Tool

The Neda ESROS Test Tools is a set of C programs, shell scripts, configuration files and related data files that includes a scenario interpreter, a group of scenario files, an exception generator, and an exception generator scope program. The Test Tools are designed to run on various versions of Unix, DOS and MS Windows. Each of the tools can be implemented as a separate process.

ESROS Test Tools Features

- **Neda Source Code Standards**

  Designed from the outset to be as portable as possible, Neda's ESROS Test Tools were written entirely in portable C. They were tested and verified using such industry standard tools as PURIFY. They have been compiled on a large set of compilers and executed on Unix, DOS and Windows platforms throughout their development.

- **Script-Based Conformance Tester**

  By using scripts and creating various normal and abnormal scenarios, various aspects of ESROS protocols can be tested. The iterative facilities in the Test Tools allow for automated regression testing. The conformance tester also includes the ability to generate protocol exceptions by providing a point of control between ESROS and UDP.

- **ESROS Protocol Analyser**

  Various facilities for capturing and displaying ESRO Protocol Data Units (PDUs) are provided. The ESROS protocol analyser may be used in real time or after the fact on PDU captures.

- **Stress Tester**

  Various forms of traffic generators are provided to test the ESROS module under stress.

ESROS Test Tools Benefits

- **Easy to Use**

  The ESROS compile time parameters allow you to adjust variables that are not likely to change once the general environment is set. Runtime parameters allow you to adjust variables such as timers and addresses, allowing for testing on various subnetworks and CPUs. Scenario log files for both the ESRO Invoker and Performer allow for clear tracking of test progress and results. The PDU log files allow you to observe the PDU dialogue of both the ESRO Performer and Invoker.

- **Compatible**

  ESROS Test Tools operate on a variety of platforms, and interoperate with all modules on the Open C Platform.

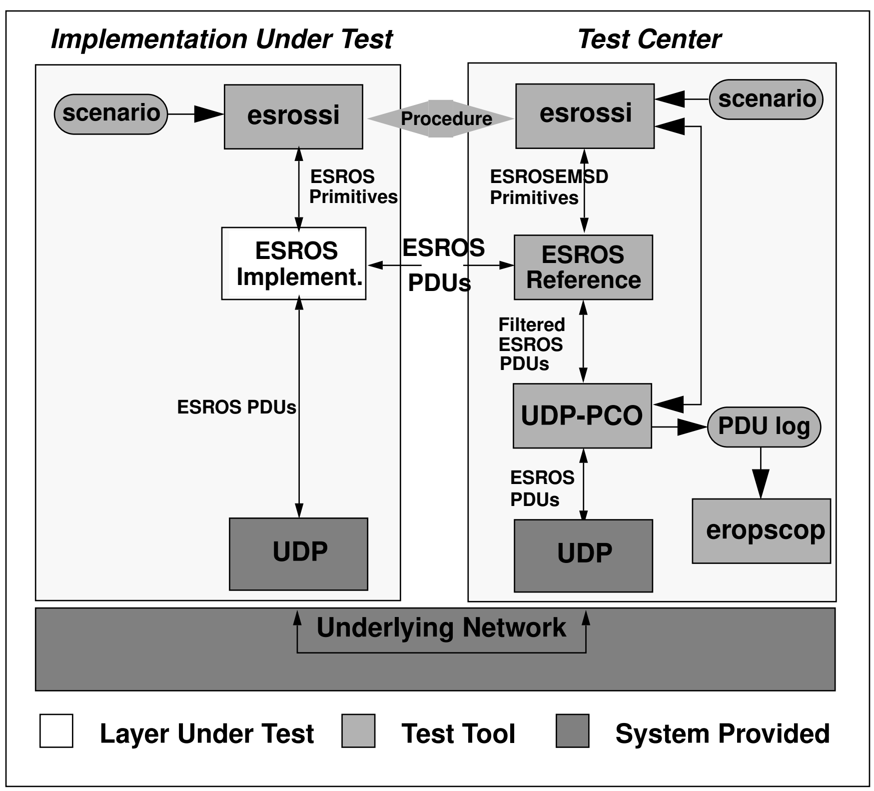
- **Proven Performance**

  The Neda Communications ESROS Test Tools have been field tested by device manufacturers and service providers. Neda Communications is the technology leader in the development of the EMSD specifications.

ESROS Test Tools Components

- **esrossi**

  esrossi is the scenario interpreter, an application that reads and executes scenario files. esrossi, which is run both locally



and remotely in parallel, reads commands in the Test Center (local) and Implementation Under Test (remote) scenario files. These commands are synchronized, so together they test a feature or a set of features of the ESROS protocol. Commands in scenario files are implemented sequentially.

- **Scenario files**

  Scenario files contain descriptions of the invocations and requests that are to be sent, and the indications and confirmations that the implementation expects to receive. Scenario files are normally written in pairs, one for the invoker and one for the performer. Scenario files are simple files containing one or more commands. Some of the commands are used exclusively by performers or by invokers. Other commands may be used by either. Scenarios are intended to be serial in nature with the major commands grouped in matching pairs. This means that when an invoker issues an "invoke request" command, for example, the performer should have an outstanding "invoke indication" command whose parameters match those of the invoker's. A mismatch either in the parameters or in the type of event expected by the performer results in a performer error.

- **UDP-PCO**

  UDP-PCO (Point of Control and Observation) is the exception generator. It is a module that observes and records Protocol Data Unit (PDU) traffic between the ESROS and the Transport Program. The exception generator is also used to introduce intentional errors into PDUs that consequently produce observable results. UDP-PCO, which is run locally, operates between the ESROS and Transport layers. UDP-PCO establishes an interprocess communication channel between itself and lsrossi, which can also control the behavior of UDP-PCO.

- **eropscop**

  lropscop is the exception generator scope program. It is a formatting program that processes the binary files generated by the exception generator and produces a readable list of the content of ESROS Protocol Data Unit traffic.

Neda Communications, Inc.

- **Open C Platform**

  The entire sources are built on this extremely flexible framework, which isolates all the communication layers from the underlying system. Once the Open C Platform is customized for a new computer platform, all other Neda protocol layer components are ready for execution on the same platform.

- **Portation Support Service**

  Neda's experienced personnel can shorten your development cycle even further by providing skilled service to get your development group up and running with this new technology.

- **Software Maintenance Service**

  Once up and running, the Neda Communications Software Maintenance service provides the assurance that your development team will stay current with the latest evolution of the EMSD specifications. The Neda staff has been instrumental in the establishment of the EMSD specifications and of the EMSD industry. With the Neda Communications Software Maintenance Service, you have the most knowledgeable EMSD technical expertise on your side!

- **Related Products from Neda**

  Other products available from Neda Communications include the following:

  - *Enhanced Two-Way Paging (ETWP) Products*
  - *Reference Message Center*

  Source code for devices is also available:

  - *ESROS Base Source*
  - *EMSD-P&FS Base Source*

- **Ordering Information**

  Please refer to the following part number when ordering this product: ESROS-TEST-SRC-CUR

  Where "CUR" indicates the current shipping version of the product. To order a specific release of this product, replace "CUR" with "x.x" where x.x is the particular release number.

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From field tested protocol components, to industry recognized expertise, the Neda Communications EMSD Device Development Toolkit is your complete solution to EMSD product success!

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