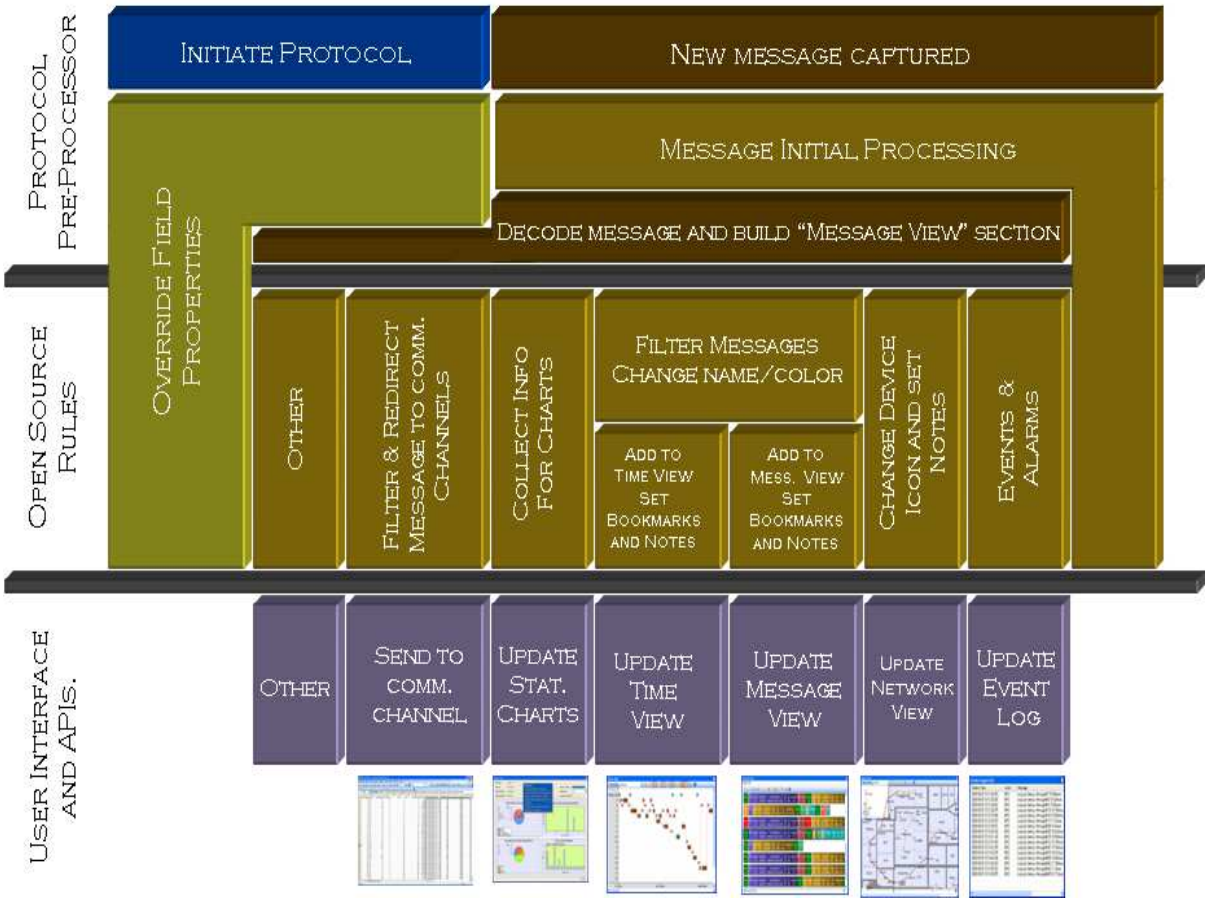
Perytons

Perytons™ Open Source Rules

Open Source Rules are practically small pieces of code that enable the user (or Perytons™ support) to add features to the Perytons™ Protocol Analyzer, or to modify existing analysis, without the need to add these features into the Perytons™ Protocol Analyzer core. Such features are aimed to serve specific needs or requirements by the user of the standard Perytons™ Protocol Analyzer platform. After they have been written and signed, Open Source Rules can be incorporated as an additional layer of the analysis process and into the different Perytons Protocol Analyzer active licenses of choice.

The Open Source Rules enhance capabilities of the Perytons™ Protocol Analyzers' environment in different dimensions like monitoring of live-networks; change the look and feel of the existing views (Time, Message, Network, etc.), definition of customizable statistic charts, interconnection and reports to external applications through numerous communication ports and protocols, e-mail alerts, and more.

Open Source Rules run whenever a new message is analyzed or when a new message is displayed as explained within the following diagram:



The various Perytons™ Protocol Analyzers basic models already include some Open Source Rules examples (the list of these basic Open Source Rules included in the standard products may change from time to time without prior notice).

These example rules are briefly described in the following list:

- Choose messages that will be automatically displayed in time-view
- Choose messages that will be automatically added into message view, and automatically expand some of their fields
- Set message ‘name’ and color
- Manage encryption keys
- Set the visible fields for message view, modify field name and hint
- Set the device icon that will be displayed in the network view
- Generate events and alarms
- Build data into customized charts

New Open Source Rules can be written and signed by any Peryton-Monitoring Add On license holder. Building, debugging and running rules is done within the analyzer GUI (user Interface) with there is no need for any additional development environment.

Signed Open Source Rules can be used by any standard Perytons™ Protocol Analyzer license; therefore users can share Open Source Rules among them.

When building an Open Source Rule, all message properties decoded by the analyzer as well as device properties are available for its use. Unlike with XML coding, with the Open Source Rules, all C sharp coding options are available so any condition can be written for the relevant Open Source Rule operations.

In addition, being a piece of code, the Open Source Rule can access other resources of the PC (such as communication sockets) and add a variety of features. For example, sending ZigBee NWL payload of received messages to another user application over UDP can be easily done by an appropriate Open Source Rule. Such an Open Source Rule would check if the message includes NWL payload, and if so, will build the relevant fields, e.g. timestamp, RSSI, etc., into a desired structure and send it over UDP to a user defined address.

Another example is related to users that have their proprietary encryption which they can't or don’t want to share. In this case “cryptographic experts” can build the encryption decoding engine within an Open Source Rule that will override some of the message fields with the decoded/clear data. Since the resulting Open Source Rule can run on the other Perytons™ Protocol Analyzer active installations, it is now just a matter of sending the resulting Open Source Rule code to the different machines installed with Perytons™ Protocol Analyzers and the encryption engine becomes an integrated part of all the Perytons™ Protocol Analyzers user group within the specific company.