EventStudio System
Designer 6

What’s new
Message endpoint tagging

Specify tags
Tag the message source and destinations. This can be used to identify the endpoint port numbers, and specify the protocol layer or software entities.

Style tags
Each type of tag can be individually formatted. The color, font and font size may be specified. The styles for tags should be named as <tag>_tag_style. A few examples are shown below:

```
style rr_tag_style: color=RED, bgcolor=RED, textcolor=WHITE
style sccp_tag_style: color=DODGERBLUE, bgcolor=DODGERBLUE, textcolor=WHITE
style isup_tag_style: color=GREY, bgcolor=GREY, textcolor=WHITE
style bssmap_tag_style: color=MIDNIGHTBLUE, bgcolor=MIDNIGHTBLUE, textcolor=WHITE
style cc_tag_style: color=DARKSLATEGREY, bgcolor=DARKSLATEGREY, textcolor=WHITE
style bcch_tag_style: color=DODGERBLUE, bgcolor=DODGERBLUE, textcolor=WHITE
style ”80_tag_style”: color=DODGERBLUE, bgcolor=DODGERBLUE, textcolor=WHITE
```

Tag specific diagrams
Use tags to filter and generate sequence diagrams that just contain messages with a specific tag.
Styling
Control the look and feel of documents with default styles. Automatically apply these styles that match regular expressions. For example, specify a style for all messages that start with specific text. Styles have been enhanced to change colors for the background, text, and parameters.

Group interactions with sequences

Simplified sequence definitions
Grouping interactions has been simplified. Just enclose the interactions in a sequence statement. EventStudio automatically identifies the interacting entities.

Nest sequences
Sequences may be nested. Quickly access a sequence from a PDF bookmark, which are nested too.
Collapse sequences

Complete sequences are shown the first time they occur in a sequence diagram.

Subsequent occurrences of the sequence are shown as a simple clickable box. Clicking on the box takes the user to the expanded sequence.

```plaintext
module: Module_01
component: Component_01 in Module_01
eternal: a in Component_01, b in Component_01, c in Component_01
feature "Sequence Grouping"
  sequence "Call Setup"
    IAM : a -> b
    b takes action "Check digits"
    ACM : a < b
  endsequence
  case
    leg "Called Party Free":
      a, b take action "Set up the voice path"
    leg "Called Party Busy":
      a, b take action "Feed busy tone"
  endcase
  sequence "Call Release"
    REL : a -> b
    RLC : a < b
  endsequence
endfeature
```
Classify systems with 5 levels of hierarchy

Generate sequence diagrams at any of the five abstraction levels.
Developers may work at the component and object level. System architects analyze the design at a system and subsystem level.

Improved modeling

Actions
Actions, which have a distinct beginning and ending, can be modeled with the new continuous action support. Also, actions may be specified at different levels in the hierarchy.

Messages
Lost messages can be modeled in sequence diagrams. Additionally, messages can be represented through a single simple statement.

"Lost Message": A ->X B

"Message Cascade": A -> B -> C
Enhanced tracing support

Flexible object interactions
Method invocation rules have been relaxed to make them compatible with sequence diagram generation from trace messages ([http://eventelix.github.com/trace-to-sequence-diagram/](http://eventelix.github.com/trace-to-sequence-diagram/)). Method calls to caller classes are permitted.

Command line
Command line mode is used to generate sequence diagrams from scripts. The command line can now be customized with specific conditional defines and include paths.

Model large systems

Share instance axes
Large number of interacting entities need not result in a large number of axis in diagrams. Dynamic objects can share a single instance axis, thus reducing the total number of axes needed in a sequence diagram.

Really large sequence diagrams
Sequence diagrams can now run into hundreds of pages. This is useful when converting large trace documents to sequence diagrams.

XML export
Export scenarios and interactions to XML. This enables generation of custom diagrams and documents.