Event Script Language (ESL)

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ESL is an easy procedural language adapted to work in the D2000 System environment. It allows implementing a wide scale of algorithms, which are necessary when creating the system application in a technological environment.

Basic features:

- own algorithm is expressed in text form, as a source text (script),
- basic (and integral) executive unit of the language is *action,*
- allows to implement and call procedures within one script,
- calling other scripts by means of the procedural method,
- error state handler,
- starting external processes,
- declaration and use of global and local variables (within the frame of procedure),
- work with values of objects, using them in expressions, changing them,
- according to the context of script usage (Script, Active picture), it provides additional possibilities,
- use of system objects in a specific way:
    - **Historical value** - work with the archive (read, block read, write),
    - **Database** - access to SQL database (read, write, delete),
    - **I/O tags** - reading, writing,
    - **Pictures**, **Graphs**, **Compositions** - to open, and close on the D2000 HI process's desktop,
    - **HI process** - communication with operator - text messages, queries,
    - **Structured variable** - work with structure items,
    - **Alarms** - to block or to acknowledge,
    - **External function** - calling external functions implemented in DLL libraries,
    - **Process** - communication with a process by means of text messages (COMMAND).