Historical Values (Data Archiving in D2000 System)

Historical values

Data archiving is defined by the configuration of the **Historical value** object. Object describes the source of archived values and archiving method. The object of *Historical value* type allows to archive:

- a simple value of the object (not a structured variable),
- an item of an object of Structured variable type,
- a column of an object of Structured variable type,
- an object of Structured variable type.

An object of Historical value type can be:

- simple historical value object represents the course of one parameter in time,
- one-column historical value object represents the courses of R parameters in time, where the parameters are arranged in one column (each parameter is defined by its serial number 1...R down from top),
- structured historical value object represents the courses of R x S parameters in time, where the parameters are arranged in a matrix containing R-columns and S-rows (each parameter is defined by its column and row).

!!! WARNING !!!

When saving the configuration of the object of *Historical value* type (by means of the D2000 CNF processes), the D2000 system is checking whether the object has not been changed as far as the classification mentioned above is concerned. If the object was changed, the system displays a warning message that contains both the previous and current object statuses. If the operator saves the object configuration in spite of this fact, some of the D2000 system parts will get into inconsistent states.

Example: If the object *H.Archiv* has been changed from a structured historical value to a simple one, then all ESL scripts, containing e.g. the item *H.Archiv* [6]^AItem, are obviously incorrect. Such a situation also occurs everywhere where the items of structured historical values are used in the configuration.

Defining the same data source for more **Historical values** allows for multiple archiving of the same data with the definition of various archiving criteria. For example, a short-term archiving that very precisely stores all value changes, and a long-term archiving that stores only significant changes.

The D2000 Archiv process provides value archiving of objects of the D2000 system into an SQL database.

Related pages:

Historical values - configuration dialog box