

# Basic Object Attributes

## Basic object attributes

All data in D2000 system are managed as [DODM](#) objects and are characterized by basic attributes.

### Object name (Name)

Each object in D2000 system has its own name that identifies it uniquely. The same rules apply for writing the names of all objects in D2000 system (the name means a complex object name including prefix and suffix):

- Object names are in the form of ASCII strings.
- Maximal length of the object name is 64 characters.
- Each object name must begin with a letter.
- Object name may include letters (**A** to **Z**), numbers (**0** to **9**) and these special characters: full stop (.) and underline (\_).
- Each object can be defined by a description no longer than 128 characters.

### Unique identifier of object in regard to configuration (HOBJ)

Each object in D2000 System has also the HOBJ identifier. It is the number that identifies the object uniquely in configuration.

### Unique identifier of object (UID)

Each object in D2000 system has the identifier UID. It identifies the object uniquely not only within the one configuration but also among several ones.

### Global value of object

Global value of object consists of the following attributes:

- **Value** - object value,
- **ValueType** - type of computer representation of object value,
- **ValueTime** - time of object value assignment,
- **ValueStatus** - status (validity) of object value,
- **ValueFlags** - [user attributes](#) of object value. For each value, there are defined 16 two-state flags labelled by letters from **A** to **P**, where each flag can get the value either TRUE or FALSE.
- **ValueLimitStatus** - object value status with regard to defined limits VLL, LL, HL a VHL - so-called limit status,
- **ValueProcAlarmStatus** - status of process alarms defined for the given object and times of process alarm occurrences,
- **ValueProcAlarmTimes** - times of process alarm value assignment.

### Time when the object has been created (CreateTime)

It is the information about the time when the object has been created. This attribute can be set when [the new object is being created](#) in [D2000 CNF](#). The value 01:00:00 01-01-1972 of attribute CreateTime represents the undefined value. It means that the object was created before the implementation of this character.

During the [XML Import](#) this attribute will have the same value as the object in XML file (tag CreateTime).

## CVS attributes of object (date, revision, author and state)

They represent the attributes of object from [XML Repository](#).

The objects are saved in the form of [XML files with CVS information](#) in XML Repository.

CVS attributes of object:

- **CVS Date** - CVS date and time of object,
- **CVS Revision** - CVS version of object,
- **CVS Author** - CVS login name of user,
- **CVS State** - CVS state of object

The object can be in **CVS Original** or **CVS Dirty** state. CVS Original is unmodified CVS version of object.

If the value of CVS Date is 01:00:00 01-01-1972, CVS Revision and CVS Author have no value and CVS State is CVS Dirty then the object **doesn't have any CVS information**.

More information are mentioned in the topic [XML Repository](#).



### Related pages:

[DODM - dynamic object data model](#)

[Limits](#)

[User attributes - Flags](#)