

THE USE OF ORACLE FOR DEVELOPMENT AND MAINTENANCE OF EPICS DATABASES

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Use of EPICS in part of DESY accelerator controls caused development of special tools for creation and maintenance of big amounts of IOC databases containing tens of thousands of EPICS records. This paper presents the development of ORACLE based implementation to manage EPICS databases. The ORACLE table structure is used to store the individual information of EPICS records. A graphical tool set based on ORA*FORM is prepared as user interface. Main point of this technology is the following. The sets of EPICS records which are differed by their names and by values of individual fields are stated as groups and group's prototypes are created for them. The groups may be built up on the base of already existing prototypes inheriting values of needed fields. The general scheme of forming record names, setting of field values and creation of EPICS databases directly from ORACLE are describd. Use of different EPICS releases in one control system caused the maintenance of IOC db for different EPICS releases simultaneously. Since the database definitions structure of EPICS R3.13 has been modified, it caused the development of data structure in the tool which would support both the old EPICS db structures and new ones. j