Status And Plans of the CODAC Core System

L. Abadie

ITER Organization

To support the adoption of the ITER standards for the Instrumentation & Control (I&C) and to prepare for the integration of the plant systems I&C developed by many distributed suppliers, the ITER Organization is providing the I&C developers with a software distribution named CODAC Core System (CCS).

This software has been released as incremental versions since 2010, starting from preliminary releases and with stable versions since 2012. CODAC Core system is based on Red Hat Enterprise Linux and uses EPICS as a control framework. It includes necessary libraries to develop and test the software for the controllers, central servers and operator terminals.

Some components have been adopted from the EPICS community and adapted to the ITER needs, in collaboration with the other users such as operator HMI, alarms or archives.

Other components have been developed specifically for the ITER project. This applies to the Self-Description Data configuration tools. First version of tools for preparing FAT (Factory Acceptance Test) will be released with the next CCS version (Feb 2016). This paper describes the current status and the plans for next releases.