

CDEV-NT : PORTING THE CONTROL DEVICE INTERFACE TO WINDOWS NT

W. Akers, TJNAF; J. Chen, TJNAF; C. Watson, TJNAF

In recent years the rapid increase in processing power of the personal computer has made it a significant competitor to high end workstations for experimental applications. When the decreasing price of the PC and the availability of inexpensive commercial software is also considered, NT becomes a very attractive alternative to traditional UNIX systems. In order to simplify the integration of Personal Computers into our operating environment, we have ported the Control Device (CDEV) Interface to Windows NT. By supporting CDEV on this platform, we can provide routine access to our existing control system. Additionally, CDEV allows us to create an interface from our UNIX workstations to Windows NT applications (such as databases) that are significantly less expensive on the PC. This paper will detail the pitfalls that we encountered during the software migration and will provide direct comparison between the performance of CDEV applications on UNIX and NT. Particular attention is provided to network performance which represents most of the overhead of this transition. We will also describe the performance differences involved when using EPICS through CDEV-NT to communicate with control system devices.