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Using Nightly Builds in Test Environment and Test Development

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I am currently working for security relevant software in the company CASSIDIAN an EADS company.

This department was former well known in Germany as MBB, renamed to DASA and now is part of the EADS company. It was my main part to design and develop a new Testsystem called AIDASS, which now holds about 2.2 million lines of code. The project is about 90% C++ and 10% C code. This application is programed partly portable and run in Windows, VxWorks and various Linux and Unix distributions. There are about 25 people working for this project since the year 2000. In this area I got a lot of experience in portable programming, programming performance relevant software, details of standard communication protocols like TCP/IP and UDP/IP. Inside the Testsystem there are many programs doing performance relevant TCP/IP and UDP communication using BSD- socket interfaces. The real-time part of the Testsystem needs to guarantee a real-time performance below 1 msec response time. Part of the system runs as windows program, other parts on PPC based real-time CPUs, all connected with Ethernet. Bug tracking and performance analysis is very demanding in this area and I was responsible for integration about 5 years.

Due to the size of the project we made the build process automatic, with saved about 10 hours work for each build. This is done with Windows, Unix scripts combined with Java based tools. Furthermore the system becomes part of a four national program, which started 2002. The result of this project is a TestStand Modeling facility used for Eurofighter/Typhoon military airplane.