

**DEMONSTRATION 1**  
**Distributed Computing Environment**  
**for Water Systems Operations**

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An X11 based shared memory system, permitting the implementation of a distributed water network monitoring and control software suite, will be demonstrated. The system is self contained and requires no commercial support packages.

The distributed shared memory system facilitates the transfer of software for real time water network monitoring and control, from a single CPU to a distributed computing environment. The demonstration highlights the advantages of distributed processing in the context of water systems operations. The increase of complexity of emerging decision support systems, which calls for a large computing power, is shown to be more naturally accommodated by a flexible distributed computing system.

The system developed at The Nottingham Trent University makes the full use of the industry standard X11 software making it readily available on a wide range of computing hardware including nonhomogenous (mixed hardware, operating systems, networking standards) environments.