

Large-Scale PC Management and Configuration for SNS Diagnostics



Abstract

The Spallation Neutron Source (SNS) Project's diagnostics group has begun its implementation of more than 300 PC-based Network Attached Devices (NAD). An implementation of this size creates many challenges, such as distribution of patches and software upgrades; virus/worm potentials; and the configuration management, including interaction with the SNS relational database. As part of the initial solution, a base operating system (OS) configuration has been determined and computer management software has been implemented. Each PC requires a unique configuration, but all are based on a common OS and supporting applications. The diagnostics group has started with an implementation of an XP Embedded (XPe) OS and uses Altiris® eXpress Deployment Solution™ [2]. The use of XPe and Altiris gives the diagnostics group the ability to easily configure, distribute, and manage software on a large scale. This paper describes the initial experience and discusses plans for the future.

Deployment Tool Set

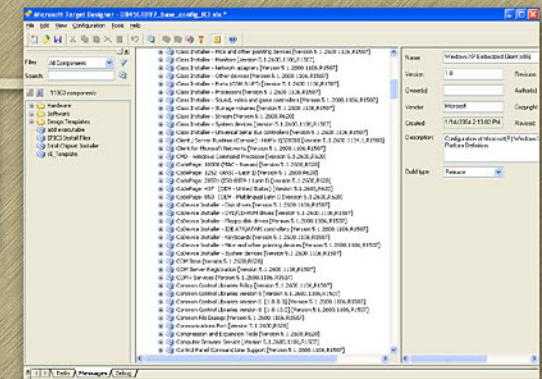
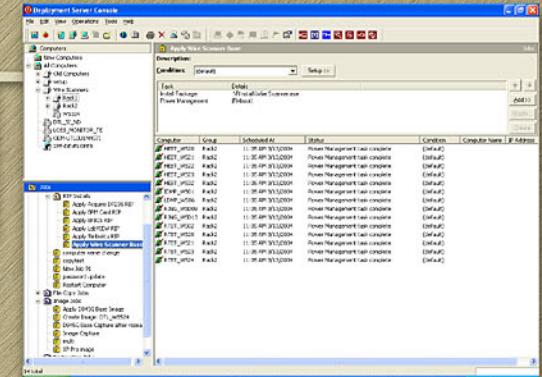
Windows Servers with Altiris Deployment and Microsoft SQL Server



Workstation for Windows XP Embedded Development Software



Altiris Console



Target Designer

1 XP embedded used to create base image

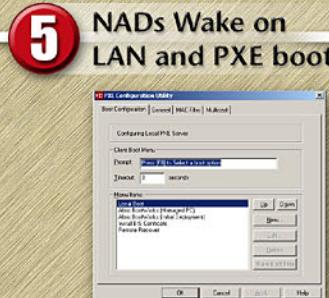


2 Specific software added and image resealed

3 Image created and stored on Altiris server



4 Target NADs mounted



5 NADs Wake on LAN and PXE boot

6 Altiris server distributes cloned image



7 NAD receives application specific files

