SYSTEM AND METHOD OF CREATING AND DELIVERING SOFTWARE

TECHNICAL FIELD OF THE INVENTION

The present invention relates generally to computer systems, and, in particular, to a system and method of creating and delivering software to the computer systems using an image builder.

BACKGROUND OF THE INVENTION

When software is installed on a hard drive of a personal computer, the hard drive must first be initialized and formatted. Software is then physically copied or loaded onto the hard drive from a floppy disk or a CD ROM disk. A disadvantage of physically installing software in this manner is the time required to do so.

When personal computers are mass produced, a manufacturer can take advantage of a common software configuration when loading software onto the hard drives. A computer system is set up as a model system having the desired software configuration that is to be duplicated in other personal computers. Once the model system has been set up, a digital image of the hard drive is created. The digital image is essentially a "picture" of the hard drive. Creating a digital image of the hard drive is well known to those skilled in the art. Once this image is created, it is distributed to the other hard drives requiring the same configuration. The result is that all of the computer systems receiving a copy of the image during their manufacturing and assembly process will have the same hard drive contents as the model system.

For software upgrades on existing computer systems, an image is created for a set of changes to be made to the hard drive and the set of changes are then transferred to the computer systems. This results in quicker computer upgrades, which in turn provides a cost savings, particularly when a large number of computer systems are to be upgraded.

Nonetheless, a disadvantage of this approach requires that a model system first be set up utilizing the same operating system and the same set of applications as desired on the other computer systems. To set up the model system, the software must be physically loaded from a disk onto the model computer system before the image can be created for transferring to the other computers.

Even if a group of computers are networked together, a baseline configuration must also be established on the file server which requires that the file server physically be set up with the desired software configuration from a disk. The file server then allows the networked computers to have access to the new configuration. Networking prevents a system administrator from having to install software upgrades individually on each computer system. However, the upgrade must first be made to the file server which requires installation via a disk.

What is needed is a method or process for creating a desired software configuration without having to create a separate baseline configuration for each unique software configuration. This would save time and expense for a manufacturer or even a system administrator supporting a large number of computer work stations.

For the reasons stated above, and for other reasons stated below which will become apparent to those skilled in the art upon reading and understanding the present specification, there is a need in the art for a software creation/distribution process that is performed without having to physically set up a model system using a disk for each unique configuration desired.

SUMMARY OF THE INVENTION

An image builder is a computerized network for generating a custom software configuration for a hard drive of a computer system according to a desired software configuration defined by a purchasing customer. The image builder surveys a database of software configurations to identify a match for a desired configuration or identify a baseline for the desired configuration. Once the baseline is identified, the image builder performs a comparison to create a set of changes that can be combined with or edited into the baseline image "picture" to generate the desired software configuration. This linear flow process utilizes intelligence and granularity in generating the desired software configuration.

In one embodiment, a computerized system for building a custom software configuration is provided. The computerized system comprises a processor, a computer readable medium, and a plurality of computer instructions executed by the processor from the computer readable medium for performing a series of steps. The steps include receiving a desired software configuration, surveying images of preexisting software configurations for a baseline software configuration similar to the desired software configuration, comparing an image of the baseline software configuration with the desired software configuration to determine a set of changes, and generating an image of the set of changes. The computerized system further includes the step of incorporating the image of the set of changes with the image of the baseline configuration to create the desired configuration.

In another embodiment, a computer readable medium having a computer readable program code embodied thereon is provided. The computer readable code comprising a computer readable code for causing a computer to receive a desired software configuration, a computer readable code for causing a computer to survey images of preexisting software configurations for a baseline software configuration similar to the desired software configuration, a computer readable code for causing a computer to compare an image of the baseline software configuration with the desired software configuration to determine a set of changes to be made to the baseline software configuration, and computer readable code for causing a computer to generate an image of the custom software configuration. The computer readable medium further comprises a computer readable program code for causing a computer to generate an image of the custom software configuration by incorporating the image of the set of changes with the image of the baseline configuration.

In yet another embodiment, a computerized network for creating and broadcasting a customized software configuration is provided. The computerized network comprises a computer system for receiving a desired software configuration, a storage device having a plurality of software configurations stored as images, and an image builder. The image builder receives the desired software configuration and surveys the storage device for an image of a baseline software configuration similar to the desired software configuration and compares the image with the desired software configuration to determine a set of changes, wherein the image builder generates an image of the custom software configuration by incorporating the image of the set of changes with the image of the baseline configuration and stores the image of the custom software configuration on the storage device. The computerized network also comprises an image server that retrieves the image of the custom software configuration from the storage device and broadcasts the image via a wired or wireless connection.