

## SYSTEM AND METHOD PROVIDING SINGLE APPLICATION IMAGE

### REFERENCE TO RELATED APPLICATION

This application is a continuation in part of U.S. patent application Ser. No. 09/606,383, which was filed Jun. 28, 2000, entitled USER INTERFACE TO DISPLAY AND MANAGE AN ENTITY AND ASSOCIATED RESOURCES, and is a continuation in part of U.S. patent application Ser. No. 09/714,568, which was filed Nov. 16, 2000, entitled SYSTEM AND METHOD PROVIDING VIRTUAL APPLICATIONS ARCHITECTURE which claims the benefit of U.S. Provisional Patent Application Ser. No. 60/231,874, which was filed Sep. 12, 2000, entitled SYSTEM AND METHOD PROVIDING VIRTUAL APPLICATIONS ARCHITECTURE.

### TECHNICAL FIELD

The present invention relates generally to computer systems, and more particularly to a system and method that facilitates administration of a plurality of various and disparate resources associated with an application via a singular application image.

### BACKGROUND OF THE INVENTION

With the advent of the Internet and other applications, computing system requirements and demands have increased dramatically. Many businesses, for example, have made important investments relating to Internet technology to support growing electronic businesses such as E-Commerce and other Internet related activities. In view of this and other considerations, hardware and software systems generally have become more complex in order to facilitate serving desired computational and/or network load requirements.

Today's web-based applications, for example, consist of many different types of resources providing various aspects of these systems. Managing these applications is a problematic and error prone endeavor, however. Since the resources often are dependent upon each other, it is important for an administrator to maintain the proper versions of the resources relative to each other when interacting with these applications. In addition to "versioning", there is an affinity and a dependence wherein, one file relies on a completely separate file, for example. Consequently, this is time-consuming and inefficient since clearly defining and maintaining an application generally requires knowledge of all resources associated with the application. Similarly, communications involving the application generally requires communication and knowledge of all components and/or resources of the application (e.g., for each and every person who interacts with the application at an administrative level).

During the development of an application, it is thus difficult to maintain knowledge of the components that make up the application. For example, currently there generally are no efficient tools or technologies for the definition and/or maintenance of the resources that make up an application. In addition, moving and/or copying of the application is problematic and error prone as it requires the administrator to be aware of all the various parts that make up the application. Monitoring an application is also problematic since it generally requires separate monitoring of the various portions of the application. Furthermore, performing various administrative tasks, such as, versioning, deployment, rolling back,

and scheduling tasks, for example, along with other issues, is problematic and also error prone since, these tasks generally operate on each resource individually.

### SUMMARY OF THE INVENTION

The following presents a simplified summary of the invention in order to provide a basic understanding of some aspects of the invention. This summary is not an extensive overview of the invention. It is intended to neither identify key or critical elements of the invention nor delineate the scope of the invention. Its sole purpose is to present some concepts of the invention in a simplified form as a prelude to the more detailed description that is presented later.

The present invention relates to a system and methodology providing a singular application image from a collection of disparate resources associated with an application. As an example, many Web-based and/or other applications consist of a plurality of different types of resources that collectively contribute to the overall functionality of the application. These resources often are distributed in various directories, memory locations, and files, as well as system configurations and/or other images, for example, within a computer system or distributed computing system. The singular application image of the present invention mitigates the time and complexity involved with administration of the resources as individual components (e.g., replication, monitoring, upgrading), as well as providing other aspects such as enabling application extensibility, for example.

In accordance with the present invention, a manifest is provided wherein 1 to N resources, N being an integer, are identified within a singular application image. The resources can be identified by resource identifiers associated with the respective resources within the manifest, wherein the singular application image includes an identifier such as a Globally Unique Identifier (GUID) to maintain the singular application identity. In this manner, administrative tasks can be performed on the singular application, thus mitigating the need for knowledge or direct manipulation of the resources that define the application. Other aspects of the invention include monitoring, versioning and staging of the singular application along with providing deployment, extensibility, and policy management capabilities. According to another aspect of the present invention, a Graphical User Interface (GUI) is provided for creation, enumeration, administration, management and deployment of the singular application image.

The following description and the annexed drawings set forth in detail certain illustrative aspects of the invention. These aspects are indicative, however, of but a few of the various ways in which the principles of the invention may be employed and the present invention is intended to include all such aspects and their equivalents. Other advantages and novel features of the invention will become apparent from the following detailed description of the invention when considered in conjunction with the drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic block diagram illustrating a singular application image in accordance with an aspect of the present invention.

FIG. 2 is a schematic block diagram illustrating a nested application image and application extensibility in accordance with an aspect of the present invention.

FIG. 3 is a diagram illustrating a more detailed singular application image in accordance with an aspect of the present invention.