

19

indicating that the installed program cannot be removed until the determined depending programs are removed.

23. The article of manufacture of claim 22, further capable of causing the computer system to perform continuing with the removal of the installed program after determining that the installed program is not a dependent component for another installed program.

24. The article of manufacture of claim 17, wherein the dependency object further includes an operating system field indicating the operating system on which the program will be installed, wherein the determined operating system command depends upon the operating system indicated in the operating system field, and wherein executing the operating system command further comprises passing data from the dependency object to the operating system command as parameters, dependent on the type of operating system indicated in the operating system field.

25. A memory within a computer system for storing data for access by an installation program for installing a program onto the computer system, comprising:

- a dependency object stored in the memory indicating a dependent component on which the program to install depends, wherein the dependency object is processed before installing the program; and
- a plurality of operating system commands for different operating systems, wherein one of the operating system commands that is capable of executing in the operating system in which the program is being installed is executed to determine whether the dependent component indicated in the dependency object is installed in the computer, and wherein an indication is made that the dependent component is not installed after determining that the dependent component is not installed.

26. The memory of claim 25, wherein the dependency object further includes an install script to install the dependent component onto the computer, wherein the install script is enabled after determining that the dependency object for the dependent component is not installed on the computer, wherein a user may select to execute the enabled install script to install the dependent component.

27. The memory of claim 26, wherein the dependency object further includes a universal resource locator (URL),

20

wherein a file at the URL is accessed and installed on the computer when executing the install script.

28. The memory of claim 26, wherein the dependency object is further capable of including install information, wherein the install script is enabled after determining that the install script is included in the dependency object and wherein the install information is presented to a user after determining that the dependency object does not include install script.

29. The memory of claim 25, wherein the memory further includes a plurality of dependency objects that are provided for indicating a plurality of dependent components on which the program to install depends, wherein the memory further includes a data structure indicating installed components and dependent components on which the installed components depend, wherein after installing the program and determining that the dependent components are installed in the computer, the data structure is updated to indicate the installed program, wherein the dependency objects are processed to determine the dependent components from which the installed program depends, and wherein an indication is made in the data structure of the dependent components determined from the dependency objects for the installed program.

30. The memory of claim 29, wherein the data structure indicates in a hierarchical relationship installed programs and at a lower hierarchical relationship to the installed program dependent components for the installed program.

31. The memory of claim 25, wherein the dependency object further includes an operating system field indicating the operating system on which the program will be installed, wherein an operating system command depends upon the operating system indicated in the operating system field, and wherein executing the operating system command further comprises passing data from the dependency object to the operating system command as parameters, dependent on the type of operating system indicated in the operating system field.

* * * * *