

a method including: operating a set of sensing devices associated with the asset to acquire sensor data independent of a user; evaluating at least a portion of the sensor data, the evaluating including determining whether any sensor data in the at least a portion of the sensor data is suspect; and initiating an action in response to determining at least a portion of the evaluated sensor data is suspect, wherein the action includes at least one of: adjusting additional processing of the sensor data, adjusting interaction between the computer system and at least one other system remote from the asset, or adjusting management operations of the asset.

[0010] Other aspects of the invention provide methods, systems, program products, and methods of using and generating each, which include and/or implement some or all of the actions described herein. The illustrative aspects of the invention are designed to solve one or more of the problems herein described and/or one or more other problems not discussed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] These and other features of the disclosure will be more readily understood from the following detailed description of the various aspects of the invention taken in conjunction with the accompanying drawings that depict various aspects of the invention.

[0012] FIG. 1 shows an illustrative environment including an asset according to an embodiment.

[0013] FIG. 2 shows an illustrative computer system comprising various components according to an embodiment.

[0014] FIG. 3 shows an illustrative flow diagram for evaluating sensor data acquired on an asset according to an embodiment.

[0015] It is noted that the drawings may not be to scale. The drawings are intended to depict only typical aspects of the invention, and therefore should not be considered as limiting the scope of the invention. In the drawings, like numbering represents like elements between the drawings.

DETAILED DESCRIPTION OF THE INVENTION

[0016] As indicated above, aspects of the invention provide a solution for managing an asset. A set of sensing devices associated with the asset are operated independent of a user to acquire sensor data. At least some of the sensor data is evaluated using a computer system associated with the asset to determine whether any sensor data in at least a portion of the sensor data is suspect. In response to a determination that at least a portion of the evaluated sensor data is suspect, an action is initiated by the computer system associated with the asset. The action can include adjusting additional processing of the sensor data, adjusting interaction between the computer system and at least one other system remote from the asset, and/or adjusting management operations of the asset. In this manner, evaluation of the sensor data can be performed locally to the sensing devices, which can enable, among other things, a reduction (or elimination) in the transmission of suspect sensor data, power consumption by malfunctioning sensing devices, a complexity of processing required in systems remote from the asset, and/or the like. As used herein, unless otherwise noted, the term “set” means one or more (i.e., at least one) and the phrase “any solution” means any now known or later developed solution.

[0017] Turning to the drawings, FIG. 1 shows an illustrative environment 10 including an asset 12 according to an embodiment. To this extent, asset 12 includes a computer

system 20 that can perform a process described herein in order to manage operation of various input/output (I/O) devices 40 on/associated with the asset 12. In particular, computer system 20 is shown including a management program 30, which makes computer system 20 operable to manage operation of the I/O devices 40 by performing a process described herein. As described herein, the asset 12 can provide/receive information to/from one or more users 14 and/or third parties 16. A user 14 or third party 16 can be a human, another machine, a service provided by another computer system, and/or the like.

[0018] Computer system 20 is shown including a processing component 22 (e.g., one or more processors), a storage component 24 (e.g., a storage hierarchy), an input/output (I/O) component 26 (e.g., one or more I/O interfaces and/or devices), and a communications pathway 28. In general, processing component 22 executes program code, such as management program 30, which is at least partially fixed in storage component 24. While executing program code, processing component 22 can process data, which can result in reading and/or writing transformed data from/to storage component 24 and/or I/O component 26 for further processing. Pathway 28 provides a communications link between each of the components in computer system 20. I/O component 26 can comprise one or more human I/O devices, which enable a human user 14 to interact with computer system 20 and/or one or more communications devices to enable a system (e.g., machine) user 14 to communicate with computer system 20 using any type of communications link. To this extent, management program 30 can manage a set of interfaces (e.g., graphical user interface(s), application program interface, and/or the like) that enable human and/or system users 14 to interact with management program 30. Further, management program 30 can manage (e.g., store, retrieve, create, manipulate, organize, present, etc.) the data, such as management data 34, using any solution.

[0019] In any event, computer system 20 can comprise one or more general purpose computing articles of manufacture (e.g., computing devices) capable of executing program code, such as management program 30, installed thereon. As used herein, it is understood that “program code” means any collection of instructions, in any language, code or notation, that cause a computing device having an information processing capability to perform a particular action either directly or after any combination of the following: (a) conversion to another language, code or notation; (b) reproduction in a different material form; and/or (c) decompression. To this extent, management program 30 can be embodied as any combination of system software and/or application software.

[0020] Further, management program 30 can be implemented using a set of modules 32. In this case, a module 32 can enable computer system 20 to perform a set of tasks used by management program 30, and can be separately developed and/or implemented apart from other portions of management program 30. As used herein, the term “component” means any configuration of hardware, with or without software, which implements the functionality described in conjunction therewith using any solution, while the term “module” means program code that enables a computer system 20 to implement the actions described in conjunction therewith using any solution. When fixed in a storage component 24 of a computer system 20 that includes a processing component 22, a module is a substantial portion of a component that implements the actions. Regardless, it is understood that two