

distinguished. However, as technologies develop, the current improvement for many method procedures can be considered as a direct improvement of a hardware circuit structure. A designer usually programs an improved method procedure to a hardware circuit, so as to obtain a corresponding hardware circuit structure. Therefore, a method procedure can be improved by using a hardware entity module. For example, a programmable logic device (PLD) (for example, a field programmable gate array (FPGA)) is such an integrated circuit, and a logical function of the programmable logic device is determined by a user through device programming. The designer performs programming to "integrate" a digital system to a PLD without requesting a chip manufacturer to design and produce an application-specific integrated circuit chip. In addition, at present, instead of manually manufacturing an integrated chip, this type of programming is mostly implemented by using "logic compiler" software. The programming is similar to a software compiler used to develop and write a program. Original code needs to be written in a particular programming language for compilation. The language is referred to as a hardware description language (HDL). There are many HDLs, such as the Advanced Boolean Expression Language (ABEL), the Altera Hardware Description Language (AHDL), Confluence, the Cornell University Programming Language (CUPL), HDCal, the Java Hardware Description Language (JHDL), Lava, Lola, MyHDL, PALASM, and the Ruby Hardware Description Language (RHDL). The very-high-speed integrated circuit hardware description language (VHDL) and Verilog are most commonly used. A person skilled in the art should also understand that a hardware circuit that implements a logical method procedure can be readily obtained once the method procedure is logically programmed by using the several described hardware description languages and is programmed into an integrated circuit.

[0059] A controller can be implemented by using any appropriate method. For example, the controller can be a microprocessor or a processor, or a computer-readable medium that stores computer readable program code (such as software or firmware) that can be executed by the microprocessor or the processor, a logic gate, a switch, an application-specific integrated circuit (ASIC), a programmable logic controller, or a built-in microprocessor. Examples of the controller include but are not limited to the following microprocessors: ARC 625D, Atmel AT91SAM, Microchip PIC18F26K20, and Silicon Labs C8051F320. The memory controller can also be implemented as a part of the control logic of the memory. A person skilled in

CLAIMS

1. A computer-implemented method for data processing, comprising:

obtaining, from a first service system and by a second service system, original event
5 attributes of an event, wherein the first service system provides attribute data in a first format and
wherein the second service system provides attribute data in a second format;

obtaining support data from a support service system that provides attribute data in a
support data format;

performing, by the second service system, data filling to the original event attributes to
10 obtain the attribute data in the second format based on the support data and a pre-configured
event correlation configuration that comprises an attribute configuration; and

providing, by the second service system, the attribute data in the second format to a third
service system that provides attribute data in a third format for the third service system to
perform data conversion based on the original event attributes and the attribute data in the second
15 format to obtain updated event attributes, wherein the third format is different from the second
format.

2. The computer-implemented method according to claim 1, comprising:

before performing data filling, obtaining the pre-configured event correlation configuration
20 based on at least one of a pre-configured attribute configuration mapping relationship or at least
one of the original event attributes.

3. The computer-implemented method according to claim 1, wherein the pre-configured
event correlation configuration further comprises a predetermined attribute configuration and the
25 attribute data further comprises a predetermined attribute.

4. The computer-implemented method according to claim 3, comprising:

performing the data filling based on the predetermined attribute configuration to obtain the
predetermined attribute.

5. The computer-implemented method according to claim 3, wherein the attribute data further comprises correlation data obtained by performing the data filling based on the pre-configured event correlation configuration.

5 6. The computer-implemented method according to claim 5, wherein performing data conversion to obtain the updated event attributes comprises:

arranging the original event attributes and the correlation data to obtain arranged data; and
converting the arranged data based on a conversion mode to obtain the updated event attributes.

10 7. The computer-implemented method according to claim 6, wherein converting the arranged data based on the conversion mode to obtain the updated event attributes comprises:

obtaining a configuration script based on the predetermined attribute configuration; and
converting the arranged data based on the configuration script to obtain the updated event
15 attributes.

8. A non-transitory, computer-readable medium storing one or more instructions executable by a computer system to perform operations comprising:

obtaining, from a first service system and by a second service system, original event
20 attributes of an event, wherein the first service system provides attribute data in a first format and wherein the second service system provides attribute data in a second format;

obtaining support data from a support service system that provides attribute data in a support data format;

performing, by the second service system, data filling to the original event attributes to
25 obtain the attribute data in the second format based on the support data and a pre-configured event correlation configuration that comprises an attribute configuration; and

providing, by the second service system, the attribute data in the second format to a third service system that provides attribute data in a third format for the third service system to perform data conversion based on the original event attributes and the attribute data in the second
30 format to obtain updated event attributes, wherein the third format is different from the second format.

9. The non-transitory, computer-readable medium according to claim 8, the operations comprising:

before performing data filling, obtaining the pre-configured event correlation configuration
5 based on at least one of a pre-configured attribute configuration mapping relationship or at least one of the original event attributes.

10. The non-transitory, computer-readable medium according to claim 8, wherein the pre-configured event correlation configuration further comprises a predetermined attribute
10 configuration and the attribute data further comprises a predetermined attribute.

11. The non-transitory, computer-readable medium according to claim 10, the operations comprising:

performing the data filling based on the predetermined attribute configuration to obtain the
15 predetermined attribute.

12. The non-transitory, computer-readable medium according to claim 10, wherein the pre-configured event correlation configuration further comprises a correlation data configuration, and the attribute data further comprises correlation data obtained by performing the data filling
20 based on the pre-configured event correlation configuration.

13. The non-transitory, computer-readable medium according to claim 12, wherein performing data conversion to obtain the updated event attributes comprises:

arranging the original event attributes and the correlation data to obtain arranged data; and
25 converting the arranged data based on a conversion mode to obtain the updated event attributes.

14. The non-transitory, computer-readable medium according to claim 13, wherein converting the arranged data based on the conversion mode to obtain the updated event attributes
30 comprises:

obtaining a configuration script based on the predetermined attribute configuration; and

converting the arranged data based on the configuration script to obtain the updated event attributes.

15. A computer-implemented system, comprising:

one or more computers; and

one or more computer memory devices interoperably coupled with the one or more computers and having tangible, non-transitory, machine-readable media storing one or more instructions that, when executed by the one or more computers, perform one or more operations comprising:

5 obtaining, from a first service system and by a second service system, original event attributes of an event, wherein the first service system provides attribute data in a first format and wherein the second service system provides attribute data in a second format;

obtaining support data from a support service system that provides attribute data in a support data format;

10 performing, by the second service system, data filling to the original event attributes to obtain the attribute data in the second format based on the support data and a pre-configured event correlation configuration that comprises an attribute configuration; and

providing, by the second service system, the attribute data in the second format to a third service system that provides attribute data in a third format for the third service system to perform data conversion based on the original event attributes and the attribute data in the second format to obtain updated event attributes, wherein the third format is different from the second format.

16. The computer-implemented system according to claim 15, the operations comprising:

20 before performing data filling, obtaining the pre-configured event correlation configuration based on at least one of a pre-configured attribute configuration mapping relationship or at least one of the original event attributes.

17. The computer-implemented system according to claim 15, wherein the pre-configured event correlation configuration further comprises a predetermined attribute configuration and the attribute data further comprises a predetermined attribute.

18. The computer-implemented system according to claim 17, the operations comprising:
performing the data filling based on the predetermined attribute configuration to obtain the
predetermined attribute.

5

19. The computer-implemented system according to claim 17, wherein the pre-configured
event correlation configuration further comprises a correlation data configuration, and the
attribute data further comprises correlation data obtained by performing the data filling based on
the pre-configured event correlation configuration.

10

20. The computer-implemented system according to claim 19, wherein performing data
conversion to obtain the updated event attributes comprises:

arranging the original event attributes and the correlation data to obtain arranged data; and

converting the arranged data based on a conversion mode to obtain the updated event
attributes.

15

21. The computer-implemented system according to claim 20, wherein converting the
arranged data based on the conversion mode to obtain updated event attributes comprises:

obtaining a configuration script based on the predetermined attribute configuration; and

converting the arranged data based on the configuration script to obtain the updated event
attributes.

20