United States Patent Application Publication	20250265131
Kind Code	A1
Publication Date	August 21, 2025
Inventor(s)	XU; Bei et al.

DATA SYNCHRONIZATION METHOD, STORAGE MEDIUM, AND ELECTRONIC DEVICE

Abstract

The present disclosure provides a method applied to a first electronic device. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor controls an application of a first application version based on obtained application control information, and synchronizes the application control information to an application of a corresponding second application version. The second processor controls the application of the second application version based on the synchronized application control information.

Inventors: XU; Bei (Xi'an, CN), ZHANG; Tao (Xi'an, CN), LI; Peng (Dongguan, CN)

Applicant: HUAWEI TECHNOLOGIES CO., LTD. (Shenzhen, CN)

Family ID: 1000008617535

Appl. No.: 19/201117

Filed: May 07, 2025

Foreign Application Priority Data

CN	202211393561.3	Nov. 08, 2022

Related U.S. Application Data

parent WO continuation PCT/CN2023/128527 20231031 PENDING child US 19201117

Publication Classification

Int. Cl.: **G06F9/52** (20060101); **G06F8/61** (20180101); **G06F8/65** (20180101)

Background/Summary

CROSS-REFERENCE TO RELATED APPLICATIONS [0001] This application is a continuation of International Application No. PCT/CN2023/128527, filed on Oct. 31, 2023, which claims priority to Chinese Patent Application No. 202211393561.3, filed on Nov. 8, 2022. The disclosures of the aforementioned applications are hereby incorporated by reference in their entireties.

TECHNICAL FIELD
[0002] Embodiments of the present disclosure relate to the field of data synchronization technologies, and in particular, to a data synchronization method, a storage medium, and an electronic device.
BACKGROUND
[0003] A smart watch has two working modes: a smart mode and an ultra-long battery life mode. When the smart watch works in the smart mode, a list of available applications supported by a watch application market is an ecosystem application in the smart mode. The smart watch may implement a plurality of functions through the installed ecosystem application, and has a strong device capability and rich functions, but is very power-consuming. After the smart watch is switched to the ultra-long battery life mode, an ecological capability of the smart watch completely inherits a sport watch, the list of available applications supported by the watch application market is an ecosystem application in the ultra-long battery life mode, and power is saved.
[0004] However, when the smart watch is switched from the smart mode to the ultra-long battery life mode, a service of the ecosystem application in the smart mode and a service of a same ecosystem application in the ultra-long battery life mode cannot be switched to a same state.
SUMMARY
[0005] In view of this, embodiments of the present disclosure provide a data synchronization method, a storage medium, and an electronic device, to resolve a problem, in a conventional technology, that when a smart watch is switched from a smart mode to an ultra-long battery life mode, a service of an ecosystem application in the smart mode and a service of a same ecosystem application in the ultra-long battery life mode cannot be switched to a same state.
[0006] According to a first aspect, an embodiment of the present disclosure provides a data synchronization method, applied to a first electronic device. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor runs a function based on a first application version; or when the first electronic device works in a second working mode, the second processor runs a function based on a second application version. The method includes:
[0007] When the first electronic device works in the first working mode, the first processor controls an application of the first application version based on obtained application control information, and synchronizes the application control information to an application of the corresponding second application version; and [0008] the second processor controls the application of the second application version based on the synchronized application control information.
[0009] In one embodiment, the application control information is application data information;
[0010] the application of the first application version is a source application (a target application) of the first application version, and the application of the second application version is a target application of the second application version; [0011] a process in which the first processor controls the application of the first application version based on the obtained application control information

includes: [0012] the first processor updates the application data information to a package of the source application (the target application) of the first application version; [0013] a process in which the first processor synchronizes the application control information to the application of the corresponding second application version includes: [0014] the first processor transparently transmits the application data information to the second processor based on a package name of the target application through a cross-core communication module; [0015] that the second processor controls the application of the second application version based on the synchronized application control information includes: [0016] the second processor synchronously updates the application data information to a package of the target application of the second application version based on a package name of the target application; and [0017] after that the second processor synchronously updates the application data information to a package of the target application of the second application version based on a package name of the target application, the method further includes: [0018] the second processor executes a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

[0019] In one embodiment, the application data information is device subscription management information; [0020] the source application (the target application) is an application device subscription management service; and [0021] the method further includes: [0022] when the first electronic device works in the first working mode, the first processor sends, based on the updated device subscription management information in a package of the application device subscription management service of the first application version, device subscription information corresponding to the device subscription management information to a second electronic device connected to the first processor; or [0023] when the first electronic device works in the second working mode, the second processor sends, based on the updated device subscription management information in a package of the application device subscription management service of the second application version, device subscription information corresponding to the device subscription management information to a second electronic device connected to the second processor.

[0024] In one embodiment, the application data information is in-application data; [0025] the source application (the target application) is a service application; and [0026] the method further includes: [0027] when the first electronic device works in the first working mode, the first processor executes a corresponding service based on the updated in-application data in a package of the service application of the first application version; or [0028] when the first electronic device works in the second working mode, the second processor executes a corresponding service based on the updated in-application data in a package of the service application of the second application version.

[0029] In one embodiment, the application control information is application installation state control information; [0030] the application of the first application version is an application market of the first application version, and the application of the second application version is an application market of the second application version; [0031] a process in which the first processor controls the application of the first application version based on the obtained application control information includes: [0032] the first processor performs corresponding application processing on the application market of the first application version based on the application installation state control information, where the application processing includes at least one of installation, uninstallation, and updating; and [0033] a process in which the second processor controls the application of the second application version based on the synchronized application control information includes: [0034] the second processor performs corresponding application processing on the application market of the second application version based on the synchronized application installation state control information.

[0035] In one embodiment, that the first processor transparently transmits the application data information to the second processor based on a package name of the target application through a

cross-core communication module includes:

[0036] The first processor sends cross-core information and the application data information to the cross-core communication module, where the cross-core information includes the package name of the target application; [0037] the cross-core communication module finds detection information based on the package name of the target application; and [0038] the cross-core communication module transparently transmits the application data information to the second processor based on the detection information and the package name of the target application.

[0039] In one embodiment, after that the second processor controls the application of the second application version based on the synchronized application control information, the method further includes:

[0040] The second processor generates a synchronization success message; and [0041] the second processor sends the synchronization success information to the first processor through a cross-core communication module.

[0042] According to a second aspect, an embodiment of the present disclosure provides a first electronic device. The first electronic device includes a first processor, a second processor, and a cross-core communication module; the first processor and the second processor are connected through the cross-core communication module, the first processor includes a part of the cross-core communication module, and the second processor includes a part of the cross-core communication module; and when the first electronic device works in a first working mode, the first processor runs a function based on a first application version; or when the first electronic device works in a second working mode, the second processor runs a function based on a second application version; [0043] when the first electronic device works in the first working mode, the first processor is configured to control an application of the first application version based on obtained application control information, and synchronize the application control information to an application of the corresponding second application version; and [0044] the second processor is configured to control the application of the second application version based on the synchronized application control information. In one embodiment, the application control information is application data information; [0045] the application of the first application version is a source application (a target application) of the first application version, and the application of the second application version is a target application of the second application version; [0046] the first processor is configured to: update the application data information to a package of the source application (the target application) of the first application version; and transparently transmit the application data information to the second processor based on a package name of the target application through the cross-core communication module; and [0047] the second processor is configured to: synchronously update the application data information to a package of the target application of the second application version based on a package name of the target application; and execute a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

[0048] According to a third aspect, an embodiment of the present disclosure provides a storage medium. The storage medium includes a stored program; and when the program is run, a device in which the storage medium is located is controlled to perform the data synchronization method according to any one of the first aspect or the embodiments of the first aspect.

[0049] In technical solutions of a data synchronization method, a storage medium, and an electronic device provided in embodiments of the present disclosure, the method is applied to a first electronic device. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor controls an application of a first application version based on obtained application control information, and synchronizes the application control information to an application of a corresponding second application version. The second processor controls the application of the second application version based on the synchronized application control information, so that when the electronic device

works in the first working mode, a process of the application of the second application version in a second working mode is the same as a process of the application of the first application version in the first working mode, and the process of the application of the second application version in the second working mode is the same as the process of the application of the first application version in the first working mode. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state, and user experience is improved.

Description

BRIEF DESCRIPTION OF DRAWINGS

[0050] To describe technical solutions in embodiments of the present disclosure more clearly, the following briefly describes the accompanying drawings used in describing embodiments. Apparently, the accompanying drawings in the following descriptions show merely some embodiments of the present disclosure, and a person of ordinary skill in the art may still derive other drawings from these accompanying drawings without creative efforts.

[0051] FIG. **1** is a diagram of a structure of a first electronic device according to an embodiment of the present disclosure;

[0052] FIG. **2** is a flowchart of a data synchronization method according to an embodiment of the present disclosure;

[0053] FIG. **3** is a diagram of one type of synchronization information according to an embodiment of the present disclosure;

[0054] FIG. **4** is a flowchart of another data synchronization method according to an embodiment of the present disclosure;

[0055] FIG. **5** is a diagram of another type of synchronization according to an embodiment of the present disclosure;

[0056] FIG. **6** is a diagram of synchronizing in-application data according to an embodiment of the present disclosure;

[0057] FIG. **7**A and FIG. **7**B are a diagram of synchronizing device subscription management information according to an embodiment of the present disclosure; and

[0058] FIG. **8** is a diagram of a structure of another first electronic device according to an embodiment of the present disclosure.

DESCRIPTION OF EMBODIMENTS

[0059] To better understand the technical solutions in the present disclosure, the following describes embodiments of the present disclosure in detail with reference to the accompanying drawings.

[0060] It should be clear that described embodiments are merely some but not all of embodiments of the present disclosure. All other embodiments obtained by a person of ordinary skill in the art based on embodiments of the present disclosure without creative efforts shall fall within the protection scope of the present disclosure.

[0061] The terms used in embodiments of the present disclosure are merely for the purpose of illustrating embodiments, and are not intended to limit the present disclosure. The terms "a", "the", and "this" of singular forms used in embodiments and the appended claims of the present disclosure are also intended to include plural forms, unless otherwise specified in the context clearly.

[0062] It should be understood that the term "and/or" in this specification describes only an association relationship for describing associated objects and represents that three relationships may exist. For example, A and/or B may represent the following cases: Only A exists, both A and B

exist, and only B exists. In addition, the character "/" in this specification usually indicates an "or" relationship between the associated objects.

[0063] It should be understood that, although terms such as "first", "second", and "third" may be used in embodiments of the present disclosure to describe quantities, the quantities should not be limited to these terms. These terms are merely used to distinguish between the quantities from each other. For example, without departing from the scope of embodiments of the present disclosure, a first quantity may also be referred to as a second quantity, and similarly, a second quantity may also be referred to as a first quantity.

[0064] Depending on the context, for example, words "if" used herein may be explained as "while" or "when" or "in response to determining" or "in response to detecting". Similarly, depending on the context, phrases "if determining" or "if detecting (a stated condition or event)" may be explained as "when determining" or "in response to determining" or "when detecting (the stated condition or event)" or "in response to detecting (the stated condition or event)".

[0065] FIG. **1** is a diagram of a structure of a first electronic device according to an embodiment of the present disclosure. FIG. **1** is a diagram of a structure of a first electronic device **100**.

[0066] The first electronic device **100** may include a processor **110**, an internal memory **121**, an antenna **2**, a wireless communication module **160**, an audio module **170**, a speaker **170**A, a microphone **170**C, a sensor module **180**, a button **190**, a camera **193**, a display **194**, and the like. The sensor module **180** may include a gyroscope sensor **180**B, an acceleration sensor **180**E, a touch sensor **180**K, and the like.

[0067] It may be understood that the structure shown in embodiments of the present disclosure does not constitute a limitation on the first electronic device **100**. In some other embodiments of the present disclosure, the first electronic device **100** may include more or fewer components than those shown in the figure, or some components may be combined, or some components may be split, or different component arrangements may be used. The components shown in the figure may be implemented by hardware, software, or a combination of software and hardware.

[0068] The processor **110** may include one or more processing units. For example, the processor **110** may include an application processor, a modem processor, a graphics processing unit (GPU), an image signal processor (ISP), a controller, a video codec, a digital signal processor (DSP), a baseband processor, a neural-network processing unit (NPU), and/or the like. Different processing units may be independent components, or may be integrated into one or more processors.

[0069] The controller may generate an operation control signal based on an instruction operation code and a time sequence signal, to complete control of instruction fetching and instruction execution.

[0070] The processor **110** in embodiments of the present disclosure is a processor **110** that may include two or more processors. For example, the processor **110** includes a first processor and a second processor.

[0071] The first processor may include one or more processing units. For example, the first processor may include an application processor, a modem processor, a graphics processing unit (GPU), an image signal processor (ISP), a controller, a video codec, a digital signal processor (DSP), a baseband processor, a neural-network processing unit (NPU), and/or the like. Different processing units may be independent components, or may be integrated into one or more processors.

[0072] The first processor is responsible for running various applications of the first electronic device, including interaction between a UI human-machine interaction interface, a cloud server, and a second electronic device, and the like. Therefore, the first processor is usually with high power consumption and a strong processing capability. The first processor may be a central processing unit (CPU), a digital signal processor (DSP), or the like. Embodiments of the present disclosure are not limited thereto.

[0073] The first processor runs in a first working mode, and the second processor may run in a

second working mode. The second processor is connected to the first processor. For example, the first processor and the second processor are connected through wired communication (for example, a serial bus, a cross-core communication module, or a parallel bus).

[0074] In embodiments of the present disclosure, after the first processor detects an event that a user selects the second working mode, the first processor with a large workload and large power consumption is disabled, so that the first electronic device **100** runs in the second working mode through the second processor with a small workload and low power consumption.

[0075] The second processor may be a processor with low power consumption, for example, a micro control unit (MCU) or a digital signal processor (DSP). Running power consumption of the first processor in the first working mode is greater than running power consumption of the second processor in the second working mode.

[0076] A wireless communication function of the first electronic device **100** may be implemented through the antenna **2**, the wireless communication module **160**, and the like.

[0077] The antenna **2** is configured to transmit and receive electromagnetic wave signals. Each antenna in the first electronic device **100** may be configured to cover one or more communication bands. Different antennas may be further multiplexed, to improve antenna utilization.

[0078] The wireless communication module **160** may provide a wireless communication solution that is applied to the first electronic device **100** and that includes a wireless local area network (WLAN) (for example, a wireless fidelity (Wi-Fi) network), Bluetooth (BT), a global navigation satellite system (GNSS), frequency modulation (FM), a near field communication (NFC) technology, an infrared (IR) technology, or the like. The wireless communication module **160** may be one or more components integrating at least one communication processor module. The wireless communication module **160** receives an electromagnetic wave through the antenna **2**, performs frequency modulation and filtering processing on an electromagnetic wave signal, and sends a processed signal to the processor **110**. The wireless communication module **160** may further receive a to-be-sent signal from the processor **110**, perform frequency modulation and amplification on the signal, and convert the signal into an electromagnetic wave for radiation through the antenna **2**.

[0079] The first electronic device **100** implements a display function through the GPU, the display **194**, the application processor, and the like. The GPU is a microprocessor for image processing, and is connected to the display **194** and the application processor. The GPU is configured to: perform mathematical and geometric computation, and render an image. The processor **110** may include one or more GPUs that execute program instructions to generate or change display information.

[0080] The internal memory **121** may be configured to store computer-executable program code. The executable program code includes instructions. The internal memory **121** may include a program storage area and a data storage area. The program storage area may store an operating system, an application required by at least one function (for example, a voice playing function or an image playing function), and the like. The data storage area may store data (for example, audio data and an address book) and the like created in a process of using the first electronic device **100**. In addition, the internal memory **121** may include a high-speed random access memory, or may include a nonvolatile memory, for example, at least one magnetic disk storage device, a flash memory, or a universal flash storage (UFS). The processor **110** runs instructions stored in the internal memory **121** and/or instructions stored in the memory disposed in the processor, to perform various function applications of the first electronic device **100** and data processing.

[0081] The first electronic device **100** may implement an audio function, for example, music playing and recording, through the audio module **170**, the speaker **170**A, the microphone **170**C, the application processor, and the like.

[0082] The audio module **170** is configured to convert digital audio information into an analog audio signal for output, and is also configured to convert an analog audio input into a digital audio

signal. The audio module **170** may be further configured to encode and decode an audio signal. In some embodiments, the audio module **170** may be disposed in the processor **110**, or some functional modules in the audio module **170** are disposed in the processor **110**.

[0083] The speaker **170**A, also referred to as a "loudspeaker", is configured to convert an audio electrical signal into a sound signal. The first electronic device **100** may be used to listen to music or answer a call in a hands-free mode through the speaker **170**A.

[0084] The microphone **170**C, also referred to as a "mike" or a "mic", is configured to convert a sound signal into an electrical signal. When making a call or sending voice information, the user may make a sound near the microphone **170**C through a mouth of the user, and input a sound signal to the microphone **170**C. At least one microphone **170**C may be disposed in the first electronic device **100**. In some other embodiments, two microphones **170**C may be disposed in the first electronic device **100**, to collect a sound signal and implement a noise reduction function. In some other embodiments, three, four, or more microphones **170**C may alternatively be disposed in the first electronic device **100**, to collect a sound signal, implement noise reduction, and identify a sound source, to implement a directional recording function and the like.

[0085] The gyroscope sensor **180**B may be configured to determine a motion posture of the first electronic device **100**. In some embodiments, an angular velocity of the first electronic device **100** around three axes (namely, axes x, y, and z) may be determined through the gyroscope sensor **180**B. The gyroscope sensor **180**B may also be used in a navigation scenario and a somatic game scenario.

[0086] The acceleration sensor **180**E may detect accelerations in various directions (usually on three axes) of the first electronic device **100**. When the first electronic device **100** is still, the acceleration sensor **180**E may detect a magnitude and a direction of gravity. The acceleration sensor **180**E may be further configured to identify a posture of the first electronic device, and is used in an application such as switching between a landscape mode and a portrait mode or a pedometer.

[0087] The touch sensor **180**K is also referred to as a "touch component". The touch sensor **180**K may be disposed on the display **194**, and the touch sensor **180**K and the display **194** constitute a touchscreen, which is also referred to as a "touch screen". The touch sensor **180**K is configured to detect a touch operation performed on or near the touch sensor. The touch sensor may transfer the detected touch operation to the application processor to determine a type of a touch event. A visual output related to the touch operation may be provided through the display **194**. In some other embodiments, the touch sensor **180**K may also be disposed on a surface of the first electronic device **100** at a location different from that of the display **194**.

[0088] The button **190** includes a power button, a volume button, and the like. The button **190** may be a mechanical button, or may be a touch button. The first electronic device **100** may receive a button input, and generate a button signal input related to a user setting and function control of the first electronic device **100**.

[0089] Embodiments of the present disclosure provide a data synchronization method applied to a first electronic device. The first electronic device includes but is not limited to a mobile phone, a tablet computer, a portable PC, a desktop computer, a wearable device, and the like, and the wearable device includes a smart watch. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor runs a function based on a first application version; or when the first electronic device works in a second working mode, the second processor runs a function based on a second application version. FIG. **2** is a flowchart of a data synchronization method according to an embodiment of the present disclosure. As shown in FIG. **2**, the method includes the following operations.

[0090] Operation **101**: When a first electronic device works in a first working mode, a first processor controls an application of a first application version based on obtained application

control information, and synchronizes the application control information to an application of a corresponding second application version.

[0091] In this embodiment of the present disclosure, when the first electronic device works in the first working mode, the first processor shown in FIG. **1** is powered on, and the first processor runs in the first working mode.

[0092] FIG. **3** is a diagram of one type of synchronization information according to an embodiment of the present disclosure. As shown in FIG. **3**, a first electronic device is communicatively connected to a second electronic device. The first electronic device includes a first processor, a cross-core communication module, and a second processor. The first processor includes a part of the cross-core communication module, and the second processor also includes a part of the cross-core communication module, so that the first processor is communicatively connected to the second processor through the cross-core communication module. When the first electronic device works in a first working mode, the first processor is communicatively connected to the second electronic device. The second electronic device supports a distributed function of the first working mode for the first electronic device. The first processor runs an application of a first application version, and the application of the first application version is an application running in the first working mode. For example, the first processor runs an ecosystem application (the first application version). The first processor synchronizes application control information to the second processor through the cross-core communication module. When a working mode of the first electronic device is switched from the first working mode to a second working mode, the first processor is powered off and the second processor is powered on, the communication connection between the first processor and the second electronic device is disconnected, and the second processor is communicatively connected to the second electronic device. The second electronic device includes an application of a third application version, the application of the third application version includes a distributed communication software development kit (SDK), and the distributed communication SDK is middleware. An SDK apparatus corresponding to the SDK of the second electronic device may be configured to receive a mode switching notification sent by the first electronic device, and may also be configured to support a distributed function of the second working mode for the first electronic device. The second processor runs an application of a second application version, the application of the second application version is an application running in the second working mode, and a name of the application of the second application version is usually the same as a name of the application of the first application version. For example, the second processor runs an ecosystem application (the second application version). The second processor synchronizes the application control information to the first processor through the cross-core communication module.

[0093] For example, the first electronic device is a smart watch, and the second electronic device is a mobile phone. When the first processor is a wireless access point (AP) processor, the second processor is an MCU processor, the first working mode is a smart mode, and the second working mode is an ultra-long battery life mode. Alternatively, when the first processor is an MCU processor, the second processor is an AP processor, the first working mode is an ultra-long battery life mode, and the second working mode is a smart mode.

[0094] When the first electronic device works in the first working mode, the first processor obtains the application control information, and the application control information may be information received from the second electronic device, or may be information generated in response to an operation of a user.

[0095] As shown in FIG. **3**, the first processor synchronizes the obtained application control information to the second processor in real time through the cross-core communication module.

[0096] Operation **201**: The second processor controls the application of the second application version based on the synchronized application control information.

[0097] In this embodiment of the present disclosure, the second processor receives, through the cross-core communication module, the application control information sent by the first processor,

and controls the application of the second application version based on the application control information.

[0098] For example, as shown in FIG. **3**, the second processor controls the application of the second application version based on the application control information, so that a real-time and automatic synchronization process between the first processor and the second processor is implemented, thereby achieving effect of synchronizing a process of the application of the second application version with a process of the application of the first application version. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state.

[0099] An embodiment of the present disclosure provides a data synchronization method, applied to a first electronic device. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor controls an application of a first application version based on obtained application control information, and synchronizes the application control information to an application of a corresponding second application version. The second processor controls the application of the second application version based on the synchronized application control information, so that when the electronic device works in the first working mode, a process of the application of the second application version in a second working mode is the same as a process of the application of the first application version in the first working mode. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state, and user experience is improved.

[0100] FIG. **4** is a flowchart of another data synchronization method according to an embodiment of the present disclosure. As shown in FIG. **4**, the method includes the following operations:

Operation **301**: When a first electronic device works in a first working mode, a first processor determines obtained application control information; and if the first processor determines that the application control information is application data information, operation **302** is performed; or if the first processor determines that the application control information is application installation state control information, operation **303** is performed.

[0101] The application control information includes the application data information or the application installation state control information, and the application data information includes device subscription management information or in-application data.

[0102] FIG. **5** is a diagram of another type of synchronization according to an embodiment of the present disclosure. As shown in FIG. **5**, a first electronic device is a smart watch, a second electronic device is a mobile phone, the smart watch is communicatively connected to the mobile phone, and the mobile phone may be further communicatively connected to a cloud device. A first processor is an AP processor, a second processor is an MCU processor, a first working mode is a smart mode, and a second working mode is an ultra-long battery life mode. Mode switching may be performed on the working mode of the smart watch, and the mode of the smart watch is switched from the smart mode to the ultra-long battery life mode. When the mode of the smart watch is switched, the smart watch sends a mode switching notification to the mobile phone. A distributed communication software development kit of an application market of the mobile phone switches, based on mode switching information sent by the smart watch, a distributed function supported by the application market of the mobile phone end from a distributed function supporting the smart mode to a distributed function supporting the ultra-long battery life mode. A distributed communication SDK apparatus of an ecosystem application of the mobile phone switches, based on the mode switching information sent by the smart watch, a distributed function supported by the ecosystem application of the mobile phone end from the distributed function supporting the smart

mode to the distributed function supporting the ultra-long battery life mode.

[0103] When the smart watch works in the smart mode, the AP processor runs at least one of an application market, an ecosystem application, and distributed communication subscription management in the smart mode. The AP processor receives application control information sent by the mobile phone, where the application control information may be application installation state control information, device subscription management information, or in-application data; and the AP processor synchronizes "application installation state control information", "in-application data", or "device subscription management information" to the MCU processor. When the first electronic device works in the ultra-long battery life mode, the MCU processor runs at least one of an application market, an ecosystem application, and distributed communication subscription management in the ultra-long battery life mode. The MCU processor receives application control information sent by the mobile phone, where the application control information may be application installation state control information, device subscription management information, or in-application data; and the MCU processor synchronizes "application installation state control information", "in-application data", or "device subscription management information" to the AP processor. However, operations "1", "2", and "3" shown in FIG. **5** are merely numerical numbers, and do not indicate that the AP processor sequentially synchronizes the installation state control information, the in-application data, and the device subscription management information to the MCU processor in a numerical sequence, or do not indicate that the MCU processor sequentially synchronizes the installation state control information, the in-application data, and the device subscription management information to the AP processor in a numerical sequence.

[0104] As shown in FIG. **5**, the application control information includes the application installation state control information, the device subscription management information, or the in-application data.

[0105] Operation **302**: The first processor updates the application data information to a package of a source application (a target application) of a first application version, and transparently transmits the application data information to the second processor based on a package name of the target application through a cross-core communication module.

[0106] In this embodiment of the present disclosure, an application of the first application version is the source application (the target application) of the first application version, and an application of a second application version is a target application of the second application version. The source application (the target application) of the first application version and the target application of the second application version are a same application in different working modes.

[0107] That the first processor transparently transmits the application data information to the second processor based on a package name of the target application through a cross-core communication module includes: The first processor sends cross-core information and the application data information to the cross-core communication module, where the cross-core information includes the package name of the target application; the cross-core communication module finds detection information based on the package name of the target application; and the cross-core communication module transparently transmits the application data information to the second processor based on the detection information and the package name of the target application.

[0108] The cross-core communication module stores the detection information, and the detection information includes a source package name, signature information, and a trustlist. The cross-core communication module finds the source package name, the signature information, and the trustlist by using the package name of the target application; and determines, based on the source package name, the signature information, and the trustlist, whether to send the application data information to the second processor based on the package name of the target application.

[0109] The application data information includes the in-application data, and the in-application data includes account binding information. FIG. **6** is a diagram of synchronizing in-application data

according to an embodiment of the present disclosure. As shown in FIG. **6**, a smart watch, an AP processor, a cross-core communication module, and an MCU processor shown in FIG. **6** may be the same as the smart watch, the AP processor, the cross-core communication module, and the MCU processor shown in FIG. **5**. A first application (a smart watch version) and a first application (a sport watch version) shown in FIG. **6** are respectively the ecosystem application in the AP processor and the ecosystem application in the MCU processor shown in FIG. **5**. The ultra-long battery life mode may also be referred to as a sport mode. When the smart watch works in the ultra-long battery life mode, the smart watch may also be referred to as a sport watch. An account of the first application (the smart watch version) is not bound to an account of the first application (the sport watch version). When the smart watch works in the smart mode, the AP processor is connected to the mobile phone. When the user performs an operation of binding the account of the first application (the smart watch version), the smart watch displays "please open a first application on the mobile phone, scan a QR code of a watch, and complete binding", the user may open the first application (a mobile phone version) of the mobile phone and tap a "scan a QR code" button, and the mobile phone scans the QR code displayed on the smart watch and sends account binding information to the AP processor. The AP processor receives the account binding information sent by the mobile phone, and binds the account of the first application (the smart watch version); and after the binding is completed, sends the account binding information to the MCU processor through the cross-core communication module, that is, "communication data" in operation **3**, operation **4**, and operation **5** is the account binding information. After receiving the account binding information, the MCU parses the account binding information, and sends a synchronization success message to the AP processor after binding the account of the first application (the sport watch version), that is, "communication data" in operation **7** and operation **8** is the synchronization success information. After the AP processor completes binding of the account of the first application (the smart watch version), the AP processor performs operation **9**. The AP processor generates a QR code, and sends the generated QR code to a display of the smart watch. For example, as shown in FIG. **1**, the first electronic device includes the display, and the display displays a payment code. When the smart watch works in the ultra-long battery life mode, the user can enable the electronic watch to display the payment code by starting the first application (the sport watch version), so that when the working mode of the first electronic device is switched from the smart mode to the ultra-long battery life mode, a service of the first application (the sport watch version) and a service of the first application (the smart watch version) are in a same state, and the user does not need to bind the account of the first application (the sport watch version) again.

[0110] As shown in FIG. **6**, when the AP processor sends the account binding information to the MCU processor, the AP processor invokes an application programming interface (API). When invoking the API, the AP processor needs cross-core information. The cross-core information includes a current mode, a target mode, the package name of the target application, and the communication data. In this case, the current mode is the smart mode, the target mode is the ultra-long battery life mode, the package name of the target application is a name of the first application, and the communication data is the account binding information. The cross-core communication module finds, from at least one source package name based on the package name of the target application, a source package name that is the same as the package name of the target application, and finds signature information corresponding to the source package name. The signature information is usually used to ensure integrity of information transmission and ensure that content in the package is not replaced. The cross-core communication module determines, based on the source package name and the signature information, whether the target application can send the account binding information to the MCU processor; if determining that the target application can send the account binding information to the MCU processor, determines whether a local trustlist includes the package name of the target application; and if determining that the local trustlist includes the package name of the target application, sends the account binding information to the

MCU processor based on the package name of the target application. Before the cross-core communication module sends the account binding information to the MCU processor, the MCU processor is in a power-off state, and the cross-core communication module wakes up the MCU processor to power on the MCU processor.

[0111] Operation **401**: The second processor synchronously updates the application data information to the package of the target application of the second application version based on the package name of the target application.

[0112] In one embodiment, if the application data information is device subscription management information; and after the second processor synchronously updates the device subscription management information to the package of the target application of the second application version, the method further includes: The second processor generates a synchronization success message; and sends the synchronization success information to the first processor through the cross-core communication module.

[0113] FIG. **7**A and FIG. **7**B are a diagram of synchronizing device subscription management information according to an embodiment of the present disclosure. As shown in FIG. **7**A and FIG. **7**B, a smart watch shown in FIG. **7**A and FIG. **7**B may be the same as the smart watch shown in FIG. **5** or FIG. **6**, a mobile phone shown in FIG. **7**A and FIG. **7**B may be the mobile phone shown in FIG. **5**, and a second application and a third application shown in FIG. **7**A and FIG. **7**B are both the ecosystem applications shown in FIG. **5**. An SDK (a mobile phone end) indicates a software development kit responsible for interacting with a wearable device. Distributed communication subscription management (AP) indicates the distributed communication subscription management of the AP processor. Distributed communication subscription management (MCU) indicates the distributed communication subscription management of the MCU processor. When the smart watch is connected to the mobile phone, an out-of-box experience (OOBE) apparatus is configured to perform a operation of the communication connection between the mobile phone and the smart watch. Operations **1** to **3**, operation **5**, and operation **6** above the dashed line indicate a process of interaction between the AP processor and the mobile phone. Operation **4** indicates that the AP processor synchronizes the device subscription management information to the MCU processor, where operation **4** being a dashed line indicates that when the AP processor synchronizes the device subscription management information to the MCU processor, synchronization may succeed or fail. Operation **7** to operation **16** below the dashed line indicate a process of interaction between the MCU processor and the mobile phone. If the synchronization in operation **4** succeeds, the MCU processor performs operations **7**, **10**, **12**.*a*, and **16**; and the mobile phone performs operations **8**, **9**, **11**, **13**, **14**, and **16**, and does not perform operations **12**.*b*, **15**.*a*, and **15**.*b*. If the synchronization in operation **4** fails, the MCU processor performs operations **7**, **10**, **15**.*b*, **15**.*c*, and **16**; and the mobile phone performs operations **8**, **9**, **11**, **12**.*b*, **13**, **14**, **15**.*a*, **15**.*b*, and **16**.

[0114] As shown in FIG. **7**A and FIG. **7**B, the mobile phone in operation **1** completes pairing with the smart mode, that is, the AP processor completes the operation of the communication connection to the mobile phone by sending device information and a device mode to the mobile phone. The device information may include information such as device power and a connected state. In this case, the device mode is the smart mode, and the connected state is a state of being connected to the AP processor. A second application (mobile phone end) apparatus stores the device information and the device mode. In operation **2**, a third application (mobile phone end) apparatus may obtain the device information and the device mode; and parse a plurality of device states based on the device information and the device mode, where the plurality of device states include the device mode, the device power, the connected state, and the like. When the user opens the third application (the mobile phone end), the user can query the device state, and the mobile phone displays the plurality of device states. The user may subscribe to any quantity of device states by using the plurality of device states displayed on the mobile phone. For example, the user subscribes to two device states, and the two device states include the device power and the connected state. In

operation **3**, the third application (mobile phone end) apparatus sends, to the SDK (mobile phone end) apparatus, the device state subscribed to by the user; and the SDK (mobile phone end) apparatus generates the device subscription management information based on at least one device state subscribed to by the user, and sends the device subscription management information to the AP processor. A distributed communication subscription management (AP) apparatus collects, based on the device subscription management information, current power of the device and generates a current connected state; and generates device subscription information based on the current power and the current connected state, and sends the device subscription information to the SDK (mobile phone end) apparatus. In operation **4**, the distributed communication subscription management (AP) apparatus synchronizes the device subscription management information to a distributed communication subscription management (MCU) apparatus. After successfully synchronizing the device subscription management information, the distributed communication subscription management (MCU) apparatus sends a synchronization success message to the distributed communication subscription management (AP) apparatus. Because the first electronic device works in the first working mode, after the synchronization success message is sent to the distributed communication subscription management (AP) apparatus, the MCU processor continues to be in the power-off state. In operation **5** and operation **6**, the current device information includes that the third application (the mobile phone end) may perform service interaction with the smart watch based on the device information and the subscribed device state.

[0115] Therefore, after the working mode of the first electronic device is switched, the user does not need to subscribe to the device state of the first electronic device again through the second electronic device, the second electronic device does not need to send the device subscription management information to the first electronic device again, and the first electronic device can actively send the device subscription information to the second electronic device, so that a subscription process of the application of the second application version in the second working mode is the same as a subscription process of the application of the first application version in the first working mode. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state, and user experience is improved.

[0116] In another embodiment, when the application data information is in-application data, after operation **401**, the method further includes: The second processor executes a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

[0117] For example, the in-application data includes account binding information, and the second processor binds an account of the target application of the second application version based on the account binding information. As shown in FIG. **6**, in operation **6**, the MCU processor receives the account binding information; synchronously updates the account binding information to the package of the first application (the sport watch version); and parses the account binding information to bind the first application (the sport watch version) and the account of the first application (the sport watch version).

[0118] After the second processor successfully executes the corresponding service, the method further includes: The second processor generates a synchronization success message; and sends the synchronization success information to the first processor through the cross-core communication module.

[0119] In one embodiment, after operation **401**, the method further includes: The application data information is device subscription management information; the source application (the target application) is an application device subscription management service; and when the first electronic device works in the first working mode, the first processor sends, based on the updated device subscription management information in a package of the application device subscription

management service of the first application version, device subscription information corresponding to the device subscription management information to the second electronic device connected to the first processor; or when the first electronic device works in the second working mode, the second processor sends, based on the updated device subscription management information in a package of the application device subscription management service of the second application version, device subscription information corresponding to the device subscription management information to the second electronic device connected to the second processor.

[0120] As shown in FIG. **7**A and FIG. **7**B, in operation **7**, the smart watch switches the working mode from the smart mode to the ultra-long battery life mode in response to a mode switching operation input by the user. In a mode switching process, the AP processor is powered off and the communication connection to the mobile phone is disconnected; and the MCU processor is powered on and sends the device information and the device mode to the mobile phone, so that the communication connection is re-established between the smart watch and the mobile phone. Because the AP processor is communicatively connected to the mobile phone through Bluetooth, in operations **8** and **9**, after detecting that the connection to the AP processor is disconnected, the second application (mobile phone end) apparatus broadcasts a Bluetooth disconnection message to the SDK (mobile phone end) apparatus; and the SDK (mobile phone end) apparatus notifies the third application (mobile phone end) apparatus of the Bluetooth disconnection message. In operations **10** and **11**, the MCU processor establishes the communication connection to the mobile phone; and the second application (mobile phone end) apparatus detects that the MCU processor establishes the communication connection to the mobile phone, and broadcasts a Bluetooth reply message to the SDK (mobile phone end) apparatus.

[0121] If the synchronization in operation **4** succeeds, in operations **12**.*a*, **13**, **14**, and **16**, the MCU processor reports the device subscription information to the SDK (mobile phone end) apparatus. The SDK (mobile phone end) apparatus notifies the third application (mobile phone end) apparatus of application device mode switching. The third application (mobile phone end) apparatus determines, based on the device mode switching notification, whether a service on a wearable side needs to be changed; and if the service does not need to be changed, continues to complete service interaction with the MCU processor. If the synchronization in operation **4** fails, the mobile phone determines that the smart watch does not report the device subscription information within preset time. In operation **12**.*b*, the SDK (mobile phone end) apparatus and the second application (mobile phone end) apparatus clear service logic of the AP processor, where the cleared service logic includes registration information of the AP processor and subscription information reported by the AP processor. The SDK (mobile phone end) apparatus further returns an error code to the third application (mobile phone end) apparatus. For example, the SDK (mobile phone end) apparatus returns, to the third application (mobile phone end) apparatus, information indicating that the mode of the smart watch is still being switched. In operation **7**, after the service logic of the AP processor is cleared, the SDK (mobile phone end) apparatus performs operation **13**, and the third application (mobile phone end) apparatus performs operation **14**. In operation **15**.*a*, the third application (mobile phone end) apparatus determines that the service on the wearable side needs to be changed, and resends, to the SDK (mobile phone end) apparatus, at least one device state subscribed to by the user. For operation **15**.*b* and operation **15**.*c*, refer to operation **3** and operation **4** in this figure respectively.

[0122] Therefore, when the first electronic device works in the first working mode or the second working mode, the second electronic device can support a distributed function; and when the working mode of the first electronic device is switched from the first working mode to the second working mode, the second processor may automatically report the device subscription information to the second processor, and the second electronic device does not need to generate the device subscription management information again. In the operation of sending the device subscription management information to the first electronic device, the second electronic device may provide

the distributed function for the second processor based on the device subscription management information reported by the second processor. This improves user experience.

[0123] In another embodiment, after operation **401**, the method further includes: When the application data information is in-application data, the application data information is the in-application data; and the source application (the target application) is a service application. The method further includes: When the first electronic device works in the first working mode, the first processor executes a corresponding service based on the updated in-application data in a package of the service application of the first application version; or when the first electronic device works in the second working mode, the second processor executes a corresponding service based on the updated in-application data in a package of the service application of the second application version.

[0124] As shown in FIG. **6**, that the first processor executes a corresponding service based on the updated in-application data in a package of the service application of the first application version includes: In operation **9**, the AP processor updates the account binding information based on the package of the first application, and generates a payment code. After generating the payment code, the AP processor may send the payment code to a display of the smart watch, and the display displays the payment code. In operation **10**, the MCU processor is powered on and the AP processor is powered off, and the working mode of the smart watch is switched from the smart mode to the ultra-long battery life mode. In operation **11**, the user starts the first application. That the second processor executes a corresponding service based on the updated in-application data in a package of the service application of the second application version includes: In operation **12**, the MCU processor generates the payment code in response to the operation of starting the first application by the user. After generating the payment code, the MCU processor may send the payment code to a display of the smart watch, and the display displays the payment code.

[0125] Therefore, after the user updates the in-application data of the source application (the target application) through the first processor, the second processor may automatically update data in the target application. When the working mode of the first electronic device is switched from the first working mode to the second working mode, the user does not need to perform a same operation on the in-application data of the target application through the second processor again, so that a process of the application of the second application version in the second working mode is the same as a process of the application of the first application version in the first working mode. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state. This improves user experience.

[0126] Operation **303**: The first processor performs corresponding application processing on an application market of the first application version based on the application installation state control information, and synchronizes the installation state control information to an application market of the corresponding second application version, where the application processing includes at least one of installation, uninstallation, and updating; and the application of the first application version is the application market of the first application version, and the application of the second application version is the application market of the second application version.

[0127] In this embodiment of the present disclosure, the first electronic device works in the first working mode, and the application market includes a plurality of applications and application states corresponding to the applications. The application state includes at least one of installation, uninstallation, and updating. For example, the application state is a state indicating being installed and updated to a latest version. The first processor synchronizes the application installation state control information to the application market of the corresponding second application version through the cross-core communication module.

[0128] As shown in FIG. **5**, an application market apparatus in the AP processor synchronizes the

application installation state control information to an application market apparatus of the MCU processor through the cross-core communication module. For example, the application installation state control information includes information about installing the first application. The user taps a button for installing the first application (the smart watch version) in the application market of the mobile phone. The mobile phone sends the information about installing the first application to the AP processor in response to the operation of tapping the button for installing the first application (the smart watch version) by the user. The AP processor obtains an installation package of the first application (the smart watch version) based on the information about installing the first application and installs the installation package. The application state of the first application in the application market (the smart watch version) is determined as installed. After the installation is completed, the AP processor invokes the API, to obtain interface information, where the interface information includes the information about installing the first application, a current mode, and a target mode; and sends the interface information to the cross-core communication module. The cross-core communication module sends the information about installing the first application to the MCU processor based on the interface information.

[0129] Operation **402**: The second processor performs corresponding application processing on the application market of the second application version based on the synchronized application installation state control information.

[0130] In this embodiment of the present disclosure, as shown in FIG. **5**, the application market apparatus of the MCU processor receives the application installation state control information. For example, the application installation state control information includes the information about installing the first application, and the MCU processor obtains an installation package of the first application (the sport watch version) based on the information about installing the first application and installs the installation package. The application state of the first application in the application market (the sport watch version) is determined as installed. Therefore, after performing an installation, uninstallation, or update operation on software in the first processor, the user does not need to perform an installation, uninstallation, or update operation on same software in the second processor again, so that when the electronic device is switched from the first working mode to the second working mode, smooth application switching can be achieved, thereby reducing operations of the user, and saving time of the user.

[0131] In one embodiment, after operation **402**, the method further includes: The second processor sends the synchronization success information to the first processor through the cross-core communication module.

[0132] An embodiment of the present disclosure provides a data synchronization method, applied to a first electronic device. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor controls an application of a first application version based on obtained application control information, and synchronizes the application control information to an application of a corresponding second application version. The second processor controls the application of the second application version based on the synchronized application control information, so that when the electronic device works in the first working mode, a process of the application of the second application version in a second working mode is the same as a process of the application of the first application version in the first working mode. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state, and user experience is improved.

[0133] An embodiment of the present disclosure provides a storage medium. The storage medium includes a stored program; and when the program is run, a device in which the storage medium is located is controlled to perform the operations of the foregoing data synchronization method embodiment. For descriptions, refer to the foregoing data synchronization method embodiment.

[0134] FIG. **8** is a diagram of a structure of another first electronic device according to an embodiment of the present disclosure. In one embodiment, FIG. **8** is a diagram of a structure of the processor **110** shown in FIG. **1**. As shown in FIG. **8**, the first electronic device **100** includes a first processor **1**, a second processor **2**, and a cross-core communication module **3**. The first processor **1** and the second processor **2** are connected through the cross-core communication module **3**, the first processor **1** includes a part of the cross-core communication module **3**, and the second processor **2** includes a part of the cross-core communication module **3**. When the first electronic device **100** works in a first working mode, the first processor **1** runs a function based on a first application version; or when the first electronic device **100** works in a second working mode, the second processor **2** runs a function based on a second application version.

[0135] When the first electronic device **100** works in the first working mode, the first processor **1** is configured to control an application of the first application version based on obtained application control information, and synchronize the application control information to an application of the corresponding second application version; and the second processor **2** is configured to control the application of the second application version based on the synchronized application control information.

[0136] In this embodiment of the present disclosure, the application control information is application data information; the application of the first application version is a source application (a target application) of the first application version, and the application of the second application version is a target application of the second application version; the first processor **1** is configured to: update the application data information to a package of the source application (the target application) of the first application version; and transparently transmit the application data information to the second processor **2** based on a package name of the target application through the cross-core communication module **3**; and the second processor **2** is configured to: synchronously update the application data information to a package of the target application of the second application version based on a package name of the target application; and execute a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

[0137] In this embodiment of the present disclosure, the application data information is device subscription management information; the source application (the target application) is an application device subscription management service; and when the first electronic device **100** works in the first working mode, the first processor **1** is further configured to send, based on the updated device subscription management information in a package of the application device subscription management service of the first application version, device subscription information corresponding to the device subscription management information to the second electronic device connected to the first processor **1**; or when the first electronic device **100** works in the second working mode, the second processor **2** is further configured to send, based on the updated device subscription management information in a package of the application device subscription management service of the second application version, device subscription information corresponding to the device subscription management information to the second electronic device connected to the second processor **2**.

[0138] In this embodiment of the present disclosure, the application data information is in-application data; the source application (the target application) is a service application; and when the first electronic device **100** works in the first working mode, the first processor **1** is further configured to execute a corresponding service based on the updated in-application data in a package of the service application of the first application version; or when the first electronic device **100** works in the second working mode, the second processor **2** is further configured to execute a corresponding service based on the updated in-application data in a package of the service application of the second application version.

[0139] In this embodiment of the present disclosure, the application control information is

application installation state control information; the application of the first application version is an application market of the first application version, and the application of the second application version is an application market of the second application version; the first processor **1** is configured to perform corresponding application processing on the application market of the first application version based on the application installation state control information, where the application processing includes at least one of installation, uninstallation, and updating; and the second processor **2** is configured to perform corresponding application processing on the application market of the second application version based on the synchronized application installation state control information.

[0140] In this embodiment of the present disclosure, the first processor **1** is configured to send cross-core information and the application data information to the cross-core communication module **3**, where the cross-core information includes the package name of the target application; the cross-core communication module **3** is configured to find detection information based on the package name of the target application; and the cross-core communication module **3** is further configured to transparently transmit the application data information to the second processor **2** based on the detection information and the package name of the target application.

[0141] In this embodiment of the present disclosure, the second processor **2** is further configured to generate a synchronization success message; and the second processor **2** is further configured to send the synchronization success information to the first processor **1** through the cross-core communication module **3**.

[0142] An embodiment of the present disclosure provides a first electronic device. The first electronic device includes a first processor and a second processor. When the first electronic device works in a first working mode, the first processor controls an application of a first application version based on obtained application control information, and synchronizes the application control information to an application of a corresponding second application version. The second processor controls the application of the second application version based on the synchronized application control information, so that when the electronic device works in the first working mode, a process of the application of the second application version in a second working mode is the same as a process of the application of the first application version in the first working mode. When the electronic device is switched from the first working mode to the second working mode, a service of the application of the first application version in the first working mode and a service of the application of the second application version in the second working mode can be switched to a same state, and user experience is improved.

[0143] The foregoing descriptions are merely example embodiments of the present disclosure, but are not intended to limit the present disclosure. Any modification, equivalent replacement, or improvement made within the spirit and principle of the present disclosure should fall within the protection scope of the present disclosure.

Claims

1. A data synchronization method, comprising: when a first electronic device, comprising a first processor and a second processor, operates in a first working mode: running, by the first processor, a function based on a first application version; controlling, by the first processor, an application of the first application version based on obtained application control information and synchronizing the application control information to an application of a corresponding second application version; and controlling, by the second processor, the application of the second application version based on the synchronized application control information; or when the first electronic device operates in a second working mode, running, by the second processor, a function based on the second application version.

2. The method according to claim 1, further comprising: updating, by the first processor,

application data information of the application control information to a package of a target application of the first application version; transparently transmitting, by the first processor, the application data information to the second processor based on a package name of the target application of the first application version through a cross-core communication module; synchronously updating, by the second processor, the application data information to a package of the target application of the second application version based on a package name of the target application of the first application version; and executing, by the second processor, a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

3. The method according to claim 2, further comprising: when the first electronic device operates in the first working mode, sending, by the first processor, based on device subscription management information of the application data information in a package of the application device subscription management service of the first application version, device subscription information corresponding to the device subscription management information to a second electronic device connected to the first processor; or when the first electronic device operates in the second working mode, sending, by the second processor based on device subscription management information of the application data information in a package of the application device subscription management service of the second application version, device subscription information corresponding to the device subscription management information to a second electronic device connected to the second processor.

4. The method according to claim 2, further comprising: when the first electronic device operates in the first working mode, executing, by the first processor, a corresponding service based on application data of the application data information in a package of a service application of the first application version; or when the first electronic device operates in the second working mode, executing, by the second processor, a corresponding service based on application data of the application data information in a package of a service application of the second application version.

5. The method according to claim 1, further comprising: performing, by the first processor, corresponding application processing on an application market of the first application version based on application installation state control information of the application control information, wherein the application processing comprises at least one of installation, uninstallation, or updating; and performing, by the second processor, corresponding application processing on an application market of the second application version based on application installation state control information of the application control information.

6. The method according to claim 2, wherein the transparently transmitting, by the first processor, the application data information to the second processor based on the package name of the target application through the cross-core communication module comprises: sending, by the first processor, cross-core information and the application data information to the cross-core communication module, wherein the cross-core information comprises the package name of the target application; locating, by the cross-core communication module, detection information based on the package name of the target application; and transparently transmitting, by the cross-core communication module, the application data information to the second processor based on the detection information and the package name of the target application.

7. The method according to claim 1, wherein, after the controlling, by the second processor, the application of the second application version based on the synchronized application control information, the method further comprises: generating, by the second processor, a synchronization success message; and sending, by the second processor, the synchronization success message to the first processor through a cross-core communication module.

8. A first electronic device, comprising: a first processor, a second processor, and a cross-core communication module, wherein the first processor and the second processor are connected through the cross-core communication module; the first processor comprises a part of the cross-

core communication module, and the second processor comprises a part of the cross-core communication module; and when the first electronic device operates in a first working mode: the first processor runs a function based on a first application version; the first processor is configured to control an application of the first application version based on obtained application control information and synchronize the application control information to an application of the corresponding second application version; and the second processor is configured to control the application of the second application version based on the synchronized application control information; or when the first electronic device operates in a second working mode, the second processor runs a function based on a second application version.

9. The first electronic device according to claim 8, wherein the first processor is configured to: update application data information of the application control information to a package of a target application of the first application version; and transparently transmit the application data information to the second processor based on a package name of the target application through the cross-core communication module; and the second processor is configured to: synchronously update the application data information to a package of the target application of the second application version based on a package name of the target application of the first application version; and execute a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

10. The first electronic device according to claim 9, wherein when the first electronic device operates in the first working mode, the first processor is configured to: send device subscription information corresponding to the device subscription management information to a second electronic device connected to the first processor based on device subscription management information of the application data information in a package of the application device subscription management service of the first application version; or when the first electronic device operates in the second working mode, the second processor is configured to: send device subscription information corresponding to the device subscription management information to a second electronic device connected to the second processor based on device subscription management information of the application data information in a package of the application device subscription management service of the second application version.

11. The first electronic device according to claim 9, wherein when the first electronic device operates in the first working mode, the first processor is configured to execute a corresponding service based on application data of the application data information in a package of a service application of the first application version; or when the first electronic device operates in the second working mode, the second processor is configured to execute a corresponding service based on application data of the application data information in a package of a service application of the second application version.

12. The first electronic device according to claim 8, wherein the first processor is configured to: perform corresponding application processing on an application market of the first application version based on application installation state control information of the application control information, wherein the application processing comprises at least one of installation, uninstallation, or updating; and the second processor is configured to: perform corresponding application processing on an application market of the second application version based on application installation state control information of the application control information.

13. The first electronic device according to claim 9, wherein the first processor is configured to send cross-core information and the application data information to the cross-core communication module, wherein the cross-core information comprises the package name of the target application; the cross-core communication module is configured to: locate detection information based on the package name of the target application; and transparently transmit the application data information to the second processor based on the detection information and the package name of the target application.

14. The first electronic device according to claim 8, wherein the second processor is configured to: generate a synchronization success message; and send the synchronization success message to the first processor through a cross-core communication module.

15. A storage medium, comprising a stored program that, when executed by a first electronic device comprising a first processor and a second processor, cause the first electronic device to perform: when the first electronic device operates in a first working mode: running, by the first processor, a function based on a first application version; controlling, by the first processor, an application of the first application version based on obtained application control information and synchronizing the application control information to an application of the corresponding second application version; and controlling, by the second processor, the application of the second application version based on the synchronized application control information; or when the first electronic device operates in a second working mode, the second processor runs a function based on a second application version.

16. The storage medium according to claim 15, wherein the first electronic device further performs: updating, by the first processor, application data information of the application control information to a package of a target application of the first application version; transparently transmitting, by the first processor, the application data information to the second processor based on a package name of the target application of the first application version through a cross-core communication module; synchronously updating, by the second processor, the application data information to a package of the target application of the second application version based on a package name of the target application of the first application version; and executing, by the second processor, a corresponding service based on the synchronously updated application data information in the package of the target application of the second application version.

17. The storage medium according to claim 16, wherein the first electronic device further performs: when the first electronic device operates in the first working mode, sending, by the first processor, based on device subscription management information of the application data information in a package of the application device subscription management service of the first application version, device subscription information corresponding to the device subscription management information to a second electronic device connected to the first processor; or when the first electronic device operates in the second working mode, sending, by the second processor based on device subscription management information of the application data information in a package of the application device subscription management service of the second application version, device subscription information corresponding to the device subscription management information to a second electronic device connected to the second processor.

18. The storage medium according to claim 16, wherein the first electronic device further performs: when the first electronic device operates in the first working mode, executing, by the first processor, a corresponding service based on application data of the application data information in a package of a service application of the first application version; or when the first electronic device operates in the second working mode, executing, by the second processor, a corresponding service based on application data of the application data information in a package of a service application of the second application version.

19. The storage medium according to claim 15, wherein the first electronic device further performs: performing, by the first processor, corresponding application processing on an application market of the first application version based on application installation state control information of the application control information, wherein the application processing comprises at least one of installation, uninstallation, or updating; and performing, by the second processor, corresponding application processing on an application market of the second application version based on application installation state control information of the application control information.

20. The storage medium according to claim 16, wherein the transparently transmitting, by the first processor, the application data information to the second processor based on the package name of

the target application through the cross-core communication module comprises: sending, by the first processor, cross-core information and the application data information to the cross-core communication module, wherein the cross-core information comprises the package name of the target application; locating, by the cross-core communication module, detection information based on the package name of the target application; and transparently transmitting, by the cross-core communication module, the application data information to the second processor based on the detection information and the package name of the target application.