MEDIA DATA PUSHING METHOD AND APPARATUS, COMPUTER, STORAGE MEDIUM, AND PROGRAM PRODUCT

RELATED APPLICATION

[0001] This application claims priority to Chinese Patent Application No. 2024105784841, filed with the China National Intellectual Property Administration on May 10, 2024 and entitled "MEDIA PROCESSING METHOD AND APPARATUS, COMPUTER, STORAGE MEDIUM, AND PROGRAM PRODUCT", which is incorporated herein by reference in its entirety.

TECHNICAL FIELD

[0002] This application relates to the field of computer technologies, and in particular, to a media data push method and apparatus, a computer, a storage medium, and a program product.

BACKGROUND

[0003] With the development of network technologies, an increasing quantity of media playback applications have emerged. The media playback applications typically push trending content, enabling users to promptly obtain latest information, events of significant impact, or the like. Generally, when performing trending content push, each application implements trending content push through a vendor messaging channel, equivalent to off-application push. When a user taps to view the trending content push, a page or the application corresponding to the trending content push is entered, interrupting a current interaction behavior, that is, a media data viewing behavior, of the user. Subsequently, the current application needs to be restarted to restart the current interaction behavior. This results in a lengthy interaction behavior path and poor fluency in media data display.

SUMMARY

[0004] Embodiments of this application provide a media data push method and apparatus, a computer, a storage medium, and a program product, to improve fluency in media data display.

[0005] An aspect of the embodiments of this application provides a media data push method. The method is performed by a first computer device. The method includes:

outputting first media data on a media presentation page;

outputting trending content description information in response to receiving a trending content push task, the trending content description information being configured for describing trending media data; and

outputting, at a trending content insertion location on the media presentation page in response to a trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the trending media data and the first media data belonging to a same media data feed.

[0006] An aspect of the embodiments of this application provides a media data push method. The method is performed by a second computer device. The method includes:

generating a trending content push task, and transmitting the trending content push task to a first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task, the first computer device outputting, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information, the trending content push task indicating to push the trending media data, the trending content description information being configured for describing the trending media data, and the trending media data and the first media data belonging to a same media data feed.

[0007] An aspect of the embodiments of this application provides a media data push apparatus. The apparatus is applicable to a first computer device. The apparatus includes:

a message output module, configured to output first media data on a media presentation page;

the message output module being further configured to output trending content description information in response to receiving a trending content push task, the trending content description information being configured for describing trending media data; and

a media output module, configured to output, at a trending content insertion location on the media presentation page in response to a trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the trending media data and the first media data belonging to a same media data feed.

[0008] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

display the trending content description information independently on the first media data in response to receiving the trending content push task.

[0009] The trending content insertion location is a location on the media presentation page that is adjacent to the first media data. The media output module is specifically configured to:

perform dynamic sliding display on the first media data along a first page direction on the media presentation page in response to the trigger operation on the trending content description information, and display, adjacent to the first media data along the first page direction on a first direction side of the first media data, the trending media data corresponding to the trending content description information, the first page direction being a direction from the first direction side to the first media data, and the first direction side being a direction side of the first media data towards a page start location of the media presentation page.

[0010] The trending content insertion location is a location on the media presentation page that is adjacent to the first media data. The media output module is specifically configured to:

hide the trending content description information while continuing playback of the first media data in response to the trigger operation on the trending content description information, and output, at the location on the media presentation page that is adjacent to the first media data when detecting a page slide operation on the media presentation page, the trending media data corresponding to the trending content description information.

[0011] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

cache the trending content push task in response to receiving the trending content push task; and

output second media data in response to a page slide operation on the media presentation page, and display the trending content description information corresponding to the trending content push task independently on the second media data, the second media data being media data in a media data feed before update that is adjacent to the first media data, and the media data feed before update being a recommended feed of media data in a media playback application in which the media presentation page is located.

[0012] The trending content insertion location is a location between the first media data and the second media data. When outputting, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description

information, the trending media data corresponding to the trending content description information, the message output module is specifically configured to:

perform dynamic sliding display on the second media data along a first page direction in response to the trigger operation on the trending content description information, and output, between the first media data and the second media data, the trending media data corresponding to the trending content description information, the first page direction being a direction from a page start location of the media presentation page to the second media data.

[0013] The apparatus further includes:

a push processing module, configured to collapse the trending content description information if display duration of the trending content description information is greater than or equal to a first display threshold.

[0014] The push processing module is further configured to terminate display of the trending content description information if display duration of the trending content description information is greater than or equal to a second display threshold. The second display threshold being greater than the first display threshold.

[0015] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

obtain, in response to receiving the trending content push task, the trending media data corresponding to the trending content push task; and

add the trending media data to a location in a media data feed before update that is adjacent to the first media data, to obtain the media data feed, and output the trending content description information corresponding to the trending content push task.

[0016] The trending content insertion location is a location on the media presentation page that is adjacent to the first media data. The media output module is specifically configured to:

suspend the trending content push task in response to the trigger operation on the trending content description information;

read the trending content push task in response to a page slide operation on the media presentation page; and

read the media data feed based on the trending content push task, to obtain the trending media data corresponding to the trending content description information, and output the

trending media data at the location on the media presentation page that is adjacent to the first media data.

[0017] The apparatus further includes:

a data backup module, configured to back up the trending media data corresponding to the trending content description information, to obtain backup data;

a backup deletion module, configured to delete the backup data if playback of the trending media data is completed; and

a backup starting module, configured to: during the playback of the trending media data, associate the backup data with a data playback progress of the trending media data when it is detected that a media playback application is closed, and when it is detected that the media playback application is started, read the backup data and the data playback progress, and play the trending media data based on the data playback progress, the media playback application being an application in which the media presentation page is located.

[0018] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

suspend the trending content push task in response to receiving the trending content push task; and

read the trending content push task if it is detected that a quantity of consecutive first slide operations is greater than or equal to a first push threshold, and output the trending content description information corresponding to the trending content push task, the first slide operation being an operation in which duration from display to termination of display of media data is less than a playback time threshold, and the playback time threshold being configured for representing minimum duration of effective playback of the media data.

[0019] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

suspend the trending content push task in response to receiving the trending content push task; and

read the trending content push task if it is detected that a quantity of slide operations is greater than or equal to a second push threshold, and output the trending content description information corresponding to the trending content push task, the slide operation including a first slide operation.

[0020] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

obtain, in response to receiving the trending content push task, a local push identifier and a trending content push identifier corresponding to the trending content push task, the local push identifier being a maximum push identifier in at least one push identifier of at least one historical trending content push task for which push has been completed; and

output, if the local push identifier is less than the trending content push identifier, the trending content description information corresponding to the trending content push task, and determine the trending content push identifier as the local push identifier; or

delete the trending content push task if the local push identifier is greater than or equal to a trending content push identifier.

[0021] When outputting the trending content description information in response to receiving the trending content push task, the message output module is configured to:

obtain, in response to receiving the trending content push task, the trending content description information and a trending content push configuration that are carried in the trending content push task, the trending content push configuration being configured for representing a push condition of the trending media data pushed by the trending content push task; and

obtain a push parameter associated with the trending content push configuration in real time, and output the trending content description information when the push parameter satisfies the trending content push condition in the trending content push configuration.

[0022] An aspect of the embodiments of this application provides a media data push apparatus. The apparatus is applicable to a second computer device. The apparatus includes:

a media transmission module, configured to generate a trending content push task, and transmit the trending content push task to a first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task, the first computer device outputting, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information, the trending content description information being configured for describing the trending media data, and the trending media data and the first media data belonging to a same media data feed.

[0023] The media transmission module is specifically configured to:

obtain the trending media data, and generate the trending content push task based on the trending media data;

add the trending content push task into a task processing queue, and generate a trending content push identifier for the trending content push task; and

transmit the trending content push task to the first computer device by using the trending content push identifier and the task processing queue.

[0024] When transmitting the trending content push task to the first computer device, the media transmission module is specifically configured to:

obtain media information of the trending media data, and obtain media delivery information associated with the media information; and

obtain the first computer device satisfying the media delivery information, and transmit the trending content push task to the first computer device satisfying the media delivery information.

[0025] An aspect of the embodiments of this application provides a computer device, including a processor, a memory, and an input/output interface.

[0026] The processor is separately connected to the memory and the input/output interface. The input/output interface is configured to receive data and output data. The memory is configured to store a computer program. The processor is configured to invoke the computer program, to enable the computer device including the processor to perform a media data push method in an aspect of the embodiments of this application.

[0027] An aspect of the embodiments of this application provides a computer-readable storage medium. The computer-readable storage medium has a computer program stored therein. The computer program is suitable for a processor to load and execute, to enable a computer device with the processor to perform a media data push method in an aspect of the embodiments of this application.

[0028] An aspect of the embodiments of this application provides a computer program product or computer program. The computer program product or computer program includes computer instructions. The computer instructions are stored in a computer-readable storage medium. A processor of a computer device reads the computer instructions from the computer-readable storage medium. The processor executes the computer instructions, to enable the computer device to perform a method provided in various exemplary manners in an aspect of the embodiments of this application. In other words, when the computer instructions are executed by the processor, the

method provided in the exemplary manners in the aspect of the embodiments of this application is implemented.

[0029] When the embodiments of this application are implemented, the following beneficial effects are achieved.

[0030] In the embodiments of this application, the first media data is outputted on the media presentation page. The trending content description information is outputted in response to receiving the trending content push task, the trending content description information being configured for describing the trending media data. The trending media data corresponding to the trending content description information is outputted at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data and the first media data belonging to the same media data feed. In the foregoing process, the trending media data corresponding to the trending content description information may be forcibly inserted into the media data feed during trending content push, that is, the trending media data is inserted into the media data feed in which the first media data is located. In this way, a user can slide the media presentation page or tap the trending content description information to view the trending media data, and can also continue to slide the media presentation page to browse other media data without interrupting an original interaction behavior of the user on the media presentation page. In other words, in an entire push process of pushing the trending media data, the user does not need to leave a current media data feed. Instead, the first computer device adds the trending media data into the media data feed currently viewed by the user. Therefore, the first computer device separately performs in parallel a process of pushing media data (which may be denoted as original media data) in a media data feed before update and the process of pushing the trending media data, and outputs the media data in the media data feed before update and the trending media data on the media presentation page by using the same data feed. This avoids impact of output of the trending media data on output of the original media data, improving fluency in media data display and improving interaction performance of media data.

BRIEF DESCRIPTION OF THE DRAWINGS

[0031] FIG. 1 is a diagram of a network interaction architecture of media data push according to an embodiment of this application.

[0032] FIG. 2 is a schematic diagram of a media data push scenario according to an embodiment of this application.

[0033] FIG. 3 is a schematic diagram of an application interaction scenario according to an embodiment of this application.

[0034] FIG. 4 is a flowchart of a media data push method according to an embodiment of this application.

[0035] FIG. 5 is a schematic diagram of a push processing scenario according to an embodiment of this application.

[0036] FIG. 6a is a schematic diagram of a media display scenario according to an embodiment of this application.

[0037] FIG. 6b is a schematic diagram of another media display scenario according to an embodiment of this application.

[0038] FIG. 7 is a schematic diagram of a push display scenario according to an embodiment of this application.

[0039] FIG. 8 is a flowchart of another media data push method according to an embodiment of this application.

[0040] FIG. 9 is a diagram of an in-feed push service architecture according to an embodiment of this application.

[0041] FIG. 10 is a schematic diagram of interaction for push processing according to an embodiment of this application.

[0042] FIG. 11 is a schematic diagram of a media data push apparatus according to an embodiment of this application.

[0043] FIG. 12 is a schematic diagram of another media data push apparatus according to an embodiment of this application.

[0044] FIG. 13 is a schematic diagram of a structure of a computer device according to an embodiment of this application.

DETAILED DESCRIPTION

[0045] The following clearly and completely describes technical solutions in embodiments of this application with reference to the drawings in the embodiments of this application. Apparently, the described embodiments are merely some rather than all of the embodiments of this application. All other embodiments obtained by a person of ordinary skill in the art based on the embodiments of this application without creative efforts shall fall within the protection scope of this application.

[0046] In this application, if data of an object (for example, a user) needs to be collected, before or during collection, a prompt interface or a pop-up window is displayed. The prompt interface or the pop-up window is configured for prompting the user that some data is currently collected. Operations related to data obtaining start to be performed only after a confirmation operation of the user for the prompt interface or the pop-up window is obtained; otherwise, the operations end. In addition, the obtained user data is used in a scenario, an objective, or the like that is appropriate and legal. In some embodiments, in some scenarios in which user data needs to be used but user authorization is not obtained, authorization may be further requested from the user, and the user data is used after the authorization passes. In other words, use of the user data in this application conforms to related stipulations of laws and regulations.

[0047] In the embodiments of this application, FIG. 1 is a diagram of a network interaction architecture of media data push according to an embodiment of this application. As shown in FIG. 1, a second computer device 101 may generate a trending content push task, and transmit the trending content push task to a first computer device, for example, a first computer device 102a, a first computer device 102b, or a first computer device 102c. The first computer device is a device that may output media data. The second computer device is a device that may push media data, a trending content push task, and the like to the first computer device. When receiving the trending content push task, the first computer device may output trending content description information corresponding to the trending content push task. In this case, media data outputted by the first computer device when receiving the trending content push task may be denoted as first media data. When the trending content description information is triggered, trending media data may be outputted at a trending content insertion location, to implement forcible insertion of the trending media data into a media data feed. The trending content insertion location is configured for representing a location of the trending media data in the media data feed, and is a location on a media presentation page that is adjacent to media data (which may be denoted as third media data) that is being outputted when the trending media data needs to be outputted. The trending media data and the first media data belong to the same media data feed. For example, when the trending media data needs to be outputted, if the media data that is being outputted on the media presentation page is media data 1 (that is, the third media data is the media data 1), the trending content insertion location is a location on the media presentation page that is adjacent to the media data 1. In this process, a process in which the first computer device outputs the first media data and a process of processing the trending content push task may be considered as being implemented in parallel. Therefore, when receiving the trending content push task, the first computer device performs push of a message (that is, the trending content description information), output of the corresponding

trending media data, and the like for the trending content push task, independently of a media data recommendation process. When needing to output the trending media data, the first computer device may implement imperceptible or low-perception trending content push. Therefore, the first computer device may directly insert the trending media data into the media data feed viewed by a user, and the user can view the trending media data by sliding the media presentation page or tapping the trending content description information without page redirection, and can also continue to slide the media presentation page to browse other media data in the media data feed. This avoids impact of a trending content push process on an application interaction process, and improves fluency in media data display.

[0048] Specifically, FIG. 2 is a schematic diagram of a media data push scenario according to an embodiment of this application. As shown in FIG. 2, a first computer device outputs first media data 202 on a media presentation page 201, and outputs trending content description information in response to receiving a trending content push task, for example, outputs trending content description information 203 in a manner shown in FIG. 2 for outputting the trending content description information 203. The trending content description information 203 is configured for describing trending media data, and may include but is not limited to media description information, a push type, and the like of the trending media data, for example, the trending content description information 203 "Breaking news: Starship revolutionizes rocket launches, cutting costs to one tenth" shown in FIG. 2. A specific component of the trending content description information may be determined based on a pop-up push manner of a media playback application. The trending content description information is displayed on the media presentation page 201 in a form of a triggerable component. In other words, the trending content description information is a triggerable component displaying description information of the trending media data. Subsequently, the triggerable component and content displayed in the triggerable component are directly represented by the trending content description information. The trending content push task indicates to push the trending media data. A processing manner of the trending content push task is: first outputting the trending content description information of the trending media data pushed in the trending content push task, associating the trending media data with the trending content description information, and then outputting the trending media data in response to a trigger operation on the trending content description information, instead of directly outputting the trending media data pushed in the trending content push task, avoiding impact of the trending content push task on normal interaction between a user and the media playback application. This can improve interaction performance of the media playback application and improve fluency in media data display. The media playback application is an application in which the media presentation page is located.

[0049] Further, the trending media data corresponding to the trending content description information 203 is outputted at a trending content insertion location on the media presentation page 201 in response to the trigger operation on the trending content description information 203. In this embodiment of this application, when the trending media data needs to be outputted, an example in which media data that is being outputted on the media presentation page 201 is the first media data 202 is used for description, that is, third media data is the first media data. For example, in a display manner 1, trending media data 204 may be outputted on a first direction side of the first media data 202. The first direction side may be considered as a direction side of the first media data 202 towards a page start location of the media presentation page. In other words, the trending media data 204 is outputted above the first media data 202. For example, in a display manner 2, the trending media data 204 may be outputted on a second direction side of the first media data 202. The second direction side may be considered as a direction side of the first media data 202 towards a page end location of the media presentation page. In other words, the trending media data 204 is outputted below the first media data 202. Above and below are based on a viewing direction of the user on the media presentation page. The trending content push task is a task configured for indicating to push the trending media data. The trending content description information may be considered as in-feed push, which is message push presented in a media playback application scenario. A media data feed may be considered as a recommended feed in the media playback application, that is, a data feed formed by media data pushed by the media playback application to the user when the media playback application presents the media data to the user. The user may continuously browse a content feed of a video through a simple page slide operation. Logic of appearance of the media data on the media presentation page of the media playback application is determined by recommendation of the media playback application. The trending media data may be considered as media data temporarily pushed by the media playback application, for example, latest information, an event of significant impact, or a related video manually determined by an operator to describe an event of significant impact on society. The event of significant impact is an event for which a predicted attention is greater than or equal to a push attention threshold. The predicted attention is configured for representing a value obtained by predicting a quantity of people paying attention to an event. The push attention degree threshold is a minimum attention corresponding to an event when it is determined that the event is of significant impact.

[0050] In other words, in this application, a running process of the media playback application is divided into a data recommendation process and a push processing process. The two processes may be considered independent of each other, and are performed in parallel. When outputting the first media data, the first computer device receives the trending content push task,

and outputs the trending content description information corresponding to the trending content push task. In this process, the first media data still continues to be played. This avoids impact of trending content push processing on running of the media playback application. Further, the trending media data is forcibly inserted into the media data feed in response to the trigger operation on the trending content description information, so that external push or internal push of the media playback application is integrated into the running of the media playback application, making the running of the media playback application smoother and improving fluency in media data display. The data recommendation process is a normal running process of the media playback application, that is, a process of playing the media data feed. The push processing process is a process in which the media playback application processes external push or internal push. External push is data push performed by another application to the media playback application. Internal push is data push generated by the media playback application. The media playback application is an application that may be configured for recommending a media data feed. The application may be application (APP) software, a mini program, a web page, or the like, for example, a video channel. This is not limited herein. Forcible insertion is relative to recommendation. Logic of appearance of content may be determined manually or by a pop-up push rule of the media playback application. Recommendation is a process of outputting a media data feed already generated by the media playback application. Forcible insertion is a process of inserting media data into the media data feed for output. The media data in this application may be a video.

[0051] The first computer device or the second computer device mentioned in the embodiments of this application includes but is not limited to a terminal device or a server. In other words, a computer device (for example, the first computer device and the second computer device) may be a server or a terminal device, or may be a system including a server and a terminal device. The terminal device mentioned above may be an electronic device, including, but not limited to, a mobile phone, a tablet computer, a desktop computer, a notebook computer, a palmtop computer, an in-vehicle device, an augmented reality/virtual reality (AR/VR) device, a helmet display, a smart television, a wearable device, a smart speaker, a digital camera, a camera, another mobile internet device (MID) having a network access capability, a terminal device in scenarios such as a train, a ship, and flight, or the like. As shown in FIG. 1, the terminal device may be a notebook computer (as shown by the first computer device 102b), a mobile phone (as shown by the first computer device 102c), an in-vehicle device (as shown by the first computer device 102a), or the like. FIG. 1 only shows a part of devices as an example. In some embodiments, the first computer device 102a is a device located in a vehicle 103, and the first computer device 102a may be configured to output media data 1021 and the like. The server mentioned above may be an independent physical server, a

server cluster or distributed system including a plurality of physical servers, or a cloud server providing a basic cloud computing service such as a cloud service, a cloud database, cloud computing, a cloud function, cloud storage, a network service, cloud communication, a middleware service, a domain name service, a security service, vehicle infrastructure cooperation, a content delivery network (CDN), and a big data and artificial intelligence platform.

[0052] In some embodiments, the data involved in the embodiments of this application may be stored in the computer device, or the data may be stored by using a cloud storage technology or a blockchain network. This is not limited herein.

[0053] Further, FIG. 3 is a schematic diagram of an application interaction scenario according to an embodiment of this application. As shown in FIG. 3, a user may interact with a client. A first computer device may include the client and the like. The client may obtain, by using a user interface (UI), interaction data entered by the user, and process the interaction data. The client may include but is not limited to a common gateway interface (CGI), a data processing module (DataManager), the user interface, and the like.

[0054] The data processing module performs create, delete, and update processing on data (for example, media data, trending media data, and other data) returned by a server as a response. For example, if the first computer device has no local push data, push data is created, and the push data may be stored in a file. For example, if receiving a data deletion request delivered by a server, the client may search for to-be-deleted data requested by using the data deletion request, delete the to-be-deleted data after finding the to-be-deleted data, and delete the to-be-deleted data from the file. For example, if receiving a data update request delivered by the server, the client may obtain replacement data carried in the data update request and to-be-updated data requested by using the data update request, replace the to-be-updated data with the replacement data, and update the to-be-updated data in the file with the replacement data. The data processing module is further configured to process file storage, and may back up and store data in a memory in a file, so that the client can restore the data and continue to process the push data after being restarted. The data processing module may be further configured to notify a data change. For example, after the client performs create, delete, and update processing, if the data of the client changes, the client may invoke the UI, and update presentation data of the UI or hide presentation data of the UI.

[0055] The UI is configured to obtain a change of data in the data processing module, and may present the push data, hide the push data, or the like in combination with the interaction data entered by the user.

[0056] Specifically, the first computer device may obtain push data transmitted by a second computer device (including the server). The push data may include but is not limited to trending content description information and a trending content push configuration, and may be denoted as data={display_info, display_config}, where display_info is configured for representing the trending content description information, and includes but is not limited to a series of presentation content such as a title, a subtitle, and an icon; and display_config is the trending content push configuration, and is configured for controlling timing of presenting or hiding the trending content description information, a trending content push condition, and the like. For example, after the user slides a media data feed for x times, the trending content description information is presented for n seconds, where x is a positive integer, and n is a value. The first computer device may obtain a push parameter associated with the trending content push configuration, and output the trending content description information when the push parameter satisfies the trending content push condition in the trending content push configuration.

[0057] Further, FIG. 4 is a flowchart of a media data push method according to an embodiment of this application. As shown in FIG. 4, a media data push process includes the following operations.

[0058] Operation S401: Output first media data on a media presentation page, and output trending content description information in response to receiving a trending content push task.

[0059] In this embodiment of this application, a first computer device may output the first media data on the media presentation page. Specifically, the first computer device may output a media data feed before update on the media presentation page, and record currently played media data as the first media data. The media data feed before update includes a plurality of pieces of media data, and is a recommended feed when a media playback application plays media data. Further, the first terminal device may output the trending content description information in response to receiving the trending content push task. In this push processing process, the media data feed before update is still outputted, that is, a process of outputting the media data feed before update is not interrupted. For example, the first computer device is playing a video 1, continues to play the video 1 when receiving the trending content push task, and when push timing arrives, outputs the trending content description information. In this case, output of the media data feed before update is still continued.

[0060] Specifically, in a push manner 1, when the trending content push task is received, the trending content description information corresponding to the trending content push task is displayed independently on the first media data in response to receiving the trending content push

task, as shown by the trending content description information 203 in FIG. 2. For example, FIG. 5 is a schematic diagram of a push processing scenario according to an embodiment of this application. As shown in FIG. 5, the first computer device receives the trending content push task. In this case, it is assumed that first media data 501 is being outputted. In the push manner 1, trending content description information 5011 corresponding to the trending content push task may be displayed independently on the first media data 501.

[0061] In a push manner 2, when the trending content push task is received, the trending content push task is suspended in response to receiving the trending content push task; and when playback of the first media data is completed, second media data is outputted, and the trending content description information corresponding to the trending content push task is outputted. Specifically, the first computer device may cache the trending content push task in response to receiving the trending content push task; and output the second media data in response to a page slide operation on the media presentation page, and display the trending content description information corresponding to the trending content push task independently on the second media data. The second media data is media data in the media data feed before update that is adjacent to the first media data. The media data feed before update is a recommended feed of media data in the media playback application in which the media presentation page is located. In other words, after receiving the trending content push task, the first computer device may temporarily locally store corresponding content, and present the corresponding trending content description information at an application top of the media playback application when a user slides down (that is, the page slide operation is triggered) after the user completes browsing a current video (that is, the first media data) the user completely browses a current video (that is, the first media data). This avoids impact of trending content push on running of the application, and improves fluency in media display. As shown in FIG. 5, in the push manner 2, when playback of the first media data 501 is completed, second media data 502 is outputted, and trending content description information 5021 corresponding to the trending content push task is outputted.

[0062] In any one of the foregoing push manners, when the trending content push task is received, trending media data corresponding to the trending content push task may be obtained. The first media data is media data displayed on the media presentation page when the first computer device receives the trending content push task. The trending media data is added to a location in the media data feed before update that is adjacent to the first media data, to obtain a media data feed, and the trending content description information corresponding to the trending content push task is outputted. In this case, the media data feed includes the trending media data. If the media data feed includes "... media data 1, media data 2, media data 3, …", and the first media data is media data 2,

the trending media data is added to a location in the media data feed that is adjacent to the first media data, to obtain a new media data feed, for example, "... the media data 1, the trending media data, the media data 2, the media data 3, …", or "... the media data 1, the media data 2, the trending media data, the media data 3, …". Alternatively, when receiving the trending content push task, the first computer device may obtain trending media data corresponding to the trending content push task, and cache the trending media data. In operation S402, third media data that is being outputted on the media presentation page is obtained in response to a trigger operation on the trending content description information, a location in the media data feed before update that is adjacent to the third media data is determined as a trending content insertion location, and the trending media data is inserted into the trending content insertion location in the media data feed before update, to obtain a media data feed. In other words, the first computer device may output media data on the media presentation page in a feed manner, and when receiving the trending media data, directly output the trending media data by using an original data feed, that is, add the trending media data to the media data feed before update, without data feed switching. In this way, from a perspective of the user, manners in which the first computer device outputs original media data and outputs the trending media data on the media presentation page are consistent, and pushing the trending media data does not interrupt an operation of the user in the media playback application. Therefore, fluency in media data display is improved.

[0063] Specifically, the first computer device may suspend the trending content push task in response to receiving the trending content push task, and output the trending content description information when the push timing arrives. The push timing may be but is not limited to that a quantity of consecutive first slide operations reaches a first push threshold, a quantity of slide operations reaches a second push threshold, media data is exposed, playback of current media data is completed, or the like. Specifically, if it is detected that the quantity of consecutive first slide operations is greater than or equal to the first push threshold, the trending content push task is read, and the trending content description information corresponding to the trending content push task is outputted. The first slide operation is an operation in which duration from display to termination of display of media data is less than a playback time threshold. In other words, after a cumulative quantity of consecutive quick slides (duration from media exposure to slide-away is less than the playback time threshold, for example, 3 seconds) reaches the first push threshold, the trending content description information may be outputted. The playback time threshold is configured for representing minimum duration of effective playback of media data. The first push threshold is a minimum quantity of consecutive first slide operations for triggering an output operation for the trending content push task. Alternatively, if it is detected that the quantity of slide operations is

greater than or equal to the second push threshold, the trending content push task is read, and the trending content description information corresponding to the trending content push task is outputted. The slide operation includes a first slide operation. The second push threshold is a minimum quantity of slide operations for triggering an output operation for the trending content push task. In other words, when a cumulative quantity of slides reaches the second push threshold (for example, m times, m being a positive integer), in-feed push is performed on the trending content description information during a next in-feed presentation, that is, the trending content description information is outputted. Alternatively, if the first media data is being played, the trending content description information is outputted. In other words, an exposure check is performed, and when the media data is dynamically exposed, whether in-feed push is to be performed is detected immediately. Alternatively, if playback of the first media data is completed, the trending content description information is outputted. In other words, a playback completion check is performed, and when dynamic playback of the current media data ends, whether in-feed push is to be performed is detected.

[0064] In some embodiments, the first computer device may obtain, in response to receiving the trending content push task, a local push identifier (CliSeq) and a trending content push identifier (SvrSeq) corresponding to the trending content push task. The local push identifier is a maximum push identifier in a push identifier of a historical trending content push task for which push has been completed. If the local push identifier is less than the trending content push identifier, that is, CliSeq<SvrSeq, there is new push data, the trending content description information corresponding to the trending content push task may be outputted, and the trending content push identifier is determined as the local push identifier, and may be denoted as CliSeq=SvrSeq. In this case, the trending content push task becomes a historical trending content push task. This implements real-time recording of a push status of the historical trending content push task for which push has been completed, to ensure that the first computer device can normally run a sequence (Seq) synchronization mechanism when initiating a data obtaining (FinderSync) request next time, where Seq may be considered as a unilaterally ascending unsigned integer. If the local push identifier is greater than or equal to the trending content push identifier, the trending content push task is deleted.

[0065] In some embodiments, the first computer device may obtain, in response to receiving the trending content push task, the trending content description information and a trending content push configuration that are carried in the trending content push task. The trending content description information is configured for describing the trending media data pushed in the trending content push task. The trending content push configuration is configured for representing a push

condition (that is a trending content push condition) of the trending media data pushed in the trending content push task. In other words, the trending content push configuration is configured for representing a condition under which the media playback application pushes the trending content description information. A push parameter associated with the trending content push configuration is obtained in real time, and the trending content description information is outputted when the push parameter satisfies the trending content push condition in the trending content push configuration. If the trending content push configuration is that the quantity of consecutive first slide operations reaches the first push threshold, the push parameter is the quantity of consecutive first slide operations. If the trending content push configuration is that the quantity of slide operations reaches the second push threshold, the push parameter is the quantity of slide operations. If the trending content push configuration is media data exposure, the push parameter is a playback status of the current media data, the playback status including a playing state, a non-playing state, and the like. Certainly, the trending content push configuration may be obtained based on a push requirement of the media playback application. The foregoing several possible configuration cases are listed as examples. This is not limited herein.

[0066] Operation S402: Output, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information.

[0067] In this embodiment of this application, the first computer device outputs, on the media presentation page based on the trending content insertion location in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information. The trending content insertion location is configured for representing the location of the trending media data in the media data feed, and may be a location on the media presentation page that is adjacent to the third media data that is being outputted when the first computer device is to output the trending media data. The third media data may be the first media data, or may not be the first media data. In other words, the first computer device may output, at the location on the media presentation page that is adjacent to the third media data in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information. The third media data is the media data that is being outputted on the media presentation page when the first computer device outputs the trending media data. Specifically, in the push manner 1, the first computer device may suspend the trending content push task in response to the trigger operation on the trending content description information; when detecting the page slide operation on the media presentation page, read the trending content push task in response to the page slide operation on the

media presentation page; and read the media data feed based on the trending content push task, to obtain the trending media data corresponding to the trending content description information, and output the trending media data.

[0068] Specifically, the trending content insertion location is a location on the media presentation page that is adjacent to the first media data, that is, the third media data is the first media data. Dynamic sliding display is performed on the first media data along a first page direction on the media presentation page in response to the trigger operation on the trending content description information. The trending media data corresponding to the trending content description information is displayed adjacent to the first media data along the first page direction on a first direction side of the first media data. The first page direction is a direction from the first direction side to the first media data. The first direction side is a direction side of the first media data towards a page start location of the media presentation page. Specifically, FIG. 6a is a schematic diagram of a media display scenario according to an embodiment of this application. As shown in FIG. 6a, the first computer device outputs first media data 602 on a media presentation page 601, and outputs trending content description information 6021 corresponding to the trending content push task. In this case, dynamic sliding display is performed on the first media data 602 along a first page direction 603 in response to a trigger operation on the trending content description information 6021, and trending media data 604 corresponding to the trending content description information 6021 is displayed adjacent to the first media data 602 along the first page direction 603 on a first direction side of the first media data 602. In this case, the media presentation page 601 is displayed as a media presentation page 601a, until the trending media data 604 is outputted on the media presentation page. In this case, the media presentation page 601 is displayed as a media presentation page 601b. In this case, the first computer device outputs the first media data 602, that is, displays the media presentation page as a media presentation page 601c, in response to a page slide operation 605 on the media presentation page 601b.

[0069] Alternatively, the trending content insertion location is a location on the media presentation page that is adjacent to the first media data, that is, the third media data is the first media data. The first computer device may hide the trending content description information while continuing playback of the first media data in response to the trigger operation on the trending content description information, and output, at the location on the media presentation page that is adjacent to the first media data in response to detecting a page slide operation on the media presentation page, the trending media data corresponding to the trending content description information. Specifically, FIG. 6b is a schematic diagram of another media display scenario according to an embodiment of this application. As shown in FIG. 6b, the first computer device

outputs first media data 607 on a media presentation page 606, and outputs trending content description information 6071 corresponding to a trending content push task. In this case, the trending content description information 6071 may be hidden in response to a trigger operation on the trending content description information 6071, to indicate that the trending content description information 6071 is already triggered, while playback of the first media data 607 is continued. When a page slide operation 608 on the media presentation page is detected, trending media data corresponding to the trending content description information may be outputted in response to the page slide operation 608 on the media presentation page. Specifically, dynamic sliding display is performed on the first media data 607 along a second page direction, and the trending media data 609 is displayed adjacent to the first media data 607 on a second direction side of the first media data 607. The second page direction is a direction from the first media data to the second direction side. The second direction side is a direction side of the first media data towards a page end location of the media presentation page. In this case, the media presentation page 606 is displayed as a media presentation page 606a, until the trending media data 609 is outputted on the media presentation page. In this case, the media presentation page 606 is displayed as a media presentation page 606b. In this case, the first computer device outputs second media data 611, that is, displays the media presentation page as a media presentation page 606c, in response to a page slide operation 610 on the media presentation page 606b.

[0070] In the push manner 2, the trending content insertion location is a location between the first media data and the second media data. Specifically, the first computer device may perform dynamic sliding display on the second media data along a first page direction in response to the trigger operation on the trending content description information, and output, between the first media data and the second media data, the trending media data corresponding to the trending content description information. For example, the media data feed includes "... the first media data, the second media data, …". The first computer device displays the trending content description information on the second media data. In this case, the first computer device may perform, in response to the trigger operation on the trending content description information, media data output by using a media data feed "... the first media data, the trending media data, the second media data, …". The first page direction is a direction from a page start location of the media presentation page to the second media data.

[0071] In short, the first page direction is a direction from the page start location of the media presentation page to a page end location of the media presentation page. The second page direction is a direction from the page end location of the media presentation page to the page start

location of the media presentation page. The first page direction and the second page direction are opposite directions.

[0072] Further, in some embodiments, if display duration of the trending content description information is greater than or equal to a first display threshold, the trending content description information is collapsed. Certainly, in this case, the display duration of the trending content description information is less than a second display threshold. If the display duration of the trending content description information is greater than or equal to the second display threshold, display of the trending content description information is terminated. Alternatively, if collapse duration of the trending content description information is greater than or equal to a third display threshold, display of the trending content description information is terminated. The second display threshold may be a sum of the first display threshold and the third display threshold. The second display threshold is greater than the first display threshold. For example, FIG. 7 is a schematic diagram of a push display scenario according to an embodiment of this application. As shown in FIG. 7, the first computer device may display media data 702 on a media presentation page 701, and display trending content description information 703 independently on the media data 702. The media data 702 may be the first media data or the second media data, which is specifically determined by a used push manner. If display duration of the trending content description information 703 is greater than or equal to the first display threshold, the trending content description information 703 is collapsed, that is, the trending content description information is displayed in a collapsed form 704, for example, is displayed as "Breaking news^". If display duration of the trending content description information 703 is greater than or equal to the second display threshold, display of the trending content description information 703 is terminated. For example, the first display threshold is 5 seconds, and the third display threshold is 5 seconds. After the trending content description information is displayed, if the trending content description information is not triggered after 5 seconds, the first computer device may collapse the trending content description information. If the trending content description information is still not triggered after being collapsed for 5 seconds, the first computer device may terminate the display of the trending content description information. In some embodiments, the first computer device may alternatively directly set a threshold denoted as a fourth display threshold. If display duration of the trending content description information is greater than or equal to the fourth display threshold, display of the trending content description information is directly terminated. In other words, the first computer device may directly terminate the display of the trending content description information after displaying the trending content description information for a period of time. Alternatively, after displaying the trending content description information for a period of time, the

first computer device may collapse the trending content description information, and then terminate the display of the trending content description information on such a basis.

[0073] Further, in some embodiments, the first computer device may back up the trending media data corresponding to the trending content description information, to obtain backup data; delete the backup data if playback of the trending media data is completed; and during the playback of the trending media data, associate the backup data with a data playback progress of the trending media data when it is detected that the media playback application is closed, and when it is detected that the media playback application is started, read the backup data and the data playback progress, and play the trending media data based on the data playback progress, the media playback application being the application in which the media presentation page is located.

[0074] Further, FIG. 8 is a flowchart of another media data push method according to an embodiment of this application. As shown in FIG. 8, a media data push process includes the following operations.

[0075] Operation S801: Generate a trending content push task, and transmit the trending content push task to a first computer device.

[0076] In this embodiment of this application, a second computer device may generate the trending content push task, and transmit the trending content push task to the first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task. The first computer device outputs, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information. The trending content push task indicates to push the trending media data. The trending content description information is configured for describing the trending media data. The trending media data and the first media data belong to a same media data feed. For details, refer to the related descriptions in FIG. 4.

[0077] Specifically, the second computer device may obtain the trending media data, and generate the trending content push task based on the trending media data; add the trending content push task into a task processing queue, and generate a trending content push identifier for the trending content push task; and transmit the trending content push task to the first computer device by using the trending content push identifier and the task processing queue. When the trending content push task is transmitted to the first computer device, media information of the trending media data is obtained, and media delivery information associated with the media information is obtained; and the first computer device satisfying the media delivery information is obtained, and

the trending content push task is transmitted to the first computer device satisfying the media delivery information. The media delivery information is configured for representing blocking information, receiving information, and the like for the trending media data, and is configured for indicating related information of the first computer device receiving the trending media data. The media information includes but is not limited to data publishing object information, a media data type, and the like of the trending media data, and may further include, for example, a media publishing channel of the trending media data in a media playback application, and the like. For example, the media information includes "published by an object 1, entertainment information, and the like". In this case, the media delivery information may include "the object 1 or the entertainment information unblocked", and the first computer device satisfying the media delivery information may be obtained. The first computer device satisfying the media delivery information does not block the object 1 or the entertainment information. Further, the trending content push task may be transmitted to the first computer device satisfying the media delivery information.

[0078] In some embodiments, the second computer device may obtain third party data transmitted by a third party application, obtain a data format of a media data feed corresponding to the media playback application, and convert the third party data into the trending media data in the data format. Alternatively, the second computer device may obtain the trending media data generated by the media playback application. Therefore, the media playback application can smoothly insert the trending media data into the media data feed, improving fluency in media data display.

[0079] In this embodiment of this application, the first media data is outputted on the media presentation page. The trending content description information is outputted in response to receiving the trending content push task, the trending content description information being configured for describing the trending media data. The trending media data corresponding to the trending content description information is outputted at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data and the first media data belonging to the same media data feed. In the foregoing process, the trending media data corresponding to the trending content description information may be forcibly inserted into the media data feed during trending content push, that is, the trending media data is inserted into the media data feed in which the first media data is located. In this way, a user can slide the media presentation page or tap the trending content description information to view the trending media data, and can also continue to slide the media presentation page to browse other media data without interrupting an original interaction behavior of the user on the media presentation page. In other words, in an entire push process of pushing the trending media

data, the user does not need to leave a current media data feed. Instead, the first computer device adds the trending media data into the media data feed currently viewed by the user. Therefore, the first computer device separately performs in parallel a process of pushing media data (which may be denoted as original media data) in a media data feed before update and the process of pushing the trending media data, and outputs the media data in the media data feed before update and the trending media data on the media presentation page by using the same data feed. This avoids impact of output of the trending media data on output of the original media data, improving fluency in media data display and improving interaction performance of media data.

[0080] Further, FIG. 9 is a diagram of an in-feed push service architecture according to an embodiment of this application. As shown in FIG. 9, the in-feed push service architecture may include the following modules.

[0081] A processing platform/request processing module (API Broker) is an in-feed pop-up push task processing platform, is an application (portal) gateway for processing an entire lifecycle of a task, is configured to process a trending content push task, and may perform task creation (for example, creation of the trending content push task), task filtering and approval, task query, task control, and the like. Task creation is configured for obtaining task metadata, for example, a push type, a title, task expiration time, and object processing data, and generating the trending content push task based on the task metadata. The object processing data is configured for describing a service object (that is, a user) of a media playback application, and may be a text file formed by user information, or the like. Task filtering and approval is configured for multi-level review, such as machine review, manual review, and security review. Task control is configured for push delivery, task revocation, and the like.

[0082] A push distribution module is configured to use distributed message middleware to support a capability of implementing quick push delivery to hundreds of millions of users, and includes a message queue (MQ) module and a task processing module (MQ Worker). The MQ module is configured to receive a message and enqueue the received message, and may be configured to process a push control message, for example, push and revocation description information. For example, the MQ module may add the received task metadata to a task processing queue. The MQ Worker is a message dequeuing module, and implements large-scale quick push to hundreds of millions of users by performing multi-level splitting on the object processing data, including task initialization and multi-level distribution. Task initialization is configured for implementing data packet reading, sub-file distribution, and the like. A first-level task distribution queue may read distributed sub-file content from the task processing queue, and quickly enqueue

and forward a plurality of (for example, 10,000) pieces of distributed sub-file content per batch to a next level. A second-level data construction queue constructs, for each batch of users, user-level push storage data based on the push task metadata, task control data, a service scenario, and the like, and forwards the user-level push storage data to a third-level unified storage queue. A third-level message storage queue performs flow rate control, is configured for implementing storage logic of single-user push and revocation, and limits a speed of the third-level queue to implement real-time push rate control. A request sequence (Seq) service implements data version control. A server stores a current latest sequence of a corresponding scenario, that is, a trending content push identifier. By comparing the current latest sequence with an old sequence value (that is, a local push identifier) transparently transmitted to a client last time, a subsequent delivery link may determine whether there is a latest control instruction, and then execute corresponding latest push and revocation instruction delivery logic. Storage and push (Notify) stores push and revocation message instruction data, and actively performs push by using a reliable Notify, to trigger the client to initiate a CGI retrieval request and retrieve a pop-up push instruction and a revocation instruction from a subsequent delivery link. Specifically, when the trending content push task is processed, the following process may be included.

[0083] (1) A second computer device may obtain a task generation request via the processing platform, obtain, via the request processing module, the task metadata carried in the task generation request, generate the trending content push task based on the task metadata, and add the trending content push task to a task database (tablekv). The task database may further include a relationship processing table (customer relationship management, CRM). The CRM may include the object processing data (or referred to as a crowd packet), and the like. The object processing data is configured for representing media data blocking information configured by a first computer device. The media data blocking information indicates a type of media data blocked by the corresponding first computer device, an object whose published media data is blocked, or the like. This is not limited herein.

[0084] (2) The second computer device may add the trending content push task to the task processing queue. The second computer device may obtain a to-be-processed task from the task processing queue via the task processing module, where the trending content push task is used herein as an example; initialize the trending content push task via the task initialization module, and then deliver data related to the trending content push task to the second-level data construction queue by using the first-level task distribution queue; by using the second-level data construction queue, obtain media information of trending media data, obtain media delivery information associated with the media information, construct push data based on the media delivery information

and the data related to the trending content push task, and forward the push data to the third-level message storage queue; and determine a trending content push configuration of the trending content push task and the like by using the third-level message storage queue.

[0085] (3) The request sequence service is invoked, and the trending content push identifier of the trending content push task is generated by using the request sequence service.

[0086] (4) In some embodiments, the push data may be added to a push database (for example, ttlkv). If the push data includes a data revocation instruction, to-be-deleted data may be obtained based on the data revocation instruction, and the to-be-deleted data is added to a revocation database. The revocation database may be a table storage database (tablekv). In some embodiments, the second computer device may obtain the local push identifier, where the local push identifier is configured for indicating a latest identifier of description information that has been delivered; and if the local push identifier is less than the trending content push identifier, add the push data to the push database, and perform (5); or if the local push identifier is greater than or equal to the trending content push identifier, add the push data to the revocation database. In some embodiments, a delete flag field may be further added for the trending content push task. In some embodiments, this process may alternatively be implemented by the first computer device.

[0087] (5) The second computer device may invoke a push service (Notify) to transmit the push data to the first computer device.

[0088] (6) and (7): The first computer device may obtain object configuration information by using a data delivery service; and if the push data satisfies the object configuration information, perform the operations shown in FIG. 4, and output the trending content description information; or if the push data does not satisfy the object configuration information, discard the push data. In some embodiments, a data push failure prompt message may be transmitted to the second computer device. The data push failure prompt message may include the object configuration information. The data delivery service includes a data delivery module (including, but not limited to, a push retrieval module and a push revocation module), a push processing module, a filtering module, and the like. In some embodiments, the first computer device may obtain the push data via the push retrieval module, convert the push data into the trending content description information via the push processing module, obtain the object configuration information via the filtering module, and when the trending content description information satisfies the object configuration information, perform the operations shown in FIG. 4 and output the trending content description information. In some embodiments, the push data is deleted if it is determined via the push revocation module that the push data is revoked.

[0089] In some embodiments, (6) and (7) may alternatively be implemented by the second computer device. For example, in response to the push service, the second computer device may obtain the push data via a push retrieval module, convert the push data into the trending content description information via a push processing module, obtain the media information of the trending content push task via a filtering module, obtain the media delivery information corresponding to the media information, obtain the first computer device (which may be denoted as a first associated device) satisfying the media delivery information, and transmit the trending content push task to the first computer device satisfying the media delivery information.

[0090] kv (for example, tablekv or ttltv) mentioned above is a key-value (KV) storage database.

[0091] The diagram of the architecture shown in FIG. 9 is merely an example. In an actual implementation, modules may be split or different modules may be combined based on functions that need to be implemented. For example, the push retrieval module and the push revocation module are combined into one module. For example, the push revocation module is split into a push revocation module and a revocation reminder module. This is not limited herein.

[0092] Further, FIG. 10 is a schematic diagram of interaction for push processing according to an embodiment of this application. A second computer device may include but is not limited to a push synchronization module, a request sequence service, a storage proxy service, a filtering module, and the like. The push synchronization module may be a push synchronization logic service (for example, mmfindersynclogicsvr), and may be considered as a push synchronization interface (FinderSync CGI). The request sequence service (for example, mmfinderseq) is configured for providing a video sequence service. The storage proxy service (for example, mmfinderstoreproxy) is configured for providing a storage proxy service of a media playback application. The filtering module, for example, a red dot filtering control center (mmfinderreddotdeliverycheck), is configured to process a delivery filtering condition of description information of the media playback application, for example, a feed is filtered for being blocked by a first object, a feed is filtered for being deleted, a feed is filtered for being hidden, a feed is filtered for being visible only to self, and a feed is filtered for being read. This is not limited herein. The feed is an information feed that is continuously updated and presented to a user, and is a product of the mobile Internet. In other words, content in which the user is interested is pushed to the user and provided to the user in a feed form through data analysis based on user-related (for example, a user habit, a user tag, and a user setting). The user-related information is information obtained with user authorization. As shown in FIG. 10, for an implementation process of the process,

refer to related operation descriptions in FIG. 4. Specifically, the process may include the following operations.

[0093] Operation S1001: Transmit a data retrieval request.

[0094] In this embodiment of this application, a service object (that is, a user) may transmit the data retrieval request to the second computer device, the data retrieval request being configured for requesting trending content push from the second computer device. In short, the user may transmit the data retrieval request to the second computer device by using an account in the media playback application.

[0095] Operation S1002: Obtain a trending content push identifier.

[0096] In this embodiment of this application, the second computer device may obtain the trending content push identifier from the request sequence service via the push synchronization module.

[0097] Operation S1003: Return the trending content push identifier.

[0098] In this embodiment of this application, the second computer device returns the trending content push identifier to the push synchronization module by using the request sequence service.

[0099] Operation S1004: Perform identifier verification.

[00100] In this embodiment of this application, the second computer device may perform identifier verification via the push synchronization module. Specifically, a local push identifier may be obtained. If the local push identifier is less than the trending content push identifier, currently processed trending media data is not delivered, a pop-up command processor (for example, GetFinderPopupCmdProcessor) may be created, and processing may be performed via the pop-up command processor.

[00101] Operation S1005: Obtain the trending media data.

[00102] In this embodiment of this application, the second computer device may obtain the trending media data from the storage proxy service via the pop-up command processor.

[00103] Operation S1006: Return trending content related information.

[00104] In this embodiment of this application, the second computer device may return the trending content related information including task metadata and the like to the pop-up command processor by using the storage proxy service.

[00105] Operation S1007: Obtain valid data.

[00106] In this embodiment of this application, the second computer device may obtain the valid data from the trending content related information via the pop-up command processor as push data. Specifically, the second computer device may perform deserialization and validity screening on the trending content related information, to obtain the valid data.

[00107] Operation S1008: Write back a delete flag.

[00108] In this embodiment of this application, the second computer device may invoke, via the pop-up command processor, the storage proxy service to write back the delete flag for the valid data.

[00109] Operation S1009: Success indication.

[00110] In this embodiment of this application, the second computer device may receive, via the pop-up command processor, the write-back success indication of the delete flag provided by the storage proxy service, and perform operation S1010.

[00111] Operation S1010: Perform delivery filtering on the push data.

[00112] In this embodiment of this application, the second computer device may request, via the pop-up command processor, the filtering module to perform delivery filtering on the push data. The filtering module may determine media delivery information based on a delivery filtering condition and media information of the trending media data, and determine a first computer device satisfying the media delivery information as a first associated device. For example, if the delivery filtering condition of the trending media data includes that a feed is filtered for being visible only to self, data publishing object information of the trending media data may be obtained, and the first computer device of a data publishing object indicated by the data publishing object information is determined as the first associated device. If the delivery filtering condition of the trending media data includes that a feed is filtered for being blocked by the first object, the first object performing a blocking operation on any parameter attribute in the media information of the trending media data may be obtained, and the first computer device associated with a service object other than the first object is determined as the first associated device.

[00113] Operation S1011: Obtain a filtering result.

[00114] In this embodiment of this application, the second computer device may obtain the filtering result from the filtering module via the pop-up command processor. The filtering result includes the first associated device and the like.

[00115] Operation S1012: Convert the push data into trending content description information.

[00116] In this embodiment of this application, the second computer device may convert the push data into the trending content description information via the pop-up command processor. The trending content description information may be displayed in a form of a pop-up window in the media playback application on the first computer device. Alternatively, the trending content description information may be displayed in a form of a triggerable component. The form of the pop-up window may be considered as a form that is independently displayed on a page in the media playback application and that can perform interaction, for example, a small bubble in a video channel. The small bubble is a simplified form for in-feed push.

[00117] Operation S1013: Transmit the trending content description information.

[00118] In this embodiment of this application, the second computer device may transmit the trending content description information to the push synchronization module via the pop-up command processor.

[00119] Operation S1014: Set the local push identifier.

[00120] In this embodiment of this application, the second computer device may set the local push identifier via the push synchronization module, that is, determine the trending content push identifier as the local push identifier, which may be denoted as CliSeq=SvrSeq.

[00121] Operation S1015: Return the local push identifier.

[00122] In this embodiment of this application, the second computer device may transmit the local push identifier and the trending content description information to the first computer device in which the service object is located, and the first computer device may perform the operations shown in FIG. 4, and output the trending content description information and the like.

[00123] Further, FIG. 11 is a schematic diagram of a media data push apparatus according to an embodiment of this application. The media data push apparatus may be a computer program (including program code and the like) run on a first computer device. For example, the media data push apparatus may be application software. The apparatus may be configured to perform corresponding operations in the method provided in the embodiments of this application. As shown in FIG. 11, the media data push apparatus 1100 may be applied to the first computer device in the embodiment corresponding to FIG. 4. Specifically, the apparatus may include a message output module 11 and a media output module 12.

[00124] The message output module 11 is configured to output first media data on a media presentation page.

[00125] The message output module 11 is further configured to output trending content description information in response to receiving a trending content push task, the trending content description information being configured for describing trending media data.

[00126] The media output module 12 is configured to output, at a trending content insertion location on the media presentation page in response to a trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the trending media data and the first media data belonging to a same media data feed.

[00127] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

display the trending content description information independently on the first media data in response to receiving the trending content push task.

[00128] The trending content insertion location is a location on the media presentation page that is adjacent to the first media data. The media output module 12 is specifically configured to:

perform dynamic sliding display on the first media data along a first page direction on the media presentation page in response to the trigger operation on the trending content description information, and display, adjacent to the first media data along the first page direction on a first direction side of the first media data, the trending media data corresponding to the trending content description information, the first page direction being a direction from the first direction side to the first media data, and the first direction side being a direction side of the first media data towards a page start location of the media presentation page.

[00129] The trending content insertion location is a location on the media presentation page that is adjacent to the first media data. The media output module 12 is specifically configured to:

hide the trending content description information while continuing playback of the first media data in response to the trigger operation on the trending content description information, and output, at the location on the media presentation page that is adjacent to the first media data when detecting a page slide operation on the media presentation page, the trending media data corresponding to the trending content description information.

[00130] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

cache the trending content push task in response to receiving the trending content push task; and

output second media data in response to a page slide operation on the media presentation page, and display the trending content description information corresponding to the trending content push task independently on the second media data, the second media data being media data in a media data feed before update that is adjacent to the first media data, and the media data feed before update being a recommended feed of media data in a media playback application in which the media presentation page is located.

[00131] The trending content insertion location is a location between the first media data and the second media data. When outputting, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the message output module 11 is specifically configured to:

perform dynamic sliding display on the second media data along a first page direction in response to the trigger operation on the trending content description information, and output, between the first media data and the second media data, the trending media data corresponding to the trending content description information, the first page direction being a direction from a page start location of the media presentation page to the second media data.

[00132] The apparatus 1100 further includes:

a push processing module 13, configured to collapse the trending content description information if display duration of the trending content description information is greater than or equal to a first display threshold.

[00133] The push processing module 13 is further configured to terminate display of the trending content description information if display duration of the trending content description information is greater than or equal to a second display threshold. The second display threshold being greater than the first display threshold.

[00134] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

obtain, in response to receiving the trending content push task, the trending media data corresponding to the trending content push task; and

add the trending media data to a location in a media data feed before update that is adjacent to the first media data, to obtain the media data feed, and output the trending content description information corresponding to the trending content push task.

[00135] The trending content insertion location is a location on the media presentation page that is adjacent to the first media data. The media output module 12 is specifically configured to:

suspend the trending content push task in response to the trigger operation on the trending content description information;

read the trending content push task in response to a page slide operation on the media presentation page; and

read the media data feed based on the trending content push task, to obtain the trending media data corresponding to the trending content description information, and output the trending media data at the location on the media presentation page that is adjacent to the first media data.

[00136] The apparatus 1100 further includes:

a data backup module 14, configured to back up the trending media data corresponding to the trending content description information, to obtain backup data;

a backup deletion module 15, configured to delete the backup data if playback of the trending media data is completed; and

a backup starting module 16, configured to: during the playback of the trending media data, associate the backup data with a data playback progress of the trending media data when it is detected that a media playback application is closed, and when it is detected that the media playback application is started, read the backup data and the data playback progress, and play the trending media data based on the data playback progress, the media playback application being an application in which the media presentation page is located.

[00137] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

suspend the trending content push task in response to receiving the trending content push task; and

read the trending content push task if it is detected that a quantity of consecutive first slide operations is greater than or equal to a first push threshold, and output the trending content description information corresponding to the trending content push task, the first slide operation

being an operation in which duration from display to termination of display of media data is less than a playback time threshold, and the playback time threshold being configured for representing minimum duration of effective playback of the media data.

[00138] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

suspend the trending content push task in response to receiving the trending content push task; and

read the trending content push task if it is detected that a quantity of slide operations is greater than or equal to a second push threshold, and output the trending content description information corresponding to the trending content push task, the slide operation including a first slide operation.

[00139] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

obtain, in response to receiving the trending content push task, a local push identifier and a trending content push identifier corresponding to the trending content push task, the local push identifier being a maximum push identifier in a push identifier of a historical trending content push task for which push has been completed; and

output, if the local push identifier is less than the trending content push identifier, the trending content description information corresponding to the trending content push task, and determine the trending content push identifier as the local push identifier; or

delete the trending content push task if the local push identifier is greater than or equal to a trending content push identifier.

[00140] When outputting the trending content description information in response to receiving the trending content push task, the message output module 11 is configured to:

obtain, in response to receiving the trending content push task, the trending content description information and a trending content push configuration that are carried in the trending content push task, the trending content push configuration being configured for representing a push condition of the trending media data pushed by the trending content push task; and

obtain a push parameter associated with the trending content push configuration in real time, and output the trending content description information when the push parameter satisfies the trending content push condition in the trending content push configuration.

[00141] Further, FIG. 12 is a schematic diagram of another media data push apparatus according to an embodiment of this application. The media data push apparatus may be a computer program (including program code and the like) run on a second computer device. For example, the media data push apparatus may be application software. The apparatus may be configured to perform corresponding operations in the method provided in the embodiments of this application. As shown in FIG. 12, the media data push apparatus 1200 may be applied to the second computer device in the embodiment corresponding to FIG. 8. Specifically, the apparatus may include a media transmission module 21.

[00142] The media transmission module 21 is configured to generate a trending content push task, and transmit the trending content push task to a first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task, the first computer device outputting, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information, the trending content description information being configured for describing the trending media data, and the trending media data and the first media data belonging to a same media data feed.

[00143] The media transmission module 21 is configured to:

obtain the trending media data, and generate the trending content push task based on the trending media data;

add the trending content push task into a task processing queue, and generate a trending content push identifier for the trending content push task; and

transmit the trending content push task to the first computer device by using the trending content push identifier and the task processing queue.

[00144] When transmitting the trending content push task to the first computer device, the media transmission module 21 is specifically configured to:

obtain media information of the trending media data, and obtain media delivery information associated with the media information; and

obtain the first computer device satisfying the media delivery information, and transmit the trending content push task to the first computer device satisfying the media delivery information.

[00145] An embodiment of this application provides a media data push apparatus. The apparatus may output first media data on a media presentation page, output trending content description information when receiving a trending content push task, and output, at a location on the media presentation page that is adjacent to the first media data in response to a trigger operation on the trending content description information, trending media data corresponding to the trending content description information. In the foregoing process, the trending media data corresponding to the trending content description information may be forcibly inserted into a media data feed during trending content push, that is, the trending media data is inserted into a location adjacent to the first media data. In this way, a user can slide the media presentation page or tap the trending content description information to view the trending media data, and can also continue to slide the media presentation page to browse other media data without interrupting an original interaction behavior of the user on the media presentation page. This can improve fluency in media data display.

[00146] FIG. 13 is a schematic diagram of a structure of a computer device according to an embodiment of this application. As shown in FIG. 13, the computer device in this embodiment of this application may include one or more processors 1301, a memory 1302, and an input/output interface 1303. The processor 1301, the memory 1302, and the input/output interface 1303 are connected through a bus 1304. The memory 1302 is configured to store a computer program. The computer program includes program instructions. The input/output interface 1303 is configured to receive data and output data, for example, is configured to perform data exchange between a first computer device and a second computer device. The processor 1301 is configured to execute the program instructions stored in the memory 1302.

[00147] The processor 1301 may perform the following operations:

outputting first media data on a media presentation page;

outputting trending content description information in response to receiving a trending content push task, the trending content description information being configured for describing trending media data; and

outputting, at a trending content insertion location on the media presentation page in response to a trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the trending media data and the first media data belonging to a same media data feed.

[00148] The processor 1301 may alternatively perform the following operations:

generating a trending content push task, and transmitting the trending content push task to a first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task, the first computer device outputting, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information, the trending content push task indicating to push the trending media data, the trending content description information being configured for describing the trending media data, and the trending media data and the first media data belonging to a same media data feed.

[00149] In some feasible implementations, the processor 1301 may be a central processing unit (CPU), or the processor may be another general-purpose processor, a digital signal processor (DSP), an application-specific integrated circuit (ASIC), a field programmable gate array (FPGA) or another programmable logic device, a discrete gate or transistor logic device, a discrete hardware component, or the like. The general-purpose processor may be a microprocessor. Alternatively, the processor may be any conventional processor or the like.

[00150] The memory 1302 may include a read-only memory and a random access memory, and provides instructions and data to the processor 1301 and the input/output interface 1303. A part of the memory 1302 may further include a non-volatile random access memory. For example, the memory 1302 may further store information about a device type.

[00151] During specific implementation, the computer device may perform implementations provided by the operations in FIG. 4 or FIG. 5 via built-in functional modules of the computer device. For details, refer to the implementations provided by the operations in FIG. 4 or FIG. 5. Details are not described herein again.

[00152] An embodiment of this application provides a computer device, including a processor, an input/output interface, and a memory. A computer program in the memory is obtained by the processor, to perform the operations in the method shown in FIG. 4 or FIG. 8, to perform media data push operations. In this embodiment of this application, first media data is outputted on a media presentation page, trending content description information is outputted when a trending content push task is received, and trending media data corresponding to the trending content description information is outputted at a location on the media presentation page that is adjacent to the first media data in response to a trigger operation on the trending content description information. In the foregoing process, the trending media data corresponding to the trending content description information may be forcibly inserted into a media data feed during trending content

push, that is, the trending media data is inserted into a location adjacent to the first media data. In this way, a user can slide the media presentation page or tap the trending content description information to view the trending media data, and can also continue to slide the media presentation page to browse other media data without interrupting an original interaction behavior of the user on the media presentation page. This can improve fluency in media data display.

[00153] An embodiment of this application further provides a computer-readable storage medium. The computer-readable storage medium has a computer program stored therein. The computer program is suitable for a processor to load and execute to perform the media data push method provided by the operations in FIG. 4 or FIG. 8. For details, refer to the implementations provided by the operations in FIG. 4 or FIG. 8. Details are not described herein again. In addition, for descriptions of beneficial effects of using the same method, details are not described herein again. For technical details that are not disclosed in the embodiment of the computer-readable storage medium in this application, refer to the descriptions in the method embodiments of this application. In an example, the computer program may be deployed to be executed on one computer device, on a plurality of computer devices at a same location, or on a plurality of computer devices that are distributed at a plurality of locations and interconnected by using a communication network.

[00154] The computer-readable storage medium may be an internal storage unit of the media data push apparatus or the computer device provided in any one of the foregoing embodiments, for example, a hard disk or an internal memory of the computer device. The computer-readable storage medium may alternatively be an external storage device of the computer device, for example, a plug-in hard disk, a smart media card (SMC), a secure digital (SD) card, or a flash card that are configured on the computer device. Further, the computer-readable storage medium may alternatively include both an internal storage unit and an external storage device of the computer device. The computer-readable storage medium is configured to store the computer program and another program and data that are required by the computer device. The computer-readable storage medium may be further configured to temporarily store data that has been outputted or is to be outputted.

[00155] An embodiment of this application also provides a computer program product or computer program. The computer program product or computer program includes computer instructions. The computer instructions are stored in a computer-readable storage medium. A processor of a computer device reads the computer instructions from the computer-readable storage medium. The processor executes the computer instructions, so that the computer device performs

the method provided in various manners in FIG. 4, implementing forcible insertion of trending media data corresponding to trending content description information into a media data feed during trending content push, that is, insertion of the trending media data into a location adjacent to first media data. In this way, a user can slide a media presentation page or tap the trending content description information to view the trending media data, and can also continue to slide the media presentation page to browse other media data without interrupting an original interaction behavior of the user on the media presentation page. This can improve fluency in media data display.

[00156] The terms "first", "second", and the like in the specification, the claims, and the drawings in the embodiments of this application are used to distinguish between different objects rather than describe a specific sequence. In addition, the term "include" or any other variant thereof is intended to cover a non-exclusive inclusion. For example, a process, method, apparatus, product, or device including a series of operations or units is not limited to the listed operations or modules, but instead, further includes operations or modules not listed in some embodiments, or further includes other operations or units inherent in the process, method, apparatus, product, or device in some embodiments.

[00157] In the embodiments of this application, the term "module" or "unit" is a computer program with a preset function or a part of a computer program and works, together with other related parts, to implement a preset target, and may be completely or partially implemented by using software, hardware (for example, a processing circuit or a memory) or a combination thereof. Similarly, one processor (or a plurality of processors or memories) may be configured to realize one or more modules or units. In addition, each module or unit may be a part of an overall module or unit including a function of the module or the unit.

[00158] A person of ordinary skill in the art may be aware that the units and the algorithm operations in the examples described with reference to the embodiments disclosed in this specification can be implemented by electronic hardware, computer software, or a combination thereof. To clearly describe interchangeability between hardware and software, the foregoing has generally described compositions and operations of the examples based on functions. Whether these functions are executed by hardware or software depends on specific applications and design constraints of the technical solutions. A person skilled in the art may use different methods to implement the described functions for each particular application, but it shall not be considered that the implementation goes beyond the scope of this application.

[00159] The method and the related apparatus provided in the embodiments of this application are described with reference to the method flowcharts and/or the schematic diagrams of

the structures provided in the embodiments of this application. Specifically, each procedure and/or block in the method flowcharts and/or the schematic diagrams of the structures and a combination of a procedure and/or a block in the flowcharts and/or the block diagrams may be implemented by using computer program instructions. The computer program instructions may be provided to a general-purpose computer, a dedicated computer, an embedded processing machine, or a processor of another programmable computer device, to generate a machine, so that the instructions executed by the computer or the processor of the another programmable computer device generate an apparatus configured to implement the functions specified in one or more procedures of the flowcharts and/or one or more blocks of the schematic diagrams of the structures. The computer program instructions may alternatively be stored in a computer-readable memory that can guide a computer or another programmable computer device to operate in a specific manner, so that the instructions stored in the computer-readable memory generate an artifact including an instruction apparatus. The instruction apparatus implements the functions specified in one or more procedures of the flowcharts and/or one or more blocks of the schematic diagrams of the structures. The computer program instructions may alternatively be loaded onto a computer or another programmable computer device, so that a series of operations are performed on the computer or the another programmable device to generate computer-implemented processing. Therefore, the instructions executed on the computer or the another programmable device provide operations for implementing the functions specified in one or more procedures of the flowcharts and/or one or more blocks of the schematic diagrams of the structures.

[00160] The operations in the method in the embodiments of this application may be adjusted in terms of a sequence, combined, or deleted based on an actual requirement.

[00161] The modules in the apparatus in the embodiments of this application may be combined, divided, or deleted based on an actual requirement.

[00162] What is disclosed above is merely exemplary embodiments of this application, and certainly is not intended to limit the scope of the claims of this application. Therefore, equivalent variations made in accordance with the claims of this application shall fall within the scope of this application.

CLAIMS

1. A media data push method, the method being performed by a first computer device, and the method comprising:

outputting first media data on a media presentation page;

outputting trending content description information in response to receiving a trending content push task, the trending content description information being configured for describing trending media data; and

outputting, at a trending content insertion location on the media presentation page in response to a trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the trending media data and the first media data belonging to a same media data feed.

2. The method according to claim 1, wherein the trending content insertion location is a location on the media presentation page that is adjacent to the first media data; and

outputting, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information comprises:

performing dynamic sliding display on the first media data along a first page direction on the media presentation page in response to the trigger operation on the trending content description information, and displaying, adjacent to the first media data along the first page direction on a first direction side of the first media data, the trending media data corresponding to the trending content description information, the first page direction being a direction from the first direction side to the first media data, and the first direction side being a direction side of the first media data towards a page start location of the media presentation page.

3. The method according to claim 1, wherein the trending content insertion location is a location on the media presentation page that is adjacent to the first media data; and

outputting, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information comprises:

hiding the trending content description information while continuing playback of the first media data in response to the trigger operation on the trending content description information, and outputting, at the location on the media presentation page that is adjacent to the first media data

when detecting a page slide operation on the media presentation page, the trending media data corresponding to the trending content description information.

4. The method according to claim 1, wherein outputting the trending content description information in response to receiving the trending content push task comprises:

caching the trending content push task in response to receiving the trending content push task; and

outputting second media data in response to a page slide operation on the media presentation page, and displaying the trending content description information corresponding to the trending content push task independently on the second media data, the second media data being media data in a media data feed before update that is adjacent to the first media data, and the media data feed before update being a recommended feed of media data in a media playback application in which the media presentation page is located.

5. The method according to claim 4, wherein the trending content insertion location is a location between the first media data and the second media data; and

outputting, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information comprises:

performing dynamic sliding display on the second media data along a first page direction in response to the trigger operation on the trending content description information, and outputting, between the first media data and the second media data, the trending media data corresponding to the trending content description information, the first page direction being a direction from a page start location of the media presentation page to the second media data.

6. The method according to claim 1, further comprising:

collapsing the trending content description information if display duration of the trending content description information is greater than or equal to a first display threshold; or

terminating display of the trending content description information if display duration of the trending content description information is greater than or equal to a second display threshold, the second display threshold being greater than the first display threshold.

7. The method according to claim 1, wherein outputting the trending content description information in response to receiving the trending content push task comprises:

obtaining, in response to receiving the trending content push task, the trending media data

corresponding to the trending content push task; and

adding the trending media data to a location in a media data feed before update that is adjacent to the first media data, to obtain the media data feed, and outputting the trending content description information corresponding to the trending content push task.

8. The method according to claim 7, wherein the trending content insertion location is a location on the media presentation page that is adjacent to the first media data; and

outputting, at the trending content insertion location on the media presentation page in response to the trigger operation on the trending content description information, the trending media data corresponding to the trending content description information comprises:

suspending the trending content push task in response to the trigger operation on the trending content description information;

reading the trending content push task in response to a page slide operation on the media presentation page; and

reading the media data feed based on the trending content push task, to obtain the trending media data corresponding to the trending content description information, and outputting the trending media data at the location on the media presentation page that is adjacent to the first media data.

9. The method according to claim 1, further comprising:

backing up the trending media data corresponding to the trending content description information, to obtain backup data;

deleting the backup data if playback of the trending media data is completed; and

during the playback of the trending media data, associating the backup data with a data playback progress of the trending media data when it is detected that a media playback application is closed, and when it is detected that the media playback application is started, reading the backup data and the data playback progress, and playing the trending media data based on the data playback progress, the media playback application being an application in which the media presentation page is located.

10. The method according to claim 1, wherein outputting the trending content description information in response to receiving the trending content push task comprises:

suspending the trending content push task in response to receiving the trending content push task; and

reading the trending content push task if it is detected that a quantity of consecutive first slide operations is greater than or equal to a first push threshold, and outputting the trending content description information corresponding to the trending content push task, the first slide operation being an operation in which duration from display to termination of display of media data is less than a playback time threshold, and the playback time threshold being configured for representing minimum duration of effective playback of the media data.

11. The method according to claim 1, wherein outputting the trending content description information in response to receiving the trending content push task comprises:

suspending the trending content push task in response to receiving the trending content push task; and

reading the trending content push task if it is detected that a quantity of slide operations is greater than or equal to a second push threshold, and outputting the trending content description information corresponding to the trending content push task.

12. The method according to claim 1, wherein outputting the trending content description information in response to receiving the trending content push task comprises:

obtaining, in response to receiving the trending content push task, a local push identifier and a trending content push identifier corresponding to the trending content push task, the local push identifier being a maximum push identifier in at least one push identifier of at least one historical trending content push task for which push has been completed; and

outputting, if the local push identifier is less than the trending content push identifier, the trending content description information corresponding to the trending content push task, and determining the trending content push identifier as the local push identifier; or

deleting the trending content push task if the local push identifier is greater than or equal to a trending content push identifier.

13. The method according to claim 1, wherein outputting the trending content description information in response to receiving the trending content push task comprises:

obtaining, in response to receiving the trending content push task, the trending content description information and a trending content push configuration that are carried in the trending content push task, the trending content push configuration being configured for representing a push condition of the trending media data pushed by the trending content push task; and

obtaining a push parameter associated with the trending content push configuration in real time,

and outputting the trending content description information when the push parameter satisfies the trending content push condition in the trending content push configuration.

14. A media data push method, the method being performed by a second computer device, and the method comprising:

generating a trending content push task, and transmitting the trending content push task to a first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task, the first computer device outputting, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information, the trending content description information being configured for describing the trending media data, and the trending media data and the first media data belonging to a same media data feed.

15. The method according to claim 14, wherein generating the trending content push task, and transmitting the trending content push task to the first computer device comprises:

obtaining the trending media data, and generating the trending content push task based on the trending media data;

adding the trending content push task into a task processing queue, and generating a trending content push identifier for the trending content push task; and

transmitting the trending content push task to the first computer device by using the trending content push identifier and the task processing queue.

16. The method according to claim 14, wherein transmitting the trending content push task to the first computer device comprises:

obtaining media information of the trending media data, and obtaining media delivery information associated with the media information; and

obtaining the first computer device satisfying the media delivery information, and transmitting the trending content push task to the first computer device satisfying the media delivery information.

17. A media data push apparatus, the apparatus being applicable to a first computer device, and the apparatus comprising:

a message output module, configured to output first media data on a media presentation page;

the message output module being further configured to output trending content description

information in response to receiving a trending content push task, the trending content description information being configured for describing trending media data; and

a media output module, configured to output, at a trending content insertion location on the media presentation page in response to a trigger operation on the trending content description information, the trending media data corresponding to the trending content description information, the trending media data and the first media data belonging to a same media data feed.

18. A media data push apparatus, the apparatus being applicable to a second computer device, and the apparatus comprising:

a media transmission module, configured to generate a trending content push task, and transmit the trending content push task to a first computer device, to enable the first computer device to output first media data on a media presentation page and output trending content description information in response to receiving the trending content push task, the first computer device outputting, at a trending content insertion location on the media presentation page when the trending content description information is triggered, trending media data corresponding to the trending content description information, the trending content description information being configured for describing the trending media data, and the trending media data and the first media data belonging to a same media data feed.

19. A computer device, comprising a processor, a memory, and an input/output interface,

the processor being separately connected to the memory and the input/output interface, the input/output interface being configured to receive data and output data, the memory being configured to store a computer program, and the processor being configured to invoke the computer program, to enable the computer device to perform the method according to any one of claims 1 to 13 or the method according to any one of claims 14 to 16.

20. A computer-readable storage medium, the computer-readable storage medium having a computer program stored therein, the computer program being suitable for a processor to load and execute, to enable a computer device with the processor to perform the method according to any one of claims 1 to 13 or the method according to any one of claims 14 to 16.

21. A computer program product, comprising a computer program/instructions, the computer program/instructions, when executed by a processor, causing the method according to any one of claims 1 to 13 or the method according to any one of claims 14 to 16 to be performed.