

LINK REQUEST PROCESSING METHOD AND APPARATUS

TECHNICAL FIELD

[0001] The present disclosure relates to the field of mobile network technologies,
5 and in particular, to a link request processing method and apparatus.

BACKGROUND

[0002] With continuous advancement of technologies, smartphones have become
an integral part of people's life. People can use smartphones to listen to music, browse
the Internet, watch videos, etc. When browsing a web page through a browser, a user
10 can click a title to read, using a link to jump to the corresponding web page.

[0003] Currently, a link is mainly processed through hardcoding. That is, some
fields are written into a link through hardcoding, and a link request is introduced to a
related service module based on those fields to open a corresponding web page.
Specifically, a link request processing procedure in an existing technology can include:
15 S101, a link distribution module receives a link request to be processed. S102, the link
distribution module queries a predetermined coupling file, determines a service
module corresponding to the link request based on hardcoded content in the link
request and the coupling file, and obtains a header file corresponding to the service
module. S103, the link distribution module generates a corresponding link handler
20 based on the header file of the service module. S104, the link distribution module
invokes the link handler to process the link. For example, assume that a link request
for opening a news details page is received from a news application. A link format is
specified as `newsapp://newsapp/?page=newsdetail&newsid=news1`, a page
presentation module corresponding to the news details page is `newsdetail`. As
25 described in `NewsDetail.h`, a link handling module needs to determine that when a
page value is `newsdetail`, a service module `NewsDetail` is used to process the link.

[0004] However, there are technical problems when a link is processed through
hardcoding: 1. The link distribution module needs to query the predetermined

coupling file before determining the corresponding service module, and read the header file of the service module before generating the corresponding link handler. As such, a processing procedure can be complicated. 2. Because hardcoding fixes parsing logic, the coupling file needs to be readjusted for newly added services, hence cannot adapt to the newly added services.

SUMMARY

[0005] The present disclosure is to resolve at least one of the technical problems in related technologies to some extent. Therefore, one objective of the present disclosure is to propose a link request processing method. The method can resolve a problem that a link request processing procedure during hardcoding can be complicated, and a coupling file does not need to be readjusted for newly added services. Operations are simplified and made convenient.

[0006] A second objective of the present disclosure is to propose a link request processing apparatus. A third objective of the present disclosure is to propose a link generation method. A fourth objective of the present disclosure is to propose a link generation apparatus.

[0007] To achieve the previous objective, an implementation in a first aspect of the present disclosure proposes a link request processing method, including: receiving a link request, where the link request includes a service module parameter and an action parameter, and generating a corresponding link handler based on the service module parameter; and controlling the link handler to perform page jumping to a target page based on the action parameter.

[0008] Based on the link request processing method in the implementation of the present disclosure, the link request is received, the corresponding link handler is generated based on the service module parameter in the link request, and the link handler is controlled to perform page jumping based on the action parameter, to jump to the target page. Therefore, the problem that a link request processing procedure can be complicated during hardcoding is resolved, and a coupling file does not need to be readjusted for newly added services. Operations are simplified and made more convenient.

[0009] An implementation in a second aspect of the present disclosure proposes a link request processing apparatus, including: a link request receiving module,

configured to receive a link request, where the link request includes a service module parameter and an action parameter; a generation module, configured to generate a corresponding link handler based on the service module parameter; and an execution module, configured to control the link handler to perform page jumping to a target page based on the action parameter. The link request processing apparatus in the implementation of the present disclosure receives the link request, generates the corresponding link handler based on the service module parameter in the link request, and controls the link handler to perform page jumping based on the action parameter, to jump to the target page. Therefore, the problem that a link request processing procedure can be complicated during hardcoding is resolved, and a coupling file does not need to be readjusted for newly added services. Operations are simplified and made more convenient.

[0010] An implementation in a third aspect of the present disclosure proposes a link generation method, including: obtaining a service module name of a service module including a target page and an action parameter corresponding to the target page; and generating a link corresponding to the target page based on the service module name and the action parameter.

[0011] Based on the link generation method in the implementation of the present disclosure, the service module name of the service module including the target page and the action parameter corresponding to the target page are obtained, and the link corresponding to the target page is generated based on the service module name and the action parameter, so that the corresponding link can be automatically generated for the target page. Operations are made convenient and simplified.

[0012] An implementation in a fourth aspect of the present disclosure proposes a link generation apparatus, including: an acquisition module, configured to obtain a service module name of a service module including a target page and an action parameter corresponding to the target page; and a generation module, configured to generate a link corresponding to the target page based on the service module name and the action parameter.

[0013] The link generation apparatus in the implementation of the present disclosure obtains the service module name of the service module including the target page and the action parameter corresponding to the target page, and generates the link corresponding to the target page based on the service module name and the action parameter, so that the corresponding link can be automatically generated for the target

page. Operations are made convenient and simplified.

BRIEF DESCRIPTION OF DRAWINGS

[0014] FIG. 1 is a flowchart illustrating a link request processing method, according to an implementation of the present disclosure.

5 [0015] FIG. 2 is a schematic structural diagram illustrating a link request processing apparatus, according to an implementation of the present disclosure.

[0016] FIG. 3 is a flowchart illustrating a link generation method, according to an implementation of the present disclosure.

[0017] FIG. 4 is a schematic structural diagram illustrating a link generation
10 apparatus, according to an implementation of the present disclosure.

DESCRIPTION OF EMBODIMENTS

[0018] Implementations of the present disclosure are described in detail below. Examples of the implementations are illustrated in the accompanying drawings. Reference signs that keep the same or similar from beginning to end represent the
15 same or similar elements or elements with same or similar functions. The implementations described below with reference to the accompanying drawings are examples and are intended to explain the present disclosure, but should not be construed as a limitation on the present disclosure.

[0019] A link request processing method and apparatus according to the
20 implementations of the present disclosure are described below with reference to the accompanying drawings. FIG. 1 is a flowchart illustrating a link request processing method, according to an implementation of the present disclosure.

[0020] As shown in FIG. 1, the link request processing method can include the following steps. S1, receive a link request. The link request can include a service
25 module parameter and an action parameter.

[0021] In an implementation of the present disclosure, the link request can be generated by using an external APP such as a browser, by using an internal service module, or through information pushing. S2, generate a corresponding link handler based on the service module parameter. Specifically, a reflection interface provided by
30 a client terminal can be invoked based on the service module parameter, to generate

the link handler. For example, if a link is
scheme://domain/model=modulelA&action=action1, a corresponding link handler
ModuleALinkHandler can be generated based on a service module parameter
modulelA. In addition, a predetermined configuration file or configuration table can
5 be queried based on the service module parameter to determine the corresponding link
handler. The service module parameter is stored in the predetermined configuration
file or configuration table. For example, one piece of content in a configuration file
LinkRule.json in a JSON format can be {moduleA:ModuleALinkHandler}. When the
service module parameter in the received link request is the modulelA, the
10 configuration file LinkRule.json can be queried to determine that the corresponding
link handler is ModuleALinkHandler.

[0022] S3, control the link handler to perform page jumping to a target page based
on the action parameter.

[0023] Specifically, a reflection interface provided by a client terminal can be
15 invoked based on the service module parameter and the action parameter to obtain the
target page, and the link handler is controlled to jump to the target page. For example,
after the corresponding link handler ModuleALinkHandler is generated based on the
service module parameter modulelA, the link handler ModuleALinkHandler can be
controlled based on an action parameter action1, to jump to a target page, that is, a
20 page corresponding to scheme://domain/model=modulelA&action=action1. The
previous process of parsing a link by using a reflection method to determine the link
handler ModuleALinkHandler corresponding to the modulelA, and using the link
handler ModuleALinkHandler to process a corresponding link request based on the
action parameter action1 forms a link routing algorithm. In the implementation of the
25 present disclosure, coupling can be eliminated by using the link routing algorithm and
a page naming convention without introducing a related service module.

[0024] In addition, a corresponding link can also be automatically assigned to a
newly added service. A corresponding link handler can be determined and a
corresponding page can be jumped to by using the previous method.

30 **[0025]** It should be understood that the link handler is a segment of program code,
and is used to process page jumping. Certainly, the link handler may be implemented
based on hardware implementations.

[0026] In addition, a predetermined configuration file or configuration table can
be queried based on the service module parameter and the action parameter to obtain

the target page, and the link handler is controlled to jump to the target page. For example, after a configuration file LinkRule.json is queried and a corresponding link handler is determined as ModuleALinkHandler, a configuration file, such as {action1: ModelAAction1ViewController}, can further be queried, and the link handler is controlled based on an action parameter action1 to jump to a target page.

[0027] Based on the link request processing method in the implementation of the present disclosure, the link request is received, the corresponding link handler is generated based on the service module parameter in the link request, and the link handler is controlled to perform page jumping based on the action parameter to jump to the target page. Therefore, the problem that a link request processing procedure can be complicated during hardcoding is resolved, and a coupling file does not need to be readjusted for newly added services. Operations are simplified and made more convenient.

[0028] To achieve the previous objective, the present disclosure further discloses a link request processing apparatus.

[0029] FIG. 2 is a schematic structural diagram illustrating a link request processing apparatus, according to an implementation of the present disclosure. As shown in FIG. 2, the link request processing apparatus can include a link request receiving module 110, a generation module 120, and an execution module 130.

[0030] Specifically, the link request receiving module 110 can be configured to receive a link request. The link request can include a service module parameter and an action parameter. In an implementation of the present disclosure, the link request can be generated by using an external APP such as a browser, by using an internal service module, or through information pushing.

[0031] The generation module 120 can be configured to generate a corresponding link handler based on the service module parameter.

[0032] Specifically, the generation module 120 can invoke a reflection interface provided by a client terminal based on the service module parameter, to generate the link handler. For example, if a link is scheme://domain/model=modulelA&action=action1, a corresponding link handler ModuleALinkHandler can be generated based on a service module parameter modulelA.

[0033] In addition, the generation module 120 can query a predetermined configuration file or configuration table based on the service module parameter to

determine the corresponding link handler. The service module parameter is stored in the predetermined configuration file or configuration table. For example, one piece of content in a configuration file LinkRule.json in a JSON format can be {moduleA:ModuleALinkHandler}. When the service module parameter in the received link request is the modulelA, the configuration file LinkRule.json can be queried to determine that the corresponding link handler is ModuleALinkHandler.

[0034] The execution module 130 can be configured to control the link handler to perform page jumping to a target page based on the action parameter.

[0035] Specifically, the execution module 130 can invoke a reflection interface provided by a client terminal based on the service module parameter and the action parameter, to obtain the target page, and control the link handler to jump to the target page. For example, after the corresponding link handler ModuleALinkHandler is generated based on the service module parameter modulelA, the link handler ModuleALinkHandler can be controlled based on an action parameter action1, to jump to a target page, that is, a page corresponding to scheme://domain/model=modulelA&action=action1. The previous process of parsing a link by using a reflection method to determine the link handler ModuleALinkHandler corresponding to the modulelA, and using the link handler ModuleALinkHandler to process a corresponding link request based on the action parameter action1 forms a link routing algorithm.

[0036] In the implementation of the present disclosure, coupling can be eliminated by using the link routing algorithm and a page naming convention without introducing a related service module.

[0037] In addition, a corresponding link can also be automatically assigned to a newly added service. A corresponding link handler can be determined and a corresponding page can be jumped to by using the previous method.

[0038] It should be understood that the link handler is a segment of program code, and is used to process page jumping. Certainly, the link handler may be implemented based on hardware implementations.

[0039] In addition, the execution module 130 can query a predetermined configuration file or configuration table based on the service module parameter and the action parameter to obtain the target page and control the link handler to jump to the target page. For example, after a configuration file LinkRule.json is queried and a corresponding link handler is determined as ModuleALinkHandler, a configuration

file, such as {action1: ModelAAction1ViewController}, can be further queried, and a page of the link handler is controlled based on an action parameter Action1 to jump to a target page.

5 [0040] The link request processing apparatus in the implementation of the present disclosure receives the link request, generates the corresponding link handler based on the service module parameter in the link request, and controls the link handler to perform page jumping to the target page based on the action parameter. Therefore, the problem that a link request processing procedure can be complicated during hardcoding is resolved, and a coupling file does not need to be readjusted for newly added services. Operations are simplified and made more convenient.

[0041] To achieve the previous objective, the present disclosure further discloses a link generation method.

[0042] FIG. 3 is a flowchart illustrating a link generation method, according to an implementation of the present disclosure.

15 [0043] As shown in FIG. 3, the link generation method can include the following steps.

[0044] S301, obtain a service module name of a service module including a target page and an action parameter corresponding to the target page.

[0045] Different service modules can have different service module names.

20 [0046] S302, generate a link corresponding to the target page based on the service module name and the action parameter.

[0047] For example, a predetermined format used for generating a link corresponding to a target page is scheme://domain/?module={ModuleName}&action={ActionType}. A service module name is module={ModuleName}, and an action parameter is action={ActionType}. A service module name ModuleA of a service module including the target page and an action parameter action1 corresponding to the target page can be substituted into the predetermined format. The link corresponding to the target page is scheme://domain/?module=ModuleA&action= action1.

30 [0048] Based on the link generation method in the implementation of the present disclosure, the service module name of the service module including the target page and the action parameter corresponding to the target page are obtained, and the link corresponding to the target page is generated based on the service module name and the action parameter. As such, the corresponding link can be automatically generated for the target page. Operations can be made convenient and simplified.

[0049] To achieve the previous objective, the present disclosure further proposes a link generation apparatus.

[0050] FIG. 4 is a schematic structural diagram illustrating a link generation apparatus, according to an implementation of the present disclosure.

5 [0051] As shown in FIG. 4, the link generation apparatus can include an acquisition module 210 and a generation module 220.

[0052] The acquisition module 210 can be configured to obtain a service module name of a service module including a target page and an action parameter corresponding to the target page.

10 [0053] Different service modules can have different service module names.

[0054] The generation module 220 can be configured to generate a link corresponding to the target page based on the service module name and the action parameter.

[0055] For example, a predetermined format used for generating a link corresponding to a target page is scheme://domain/?module={ModuleName}&action={ActionType}. A service module name is module={ModuleName}, and an action parameter is action={ActionType}. The generation module 220 can substitute, into the predetermined format, a service module name ModuleA of a service module including the target page and an action parameter action1 corresponding to the target page. The link corresponding to the target page is scheme://domain/?module=ModuleA&action=action1.

[0056] The link generation apparatus in the implementation of the present disclosure obtains the service module name of the service module including the target page and the action parameter corresponding to the target page, and generates the link corresponding to the target page based on the service module name and the action parameter. As such, the corresponding link can be automatically generated for the target page. Operations can be made convenient and simplified.

[0057] In the descriptions of the present disclosure, it should be understood that, directions or positional relationships indicated by terms "center", "longitudinal", "transverse", "length", "width", "thickness", "above", "below", "in front of", "behind", "left", "right", "vertical", "horizontal", "top", "bottom", "inside", "outside", "clockwise", "counterclockwise", "axial", "radial", "circumferential", etc. are based on orientations or positional relationships shown in the accompanying drawings, and they are used only for describing the present disclosure and for description simplicity,

but do not indicate or imply that an indicated apparatus or element need to have a specific orientation or be constructed and operated in a specific orientation. Therefore, it does not constitute a limitation on the present disclosure.

[0058] In addition, the terms "first" and "second" are merely intended for a purpose of description, and shall not be understood as an indication or implication of relative importance or implicit indication of the number of indicated technical features. Therefore, a feature limited by "first" or "second" can explicitly or implicitly include at least one such feature. In the descriptions about the present disclosure, "a plurality of" means at least two, for example, two or three, unless otherwise specified.

[0059] In the present disclosure, terms "install" "link", "connect", "fix", etc. should be understood in a broad sense unless otherwise definitely stipulated or limited. For example, a connection may be a fixed connection, a detachable connection, or an integrated connection; may be a mechanical connection or an electrical connection; and may be a direct connection, an indirect connection through an intermediate medium, or a connection inside two components or interaction between two components. For a person of ordinary skill in the art, specific meanings of the previous terms in the present disclosure can be understood based on a specific situation.

[0060] In the present disclosure, unless otherwise specified, a first feature "above" or "below" a second feature can mean direct contact between the first feature and the second feature, or indirect contact between the first feature and the second feature through an intermediate medium.

[0061] In addition, that the first feature is "above" the second feature can mean that the first feature is right above or diagonally above the second feature, or simply indicate that the first feature is at a higher position than the second feature.

[0062] That the first feature is "below" the second feature can mean that the first feature is right below or diagonally below the second feature, or simply indicate that the first feature is at a lower position than the second feature. In descriptions in the present specification, descriptions about such reference terms as "an implementation", "some implementations", "an example", "a specific example", and "some examples" mean that specific features, structures, materials, or characteristics described with reference to the implementations or examples are included in at least one implementation or example of the present disclosure. In the present specification, the previous example expressions of the terms are not necessarily for a same

implementation or example. In addition, the described specific features, structures, materials, or characteristics can be combined in a proper way in any one or more of the implementations or examples. In addition, a person skilled in the art can integrate or combine different implementations or examples and characteristics of different implementations or examples described in the present specification, provided that
5 they do not conflict with each other.

[0063] Although the implementations of the present disclosure are shown and described above, it can be understood that the previous implementations are examples and cannot be construed as a limitation on the present disclosure, and a person of
10 ordinary skill in the art can make changes, modifications, replacement, and variations to the previous implementations within the scope of the present disclosure.

CLAIMS

What is claimed is:

1. A method for processing a link request, the method comprising:
receiving the link request, wherein the link request comprises a service module parameter and an action parameter;
querying a configuration table with the service module parameter to retrieve a link handler corresponding to the service module parameter; and
controlling the link handler to perform page jumping to a target page based on the action parameter, wherein controlling the link handler to perform page jumping to the target page based on the action parameter comprises:
invoking a reflection interface provided by a client terminal based on the service module parameter and the action parameter, to obtain the target page; and
controlling the link handler to jump to the target page.
2. The method according to claim 1, wherein controlling the link handler to perform page jumping to the target page based on the action parameter further comprises:
querying a predetermined configuration file or configuration table based on the service module parameter and the action parameter to obtain the target page.
3. The method according to any one of claims 1 to 2, wherein the link handler comprises a segment of program code.
4. The method according to any one of claims 1 to 3, wherein the link request is generated by using an internal service module or through information pushing.
5. The method according to any one of claims 1 to 4, wherein the action parameter comprises an action type.

6. An apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 5.