Claims:

1. A data center and domain name switching method used for an electronic device, the method comprising:

acquiring access attribute information and target service information corresponding to a current valid function trigger event, if a domain name switching event is triggered;

obtaining a target data center identifier based on center switching rules in the electronic device and the access attribute information;

searching and obtaining, based on the target data center identifier and the target service information, a target domain name corresponding to the target data center identifier and the target service information from a center-and-domain-name mapping relationship in the electronic device, and switching an access corresponding to the current valid function trigger event to the target domain name, wherein the center-and-domain-name mapping relationship comprises a correspondence among data center identifiers, service information, and domain names.

2. The method according to claim 1, wherein the electronic device is configured with a center mapping relationship comprising a correspondence between data center identifiers and center switching rules, and

the obtaining a target data center identifier based on center switching rules in the electronic device and the access attribute information, comprising:

determining a target center switching rule based on the access attribute information, wherein the target center switching rule comprises the center switching rule that matches the access attribute information;

determining a data center identifier corresponding to the target center switching rule, based on the target center switching rule and the center mapping relationship; and determining the data center identifier corresponding to the target center switching rule as the target data center identifier.

3. The method according to claim 1, wherein the searching and obtaining, based on the target data center identifier and the target service information, a target domain name corresponding to the target data center identifier and the target service information from a center-and-domain-name mapping relationship in the electronic device comprises:

searching and obtaining, based on the target data center identifier, service information and domain names corresponding to the target data center identifier from the center-and-domain-name mapping relationship; and

searching and obtaining, based on the target service information, a domain name corresponding to the target service information from the service information and domain names corresponding to the target data center identifier, and determining the domain name corresponding to the target service information as the target domain name.

4. The method according to claim 1, wherein the obtaining a target data center identifier based on center switching rules in the electronic device and the access attribute information comprises:

calling a first functional interface, and obtaining the target data center identifier based on the access attribute information and the center switching rules; and

wherein the searching and obtaining, based on the target data center identifier and the target service information, a target domain name corresponding to the target data center identifier and the target service information from a center-and-domain-name mapping relationship in the electronic device comprises:

calling a second functional interface, and searching and obtaining, based on the target data center identifier and the target service information, the target domain name corresponding to the target data center identifier and the target service information from the center-and-domain-name mapping relationship.

5. The method according to claim 1, wherein prior to the acquiring access attribute information and target service information corresponding to the current valid function trigger event, the method further comprises:

detecting a valid function trigger event in the electronic device, and recording time points and the number of times when errors occur to the valid function trigger event;

determining that a domain name switching event is triggered, if the time points and the number of times when errors occur to the valid function trigger event meet predetermined domain name switching conditions.

6. The method according to claim 5, wherein the domain name switching conditions comprise:

a first interval duration between a time point when a previous domain name switching event was triggered and a time point when errors occur to the valid function trigger event this time is less than a first predetermined duration, and the number of

times when errors occur to the valid function trigger event within the first interval duration is greater than or equal to a first switching trigger count threshold;

or

a second interval duration between a time point when the valid function trigger event with errors was first detected and a time point when errors occur to the valid function trigger event this time is less than a second predetermined duration, and the number of times when errors occur to the valid function trigger event within the second interval duration is greater than or equal to a second switching trigger count threshold.

7. The method according to claim 5, wherein the recording the time points and the number of times when errors occur to the valid function trigger event comprises:

generating a time window, when the valid function trigger event with errors is detected for the first time;

each time the valid function trigger event with errors is detected, extending the time window to include the detected valid function trigger event with errors, and recording the time points and the number of times when errors occur to the valid function trigger event within the time window until a domain name switching event is triggered; and

when the domain name switching event is triggered, generating a new time window, and continuously detecting the valid function trigger event with errors.

8. The method according to claim 5, wherein the detecting a valid function trigger event for a function application in the electronic device comprises:

acquiring initial access information associated with a function trigger event; and

when the initial access information complies with detection rules in the electronic device, determining the function trigger event as the valid function trigger event.

9. The method according to claim 8, wherein:

the initial access information comprises one or more of the following:

a domain name that the function trigger event expects to access, a path interface accessed by the function trigger event, and a response code of the function trigger event;

the detection rules comprise one or more of the following:

the domain name that the function trigger event expects to access is in a predetermined monitored domain name list;

the path interface accessed by the function trigger event is in a predetermined monitored path interface list; and

the response code of the function trigger event is in a predetermined monitored response code list.

10. The method according to any one of claims 1 to 9, wherein the access attribute information comprises one or more of the following:

user type information, electronic device type information, and application type information.

11. The method according to any one of claims 1 to 9, wherein the service information comprises one or more of the following:

service type tags, request type information of function trigger events, and access type information of function trigger events;

wherein the service type tags are obtained by simplifying domain names corresponding to the service type tags.

12. The method according to any one of claims 1 to 9, wherein the electronic device comprises a user terminal.

13. A data center and domain name switching apparatus, comprising:

an acquisition module configured to, if a domain name switching event is triggered, acquire access attribute information and target service information corresponding to a current valid function trigger event;

a calculation processing module configured to obtain a target data center identifier based on center switching rules in the data center and domain name switching apparatus and the access attribute information; and

a matching query module configured to search and obtain, based on the target data center identifier and the target service information, a target domain name corresponding to the target data center identifier and the target service information from a center-and-domain-name mapping relationship in the data center and domain name switching apparatus, and switch an access corresponding to the current valid function trigger event to the target domain name, wherein the center-and-domain-name mapping relationship comprises a correspondence among data center identifiers, service information, and domain names.

14. An electronic device, comprising: a processor and a memory with computer program instructions stored therein;

wherein the processor, when executing the computer program instructions, implements the data center and domain name switching method according to any one of claims 1 to 12.

15. A computer-readable storage medium with computer program instructions stored thereon, wherein the computer program instructions, when executed by a processor, implement the data center and domain name switching method according to any one of claims 1 to 12.