Claims

1. A computer-implemented method, comprising:

at a client device:

receiving a first message that includes a first data usage value, wherein the first message is formatted according to a respective format;

after receiving the first message:

acquiring a data usage template corresponding to the respective format;

receiving a second message that includes a second data usage value, wherein the second message is formatted according to the respective format; and

parsing the second message according to the data usage template so as to obtain the second data usage value;

wherein acquiring the data usage template corresponding to the respective format comprises:

analyzing the first message to obtain the data usage template;

wherein analyzing the first message so as to obtain the data usage template comprises:

determining whether an existing data usage template that corresponds to the respective format is stored in memory on the client device;

in accordance with a determination that an existing data usage template corresponding to the respective format is stored in memory on the client device, using the existing data usage template as the data usage template corresponding to the respective format; and

in accordance with a determination that no existing data usage template corresponding to the respective format is stored in memory on the client device, generating the data usage template corresponding to the respective format.

2. The method according to claim 1, wherein generating the data usage template corresponding to the respective format comprises:

identifying a string within the first message that indicates the presence of the first data usage value;

acquiring a location of the string within the first message; and

identifying within the string one or more of the group consisting of: a template prefix, a template suffix, a template unit and a template type;

wherein the template prefix is a first portion of the string that is located before the data usage value, the template suffix is a second portion of the string that is located after the data usage value, the template unit is a unit of measurement by which the data usage value is measured, and the template type comprises one of: an amount of data remaining, an amount of data used, and a total amount of data.

3. The method of any of claims 1 and 2, further comprising storing the generated data usage template in memory on the client device.

4. The method of claim 1, wherein acquiring the data usage template corresponding to the respective format comprises:

sending the first message to a server for the server to analyze the first message so as to obtain the data usage template; and

receiving, at the client device, the data usage template returned by the server.

5. An electronic device, comprising:

one or more processors;

memory; and

one or more programs, wherein the one or more programs are stored in the memory and configured to be executed by the one or more processors, the one or more programs including instructions that when executed by the one or more processors cause the device to:

receive a first message that includes a first data usage value, wherein the first message is formatted according to a respective format;

after receiving the first message:

acquire a data usage template corresponding to the respective format;

receive a second message that includes a second data usage value, wherein the second message is formatted according to the respective format; and

parse the second message according to the data usage template so as to obtain the second data usage value;

wherein the instructions further cause the device to analyze the first message to obtain the data usage template;

wherein analyzing the first message so as to obtain the data usage template comprises:

determining whether an existing data usage template that corresponds to the respective format is stored in memory on the device;

in accordance with a determination that an existing data usage template corresponding to the respective format is stored in memory on the device, using the existing data usage template as the data usage template corresponding to the respective format; and

in accordance with a determination that no existing data usage template corresponding to the respective format is stored in memory on the device, generating the data usage template corresponding to the respective format.

6. The electronic device of claim 5, wherein generating the data usage template corresponding to the respective format comprises:

identifying a string within the first message that indicates the presence of the first data usage value;

acquiring a location of the string within the first message; and

identifying within the string at least one of: a template prefix, a template suffix, a template unit and a template type;

wherein the template prefix is a first portion of the string that is located before the

data usage value, the template suffix is a second portion of the string that is located after the data usage value, the template unit is a unit of measurement by which the data usage value is measured, and the template type comprises one of: an amount of data remaining, an amount of data used, and a total amount of data.

7. The electronic device of claim 5, the instructions further causing the device to store the generated data usage template in memory on the device.

8. The electronic device of claim 5, wherein the instructions further cause the device to:

send the first message to a server for the server to analyze the first message so as to obtain the data usage template; and

receive the data usage template returned by the server.

9. A computer-implemented method, comprising:

at a server:

receiving a message that includes a data usage value sent by a client device, wherein the message is formatted according to a respective format;

analyzing the message so as to obtain a data usage template corresponding to the respective format; and

sending the data usage template to the client device, thereby providing the data usage template to the client device in order for the client device to parse a subsequently received message containing a second data usage value according to the data usage template, so as to obtain the second data usage value;

wherein analyzing the message further comprises:

determining whether an existing data usage template that corresponds to the respective format is stored in memory on the server;

in accordance with a determination that an existing data usage template corresponding to the respective format is stored in memory on the server, using the existing data usage template as the data usage template corresponding to the respective format; and

in accordance with a determination that no existing data usage template corresponding to the respective format is stored in memory on the server, generating the

data usage template corresponding to the respective format based on content of the message.

10. The method of claim 9, wherein generating the data usage template corresponding to the respective format based on content of the message comprises:

identifying a string within the message that indicates the presence of a data usage value;

acquiring a location of the string within the message; and

identifying within the string at least one of: a template prefix, a template suffix, a template unit and a template type;

wherein the template prefix is a first portion of the string that is located before the data usage value, the template suffix is a second portion of the string that is located after the data usage value, the template unit is a unit of measurement by which the data usage value is measured, and the template type comprises one of: an amount of data remaining, an amount of data used, and a total amount of data.

11. The method of claim 9 or 10, further comprising storing the generated data usage template in memory on the server.

12. A non-transitory computer readable storage medium storing one or more programs, the one or more programs comprising instructions, which when executed by an electronic device with one or more processors and memory, cause the device to:

receive a first message that includes a first data usage value, wherein the first message is formatted according to a respective format;

after receiving the first message:

acquire a data usage template corresponding to the respective format;

receive a second message that includes a second data usage value, wherein the second message is formatted according to the respective format; and

parse the second message according to the data usage template so as to obtain the second data usage value;

wherein the instructions further cause the device to analyze the first message to obtain the data usage template;

wherein the instruction for analyzing the first message so as to obtain the data usage template comprises instructions for:

determining whether an existing data usage template that corresponds to the respective format is stored in memory on the device;

in accordance with a determination that an existing data usage template corresponding to the respective format is stored in memory on the device, using the existing data usage template as the data usage template corresponding to the respective format; and

in accordance with a determination that no existing data usage template corresponding to the respective format is stored in memory on the device, generating the data usage template corresponding to the respective format.

~~13. The non-transitory computer readable storage medium of claim 0, wherein the instructions further cause the device to:~~

~~send the first message to a server for the server to analyze the first message so as to obtain the data usage template; and~~

~~receive the data usage template returned by the server.~~