

CLAIMS

1. A method for rendering data at an application interface, the method comprising:
parsing (S101), by a client application, structured data of an interface template, wherein
the interface template is delivered by a server to the client application to obtain a document
5 object model node, wherein the structured data of the interface template is generated by the
server by parsing interface template data written in a general protocol markup language, and the
interface template data comprises a common tag for describing a widget, wherein the document
object model node stores information related to the common tag, and wherein the document
object model node comprises location information of the widget in the interface described by
10 using the common tag, and wherein the interface template comprises a first unique interface
identifier to distinguish between interface templates;

based on the parsed structured data, generating, by the client application, a virtual view
node as part of a tree-structure of virtual view nodes for storing information for document object
model nodes including related information to the common tag;

15 binding (S102), by the client application, service data to the virtual view node from the
tree-structure of the virtual view nodes, wherein the client application searches for an interface
template that corresponds to the service data based on an interface identifier in the service data
that corresponds to the first unique interface identifier;

calculating (S103) location information of the widget based on the stored information in
20 the virtual view node that the service data is bound to;

rendering (S104), by the client application, the widget in a view of an interface of the
client application at a corresponding location of the view based on the location information of
the widget, wherein the service data is inserted into the widget in the view (S104); and

triggering by the client application a service procedure for presenting the service data;

25 after obtaining the service data from the server, searching, by the client application, for an
interface template that corresponds to the service data based on an interface identifier in the
service data; and

if no interface template is identified, requesting, by the client application, updated
structured data of the new interface template that corresponds to the interface identifier from the
30 server.

2. The method according to claim 1, wherein the general protocol markup language is HTML, and the structured data is JSON data or XML data.

3. The method according to any one of claims 1 to 2, wherein the virtual view node stores information related to the common tag, and/or type of the client application, and/or a
5 response event in the client application.

4. The method according to any one of claims 1 to 3, wherein the method further comprises:

after receiving updated structured data of an updated interface template, updating, by the client application, the related information stored in the virtual view node.

10 5. The method according to claim 1, further comprising:

after receiving the updated structure data from the server, the client application, parsing the updated structure data to obtain an updated virtual view node;

updating the related information stored in the virtual view node, wherein the virtual view node is bound to the service data based on the updated information; and

15 passing the virtual view node to a rendering engine to re-render the virtual view node.

6. The method according to any one of claims 1 to 5, wherein rendering the widget in the virtual view node based on the location information of the widget comprises:

after the location information of widgets is calculated, obtaining the location information of the widgets, and rendering the widgets into the view.

20 7. The method according to any one of claims 1 to 6, further comprising:

delivering the structured data to the client application, so that the client application renders the widget into the virtual view node.

8. The method according to any one of claims 1 to 7, wherein the structured data is JSON data and the common tag is stored in the document object model node for the JSON data.

25 9. The method according to any one of claims 1 to 8, wherein the structured data comprises a first syntax tree with a format simpler than a second syntax tree of the interface

template.

10. The method according to any one of claims 1 to 9, wherein binding the service data to the virtual view node comprises inserting the service data in the virtual view node by using an entry function.

5 11. The method according to any one of claims 1 to 10, further comprising:
searching, by the client application, for the new interface template to correspond to the service data based on an interface identifier in the service data; and
if no interface template is identified based on the searching, requesting structure data of the interface template corresponding to the interface identified from the server.

10 12. An apparatus adapted to display interface data, the apparatus comprising a plurality of modules configured to perform the method of any one of claims 1 to 11.