CLAIMS

1. A method for associating different instances of engagement of a subscriber of a service provider network with a first content provider, the method comprising:

for a first instance:

at a first entity within the service provider network:

receiving a first message from a subscriber device of the subscriber, the first message comprising a first ID associated with the provision of content from the first content provider to the subscriber device in the first instance;

identifying the subscriber based on the received first message;

determining an identifier for the subscriber based on the identification of the subscriber; and

transmitting the identifier for the subscriber and the first ID to a second entity;

at the second entity:

storing the first ID in association with the identifier for the subscriber;

for a second instance:

at the first entity within the service provider network:

receiving a second message from the subscriber device or another subscriber device of the subscriber, the second message comprising a second ID different to the first ID, the second ID being associated with the provision of content from the first content provider to the subscriber device or the other subscriber device in the second instance;

identifying the subscriber based on the received second message;

determining the identifier for the subscriber based on the identification of the subscriber; and

transmitting the identifier for the subscriber and the second ID to the second entity;

at the second entity:

storing the second ID in association with the identifier for the subscriber and thereby in association with the first ID;

wherein the method further comprises, at the second entity:

providing, to a third entity associated with the first content provider, information indicating the stored association between the second ID and the first ID, thereby to allow the third entity to associate the first instance with the second instance;

wherein the first ID is generated when the subscriber device obtains the content from the first content provider in the first instance, and the second ID is generated when the subscriber device or the other subscriber device obtains the content from the first content provider in the second instance.

2. The method according to claim 1, wherein the first ID is generated by the first content provider and provided to the subscriber device when the subscriber device obtains the content from the first content provider in the first instance; and/or the second ID is generated by the first content provider and provided to the subscriber device or the other subscriber device when the subscriber device or the other subscriber device obtains the content from the first content provider in the second instance.

3. The method according to any one of claim 1 to claim 2, wherein

the first ID is stored as a cookie on the subscriber device by the first content provider; and/or

the second ID is stored as a cookie on the subscriber device or the other subscriber device by the first content provider.

4. The method according to any one of claim 1 to claim 3, wherein

the content obtained by the subscriber device from the first content provider in the first instance includes code or a link to code that causes the subscriber device to send the first message to the first entity in the service provider network; and/or

the content obtained by the subscriber device or the other subscriber device from the first content provider in the second instance includes code or a link to code that causes the subscriber device or the other subscriber device to send the second message to the first entity in the service provider network.

5. The method according to any one of claim 1 to claim 4, wherein the second message is received from the other subscriber device, and wherein the second ID is associated with the provision of content from the first content provider to the other subscriber device in the second instance.

6. The method according to any one of claim 1 to claim 4, wherein the second message is received from the subscriber device, wherein the second ID is associated with the provision of content from the first content provider to the subscriber device in the second instance, and wherein the second instance is at a different time to the first instance.

7. The method according to any one of claim 1 to claim 6, wherein the second entity is external to the service provider network, and wherein:

for the first instance:

identifying the subscriber based on the first message at the first entity comprises determining a first subscriber identifier for the subscriber that identifies the subscriber within the service provider network;

determining the identifier for the subscriber based on the identification of the subscriber comprises deriving, based on the first subscriber identifier, a second subscriber identifier for the subscriber that identifies the subscriber at the second entity; and

wherein the method comprises: at the first entity, modifying the first message to include the second subscriber identifier; and sending the modified first message to the second entity for the second entity to use in storing the first ID in association with the identifier for the subscriber; and

for the second instance:

identifying the subscriber based on the second message at the first entity comprises determining the first subscriber identifier for the subscriber;

determining the identifier for the subscriber based on the identification of the subscriber comprises deriving, based on the first subscriber identifier, the second subscriber identifier for the subscriber; and

wherein the method comprises: at the first entity, modifying the second message to include the second subscriber identifier; and sending the modified second message to the

second entity for the second entity to use in storing the second ID in association with the identifier for the subscriber.

8. The method according to claim 7, wherein the method further comprises:

for the first instance:

at the second entity, storing the first ID in association with the second subscriber identifier; and

for the second instance:

at the second entity, storing the second ID in association with the second subscriber identifier.

9. The method according to claim 7 or claim 8, wherein, for the first instance:

where a said second subscriber identifier for the subscriber is already stored in association with the first subscriber identifier at the first entity, deriving the second subscriber identifier comprises using the first subscriber identifier to look up the second subscriber identifier; and/or

where no said second subscriber identifier for the subscriber is already stored in association with the first subscriber identifier at the first entity, deriving the second subscriber identifier comprises generating the second subscriber identifier for the first subscriber identifier.

10. The method according to any one of claim 1 to claim 9, wherein the first message and the second message each include a third ID identifying the first content provider from which the content is provided, and wherein the method comprises:

for the first and second instance:

at the second entity, storing the third ID in association with the first ID and the second ID, respectively.

11. The method according to claim 10, wherein providing the information indicating the association between the second ID and the first ID to the third entity is responsive to a determination that the first ID and the second ID are stored in association with the third ID.

12. The method according to any one of claim 1 to claim 11, wherein the first message and the second message include consent information associated with the first ID and the second ID, respectively, the consent information for the first ID and the second ID indicating whether or not the subscriber consents to the use of their identification by the service provider network for the first ID and the second ID, respectively; and wherein the method comprises:

for the first and second instance:

at the second entity, storing the consent information for the first ID in association with the first ID and storing the consent information for the second ID in association with the second ID, respectively.

13. The method according to claim 12, wherein providing the information indicating the association between the second ID and the first ID to the third entity is responsive to a determination, based on the stored consent information for the first ID and the second ID, that there is a valid consent for the use of the identification of the subscriber by the service provider network for the first ID and the second ID.

14. The method according to claim 13, wherein the consent information for the first ID comprises a consent expiry for the first ID and the consent information for the second ID comprises a consent expiry for the second ID, and wherein determining that there is a valid consent for the first ID and the second ID is based on a comparison of the stored consent expiry for the first ID and the second ID with a current time.

15. The method according to any one of claim 13 to claim 14, wherein the method comprises updating the stored consent expiry for the first ID based on the consent information associated with the second ID included in the second message.

16. The method according to any one of claim 13 to claim 15, wherein the method comprises, for a third instance:

at the second entity, receiving a third message comprising the first ID and updated consent information associated with the first ID or comprising the second ID and updated consent information associated with the second ID; and

at the second entity, updating the stored consent information for the first ID or for the second ID based on the updated consent information associated with the first ID and/or the second ID, respectively.

17. The method according to claim 16, wherein the third message is received by the second entity from a subscriber device via an access network other than the service provider network and without passing through the service provider network.

18. The method according to any one of claim 1 to claim 16, wherein the method comprises:

at the second entity, receiving, from the third entity, the first ID and/or the second ID in association with a browsing attribute indicating an attribute of said engagement of the subscriber with the content provider in the first and/or second instance, respectively;

at the second entity, determining the identifier for the subscriber associated with the browsing attribute based on the received first ID and/or second ID and the stored association between the first ID, the second ID and the identifier for the subscriber;

at the second entity, storing the browsing attribute in association with the identifier for the subscriber; and

at the second entity, providing, to an advertising entity, segment information indicating at least the browsing attribute.

19. The method according to claim 18, wherein the method comprises:

at the second entity, receiving a token from the advertising entity, the token having been provided to the advertising entity by a subscriber device of the subscriber when the subscriber device of the subscriber requests an advert; and

at the second entity, matching the token from the advertising entity with a token stored at the second entity in association with the identifier for the subscriber;

wherein providing to the advertising entity the segment information indicating at least the browsing attribute is responsive to the matching of the token.

20. A system for associating different instances of engagement of a subscriber of a service provider network with a first content provider, the system comprising:

a first entity within the service provider network; and

a second entity,

wherein, the first entity is configured to:

for a first instance, receive a first message from a subscriber device of the subscriber, the first message comprising a first ID associated with the provision of content from the first content provider to the subscriber device in the first instance; identify the subscriber based on the received first message; determine an identifier for the subscriber based on the identification of the subscriber; and transmit the identifier for the subscriber and the first ID to the second entity; and

for a second instance, receive a second message from the subscriber device or another subscriber device of the subscriber, the second message comprising a second ID different to the first ID, the second ID being associated with the provision of content from the first content provider to the subscriber device or the other subscriber device in the second instance; identify the subscriber based on the received second message; determine an identifier for the subscriber based on the identification of the subscriber; and transmit the identifier for the subscriber and the second ID to the second entity;

wherein the second entity is configured to:

for the first instance, store the first ID in association with the identifier for the subscriber;

for the second instance, store the second ID in association with the identifier for the subscriber and thereby in association with the first ID; and

provide, to a third entity associated with the first content provider, information indicating the stored association between the second ID and the first ID, thereby to allow the third entity to associate the first instance with the second instance;

wherein the first ID is generated when the subscriber device obtains the content from the first content provider in the first instance, and the second ID is generated when the subscriber device or the other subscriber device obtains the content from the first content provider in the second instance.

21. A method for associating different instances of engagement of a subscriber of a service provider network with a first content provider, the method comprising, at a second entity:

for a first instance:

storing a first ID in association with an identifier for the subscriber, the first ID having been included in a first message received from a subscriber device by a first entity within the service provider network, the subscriber having been identified, by the first entity, based on the first message, the identifier for the subscriber having been determined, by the first entity, based on the identification of the subscriber, the first ID and the identifier for the subscriber having been transmitted by the first entity to the second entity, the first ID being associated with the provision of content from the first content provider to the subscriber device in the first instance;

for a second instance:

storing a second ID in association with the identifier for the subscriber and thereby in association with the first ID, the second ID having been included in a second message received from the subscriber device or another subscriber device by the first entity, the subscriber having been identified, by the first entity, based on the second message, the identifier for the subscriber having been determined, by the first entity, based on the identification of the subscriber, the second ID and the identifier for the subscriber having been transmitted by the first entity to the second entity, the second ID being associated with the provision of content from the first content provider to the subscriber device or the other subscriber device in the second instance; and

wherein the method further comprises, at the second entity:

providing, to a third entity associated with the first content provider, information indicating the stored association between the second ID and the first ID, thereby to allow the third entity to associate the first instance with the second instance,

the first ID having been generated when the subscriber device obtains the content from the first content provider in the first instance, and the second ID having been generated when the subscriber device or the other subscriber device obtains the content from the first content provider in the second instance.

22. A method for associating different instances of engagement of a subscriber of a service provider network with a first content provider, the method comprising, at a third entity associated with the first content provider:

for a first instance:

recording a first ID associated with the provision of content from the first content provider to a subscriber device in the first instance;

for a second instance:

recording a second ID associated with the provision of content from the first content provider to the subscriber device or another subscriber device in the second instance;

receiving, from a second entity, information indicating an association between the first ID and the second ID, the first ID and the second ID having been stored by the second entity in association with an identifier for the subscriber, the subscriber having been identified, by a first entity within the service provider network, based on a first message, comprising the first ID, received from a subscriber device and based on a second message, comprising the second ID, received from the subscriber device or another subscriber device, the identifier for the subscriber having been determined, by the first entity, based on the identification of the subscriber, the first ID and the identifier for the subscriber having been transmitted from the first entity to the second entity, the second ID and the identifier for the subscriber having been transmitted from the first entity to the second entity; and

associating the first instance with the second instance based on the received information indicating the association between the first ID and the second ID;

wherein the first ID is generated when the subscriber device obtains the content from the first content provider in the first instance, and the second ID is generated when the subscriber device or the other subscriber device obtains the content from the first content provider in the second instance.

23. Apparatus configured to perform the method according to claim 21 or claim 22.

24. A computer readable medium having instructions stored thereon which, when executed by a computer system, cause the computer system to perform the method according to any one of claims 1 to 19, 21 or 22.