

CLAIMS

1. An authorization token batch-revoking method for a third-party application, wherein the method comprises:

- determining a third-party application needing authorization token revoking;
- obtaining a current moment, and setting a time validity attribute value for the determined third-party application, so the time validity attribute value equals the current moment;
- receiving an authorization token provided by the third-party application;
- obtaining a validity attribute value of the authorization token;
- determining whether the obtained validity attribute value is valid or not;
- in response to determining that the obtained validity attribute value is valid, obtaining a validation moment of the authorization token and the time validity attribute value of the third-party application; and
- determining that the authorization token is invalid if the obtained validation moment is earlier than the obtained time validity attribute value, otherwise, determining that the authorization token is valid.

2. A database authorization record batch-revoking method, wherein a first time validity attribute is configured for an authorization record set needing revoking, and the first time validity attribute is used to describe a first time point, so an authorization record whose authorization validation moment is earlier than the first time point in the set becomes invalid, and the method comprises:

- determining an authorization record set needing revoking (S101); and
- setting a time validity attribute value for the determined set (S102), and setting the time validity attribute value to a current moment or a future moment.

3. The method according to claim 1, wherein the authorization record set comprises authorization records for the same authorized party.

4. The method according to claim 1, wherein when the next earliest authorization validation moment of the authorization record set needing revoking can be determined, the setting the time validity attribute value to a future moment comprises:

- setting the time validity attribute value to the future moment, wherein the time validity attribute value is earlier than the next earliest authorization validation moment.

5. The method of claim 2, wherein the first time validity attribute or a second time validity attribute is configured for an authorization record set needing revoking, the second time validity attribute is used to describe a second time point, so an authorization record whose authorization validation moment is later than the second time point in the set becomes invalid, and wherein setting a time validity attribute value for the determined set and setting the time validity attribute value to a current moment or a future moment comprises:

determining a latest validation moment of authorization records in the set and setting the first time validity attribute value for the set when the first time validity attribute is configured for the set, so the first time validity attribute value is later than the latest validation moment of the authorization records in the set; or

determining an earliest validation moment of authorization records in the set and setting a second time validity attribute value for the set when the second time validity attribute is configured for the set, so the second time validity attribute value is earlier than the earliest validation moment of the authorization records in the set.

6. A database authorization record validity verification method, wherein a first time validity attribute or a second time validity attribute is configured for an authorization record set needing revoking, the first time validity attribute is used to describe a first time point, so an authorization record whose authorization validation moment is earlier than the first time point in the set becomes invalid, the second time validity attribute is used to describe a second time point, so an authorization record whose authorization validation moment is later than the second time point in the set becomes invalid, and the method comprises:

determining an authorization record to be verified (S201);

obtaining a validation moment of the authorization record to be verified (S202);

obtaining a first time validity attribute value or a second time validity attribute value of an authorization record set that comprises the authorization record to be verified (S203); and

determining that the authorization record to be verified is invalid when the obtained validation moment is earlier than the obtained first time validity attribute value (S204); or

determining that the authorization record to be verified is invalid when the obtained validation moment is later than the obtained second time validity attribute value.

7. The method according to claim 6, wherein the method further comprises:

obtaining a validity attribute value of the authorization record to be verified; and

determining that the authorization record to be verified is invalid when the obtained

validity attribute value indicates invalid; or

determining that the authorization record to be verified is valid when the obtained validity attribute value indicates valid, and the obtained validation moment is not earlier than the obtained first time validity attribute value; or

determining that the authorization record to be verified is invalid when the obtained validity attribute value indicates valid, and the obtained validation moment is not later than the obtained second time validity attribute value.

8. A database authorization record batch-revoking device, wherein a time validity attribute is configured for an authorization record set needing revoking, the time validity attribute is used to describe a time point, so an authorization record whose authorization validation moment is earlier than the time point in the set becomes invalid, and the device comprises:

a revoking task determining unit, configured to determine an authorization record set needing revoking; and

a revoking execution unit, configured to set a time validity attribute value for the determined set, and set the time validity attribute value T_0 to a current moment or a future moment.

9. The database authorization record batch-revoking device of claim 8, wherein the revoking task determining unit and revoking execution unit are further configured to perform the method of any one of claims 3 to 5.

10. A database authorization record validity verification device, wherein a first time validity attribute or a second time validity attribute is configured for an authorization record set needing revoking, the first time validity attribute is used to describe a first time point, so an authorization record whose authorization validation moment is earlier than the first time point in the set becomes invalid, the second time validity attribute is used to describe a second time point, so an authorization record whose authorization validation moment is later than the second time point in the set becomes invalid, and the device comprises:

a verification object determining unit, configured to determine an authorization record to be verified;

a first acquisition unit, configured to obtain a validation moment of the authorization record to be verified;

a second acquisition unit, configured to obtain a first time validity attribute value or a

second time validity attribute value of an authorization record set that comprises the authorization record to be verified; and

a verification unit, configured to determine that the authorization record to be verified is invalid when the obtained validation moment is earlier than the obtained first time validity attribute value; or

determine that the authorization record to be verified is invalid when the obtained validation moment is later than the obtained second time validity attribute value.

11. The device according to claim 10, wherein the device further comprises:

a third acquisition unit, configured to obtain a validity attribute value of the authorization record to be verified; and

the verification unit is further configured to:

determine that the authorization record to be verified is valid when the obtained validity attribute value indicates valid, and the obtained validation moment is not earlier than the obtained first time validity attribute value; or

determine that the authorization record to be verified is invalid when the obtained validity attribute value indicates valid, and the obtained validation moment is not later than the obtained second time validity attribute value.