[0098] receiving measurement gap indication information, before switching an activated BWP of the UE. The measurement gap indication information is configured to indicate whether the UE needs the measurement gap on the configured BWP.

[0099] In some embodiments of the present disclosure, the measurement gap indication information may be the measurement gap indication information described in step S31.

[0100] In some embodiments, step S31 includes: receiving the measurement gap indication information, before switching the activated BWP of the UE. The measurement gap indication information is configured to indicate whether the UE needs the measurement gap on the configured BWP.

[0101] A method for processing measurement gap pre-configuration is provided in an embodiment of the present disclosure, the method is performed by the UE, and may include: receiving activation measurement gap indication information, before switching the activated BWP of the UE. The activation measurement gap indication information is configured to indicate at least one measurement object for which the UE needs the measurement gap on the configured BWP.

[0102] A method for processing measurement gap pre-configuration is provided in an embodiment of the present disclosure, the method is performed by the UE, and may include: receiving activation measurement gap indication information, before switching the activated BWP of the UE. The activation measurement gap indication information is configured to activate the measurement gap of the measurement object on the configured BWP for the UE.

[0103] A method for processing measurement gap pre-configuration is provided in an embodiment of the present disclosure, the method is performed by the UE, and may include: receiving deactivation measurement gap indication information, before switching the activated BWP of the UE. The deactivation measurement gap indication information is configured to indicate at least one measurement object for which the UE does not need the measurement gap on the configured BWP.

[0104] A method for processing measurement gap pre-configuration is provided in an embodiment of the present disclosure, the method is performed by the UE, and may

include: receiving deactivation measurement gap indication information, before switching the activated BWP of the UE. The deactivation measurement gap indication information is configured to deactivate the measurement gap of the measurement object on the configured BWP for the UE.

[0105] In the embodiment of the present disclosure, the UE may receive the measurement gap indication information before switching the activated BWP of the UE. The UE may know whether the measurement gap is configured for the measurement object on the configured BWP for the UE and whether to activate the measurement gap of the measurement object on the configured BWP for the UE, so that the UE needs not to determine whether the measurement gap is configured for the measurement object on the BWP and whether to activate the measurement gap at the last moment, thereby improving the measurement efficiency of the UE.

[0106] It should be noted that, those skilled in the art may understand that the method provided in the embodiments of the present disclosure may be executed separately, or may also be executed together with other methods in the embodiments of the present disclosure or some methods in the related art.

[0107] A method for processing measurement gap pre-configuration is provided in an embodiment of the present disclosure, the method is performed by the UE, and includes: receiving a RRC layer signaling. The measurement gap indication information is carried in the RRC layer signaling.

[0108] In an embodiment, the RRC layer signaling may be sent once. For example, the RRC layer signaling is sent, and the measurement gap indication information carried in the RRC layer signaling is configured to indicate whether the UE needs the measurement gap on the configured BWP and whether to activate the measurement gap on the configured BWP for the UE.

[0109] In another embodiment, the RRC layer signaling may be sent twice. For example, a first RRC layer signaling and a second RRC layer signaling are sent. The measurement gap indication information carried in the first RRC layer signaling is configured to indicate whether the UE needs the measurement gap on the configured BWP. The measurement gap indication information carried in the second RRC layer signaling is

MeasGapConfig signaling can be improved.

[0119] In addition, in the embodiments of the present disclosure, since the situation where the measurement gap is needed for the measurement object on the configured BWP for the UE can be known in advance, even if there is a certain delay in sending the activation measurement gap indication information and/or the deactivation measurement gap indication information based on the MeasGapConfig signaling, the measurement gap of the measurement object on the configured BWP for the UE may be activated before the UE performs the switching. Therefore, measurement success rate and measurement efficiency of the UE can be greatly improved.

[0120] It should be noted that, those skilled in the art may understand that the method provided in the embodiments of the present disclosure may be executed separately, or may also be executed together with other methods in the embodiments of the present disclosure or some methods in the related art.

[0121] A method for processing measurement pre-configuration is provided in an embodiment of the present disclosure, the method is performed by the UE, and may include:

[0122] receiving measurement configuration information for measurement, in which the measurement configuration information is configured to instruct the UE to perform the measurement on a configured BWP.

[0123] In an embodiment, receiving the measurement configuration information for the measurement includes: receiving the measurement configuration information for the measurement sent by a base station.

[0124] In this way, in the embodiments of the present disclosure, the UE may receive the measurement configuration information sent by the base station, and may determine that the UE may perform the measurement.

[0125] A method for processing measurement pre-configuration is provided in an embodiment the present disclosure, the method is performed by the UE, and may include: receiving a RRC message. The measurement configuration information is carried in the RRC message.

[0126] A method for processing measurement gap pre-configuration is provided in

CLAIMS

1. A method for processing measurement gap pre-configuration, performed by a user equipment (UE), comprising:

receiving (S31) measurement gap indication information, wherein the measurement gap indication information is configured to indicate whether the UE needs a measurement gap on a configured bandwidth part (BWP).

2. The method of claim 1, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to indicate at least one measurement object for which the UE needs the measurement gap on the configured BWP; or

deactivation measurement gap indication information, configured to indicate at least one measurement object for which the UE does not need the measurement gap on the configured BWP.

3. The method of claim 1 or 2, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to activate a measurement gap of a measurement object on the configured BWP for the UE; or

deactivation measurement gap indication information, configured to deactivate a measurement gap of a measurement object on the configured BWP for the UE.

4. The method of claim 2 or 3, wherein receiving (S31) the measurement gap indication information comprises at least one of:

receiving (S41) a measurement gap configuration (MeasGapConfig) signaling, wherein the activation measurement gap indication information is carried in the MeasGapConfig signaling; or

receiving (S42) a measurement gap configuration (MeasGapConfig) signaling, wherein the deactivation measurement gap indication information is carried in the MeasGapConfig signaling.

5. A method for processing measurement gap pre-configuration, performed by a base station, comprising:

sending (S51) measurement gap indication information, wherein the measurement gap indication information is configured to indicate whether a user equipment (UE) needs a measurement gap on a configured bandwidth part (BWP).

6. The method of claim 5, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to indicate at least one measurement object for which the UE needs the measurement gap on the configured BWP; or

deactivation measurement gap indication information, configured to indicate at least one measurement object for which UE does not need the measurement gap on the configured BWP.

7. The method of claim 5 or 6, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to activate a measurement gap of a measurement object on the configured BWP for the UE; or

deactivation measurement gap indication information, configured to deactivate a measurement gap of a measurement object on the configured BWP for the UE.

8. The method of claim 6 or 7, wherein sending (S51) the measurement gap indication information comprises at least one of:

sending a measurement gap configuration (MeasGapConfig) signaling, wherein the activation measurement gap indication information is carried in the MeasGapConfig signaling; or

sending a measurement gap configuration (MeasGapConfig) signaling, wherein the deactivation measurement gap indication information is carried in the MeasGapConfig signaling.

9. The method of any one of claims 5 to 8, further comprising:

sending (S61) measurement configuration information for measurement, wherein the measurement configuration information is configured to instruct the UE to perform the measurement on the configured BWP.

10. The method of claim 9, wherein sending (S61) the measurement configuration information comprises one of:

sending a radio resource control reconfiguration (RRCReconfiguration) message, wherein the measurement configuration information is carried in the RRCReconfiguration message; or

sending a measurement configuration (measConfig) signaling, wherein the measurement configuration information is carried in the measConfig signaling.

11. The method of any one of claims 5 to 10, further comprising:

sending (S71) a downlink bandwidth part information element (IE BWP-Downlink) signaling, wherein the IE BWP-Downlink signaling is configured to indicate the configured BWP for the UE.

12. The method of claim 11, wherein a bwp-Id field of the IE BWP-Downlink signaling is configured to indicate a maximum number of the configured BWPs for the UE.

13. An apparatus for processing measurement gap pre-configuration, applied to a user equipment (UE), comprising:

a first receiving module (41), configured to receive measurement gap indication information; wherein the measurement gap indication information is configured to indicate whether the UE needs a measurement gap on a configured BWP.

14. The apparatus of claim 13, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to indicate at least one measurement object for which the UE needs the measurement gap on the configured BWP; or

deactivation measurement gap indication information, configured to indicate at least one measurement object for which the UE does not need the measurement gap on the configured BWP.

15. The apparatus of claim 13 or 14, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to activate a measurement gap of a measurement object on the configured BWP for the UE; or

deactivation measurement gap indication information, configured to deactivate a measurement gap of a measurement object on the configured BWP for the UE.

16. The apparatus of claim 14 or 15, wherein,

the first receiving module (41) is configured to receive a measurement gap configuration (MeasGapConfig) signaling, wherein the activation measurement gap indication information is carried in the MeasGapConfig signaling;

and/or,

the first receiving module (41) is configured to receive a measurement gap configuration (MeasGapConfig) signaling, wherein the deactivation measurement gap indication information is carried in the MeasGapConfig signaling.

17. An apparatus for processing measurement gap pre-configuration, applied to a base station, comprising:

a second sending module (61), configured to send measurement gap indication information, wherein the measurement gap indication information is configured to indicate whether a user equipment (UE) needs a measurement gap on a configured bandwidth part (BWP).

18. The apparatus of claim 17, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to indicate at least one measurement object for which the UE needs the measurement gap on the configured BWP; or

deactivation measurement gap indication information, configured to indicate at least one measurement object for which UE does not need the measurement gap on the configured BWP.

19. The apparatus of claim 18, wherein the measurement gap indication information comprises at least one of:

activation measurement gap indication information, configured to activate a measurement gap of a measurement object on the configured BWP for the UE; or

deactivation measurement gap indication information, configured to deactivate a measurement gap of a measurement object on the configured BWP for the UE.

20. The apparatus of claim 18 or 19, wherein,

the second sending module (61) is configured to send a measurement gap configuration (MeasGapConfig) signaling, and the activation measurement gap indication information is

carried in the MeasGapConfig signaling;

and/or,

the second sending module (61) is configured to send a measurement gap configuration (MeasGapConfig) signaling, and the deactivation measurement gap indication information is carried in the MeasGapConfig signaling.