AR系列路由器debugging bgp packet命令
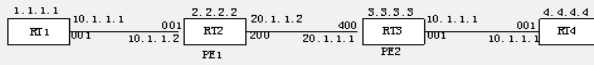
赵刚   2007-09-26 发表

AR系列路由器debugging bgp packet命令

BGP组网示意图

【命令】

debugging bgp packet

【视图】

用户视图

【参数】

无

【描述】

debugging bgp packet命令用来打开所有与BGP相关的packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的调试信息。显示如下：

<RT1>display debugging

BGP open debugging is on

BGP update debugging is on

BGP keepalive debugging is on

BGP route-refresh debugging is on

BGP mp-update debugging is on

【举例】

例1：在RT2和RT3上建立BGP和邻居关系过程中，显示所有BGP packet报文(包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文)，包括接收到的和发送出去的。

[RT2]bgp 100

[RT2-bgp]undo synchronization

[RT2-bgp]group as100 internal

[RT2-bgp]peer 20.1.1.1 group as100

[RT2-bgp]

*0.22046908 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179

*0.22046908 RT2 RM/7/RTDBG:BGP SEND message type 1 (Open) length 39

*0.22046908 RT2 RM/7/RTDBG:BGP SEND Capabilities:

*0.22046908 RT2 RM/7/RTDBG:multi-protocol afi(1),safi(1) route-refresh

*0.22046908 RT2 RM/7/RTDBG:BGP SEND version 4 as 100 holdtime 180 id 10.1.1.2 authcode 0

\\ 发送的BGP open报文信息

*0.22046923 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097

*0.22046923 RT2 RM/7/RTDBG:BGP RECV message type 1 (Open) length 39

*0.22046923 RT2 RM/7/RTDBG:BGP RECV Capabilities:

*0.22046923 RT2 RM/7/RTDBG:multi-protocol afi(1),safi(1) route-refresh

*0.22046923 RT2 RM/7/RTDBG:BGP RECV version 4 as 100 holdtime 180 id 20.1.1.1 authcode 0

\\ 接收的BGP open报文信息

*0.22046923 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179

*0.22046923 RT2 RM/7/RTDBG:BGP SEND message type 4 (KeepAlive) length 19

\\ 发送的BGP keepalive报文信息

*0.22046923 RT2 RM/7/RTDBG:bgp read: 20.1.1.1 (Internal AS 100): 0 bytes buffered

*0.22046954 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097

*0.22046970 RT2 RM/7/RTDBG:BGP RECV message type 4 (KeepAlive) length 19

\\ 接收的BGP keepalive报文信息

*0.22047001 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179

*0.22047001 RT2 RM/7/RTDBG:BGP SEND message type 4 (KeepAlive) length 19

*0.22047033 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097
*0.22047033 RT2 RM/7/RTDBG:BGP RECV message type 4 (KeepAlive) length 19
\\ 发送的BGP keepalive报文信息

 [RT2-bgp]import direct
\\引入直连路由时
*0.22055954 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179
*0.22055970 RT2 RM/7/RTDBG:BGP SEND message type 2 (Update) length 57
*0.22056001 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code Origin(1): Incomplete
*0.22056017 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code ASPath(2): <null>
*0.22056048 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code NextHop(3): 20.1.1.2
*0.22056064 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code LocalPref(5): 100
*0.22056095 RT2 RM/7/RTDBG:BGP SEND 2.2.2.2/32, 10.1.1.0/24, 20.1.1.0/24
*0.22056111 RT2 RM/7/RTDBG:Total IPV4 reach routes: 3
\\ 有发送的BGP update报文信息

*0.91437877 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097
*0.91437877 RT2 RM/7/RTDBG:BGP RECV message type 2 (Update) length 57
*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code Origin(1): Incomplete
*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code ASPath(2): <null>
*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code NextHop(3): 20.1.1.1
*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code LocalPref(5): 100
*0.91437877 RT2 RM/7/RTDBG:BGP RECV 3.3.3.3/32, 20.1.1.0/24, 60.1.1.0/24
*0.91437877 RT2 RM/7/RTDBG:Total IPV4 reach routes: 3
\\ 有接收的BGP update报文信息

各个报文具体内容会在其它命令中逐一有详细解释，这里不再重复。
debugging bgp packet receive
【命令】
debugging bgp packet receive
【视图】
用户视图
【参数】
无
【描述】
debugging bgp packet receive命令用来打开接收到的packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的调试信息。
<RT1>display debugging
BGP recv open debugging is on
BGP recv update debugging is on
BGP recv keepalive debugging is on
BGP recv route-refresh debugging is on
BGP recv mp-update debugging is on
【举例】
例1：在RT2和RT3上建立BGP和邻居关系过程中，显示所有接收到的BGP/ packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的调试信息。
*0.22046923 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097
*0.22046923 RT2 RM/7/RTDBG:BGP RECV message type 1 (Open) length 39
*0.22046923 RT2 RM/7/RTDBG:BGP RECV Capabilities:
*0.22046923 RT2 RM/7/RTDBG:multi-protocol afi(1), safi(1) route-refresh
*0.22046923 RT2 RM/7/RTDBG:BGP RECV version 4 as 100 holdtime 180 id 20.1.1.1 authcode 0
\\ 接收的BGP open报文信息

*0.22046923 RT2 RM/7/RTDBG:bgp read: 20.1.1.1 (Internal AS 100): 0 bytes buffered
*0.22046954 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097
*0.22046970 RT2 RM/7/RTDBG:BGP RECV message type 4 (KeepAlive) length 19
\\ 接收的BGP keepalive报文信息

*0.91437877 RT2 RM/7/RTDBG:BGP RECV 20.1.1.1+179 -> 20.1.1.2+1097
*0.91437877 RT2 RM/7/RTDBG:BGP RECV message type 2 (Update) length 57
*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code Origin(1): Incomplete

*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code ASPath(2): <null>

*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code NextHop(3): 20.1.1.1

*0.91437877 RT2 RM/7/RTDBG:BGP RECV flags 0x40 code LocalPref(5): 100

*0.91437877 RT2 RM/7/RTDBG:BGP RECV 3.3.3.3/32, 20.1.1.0/24, 60.1.1.0/24

*0.91437877 RT2 RM/7/RTDBG:Total IPV4 reach routes: 3

\\ 有接收的BGP update报文信息

其它报文类似，其结果是只打印出接收到的各种报文。

1. debugging bgp packet receive verbose

【命令】

debugging bgp packet receive verbose

【视图】

用户视图

【参数】

无

【描述】

debugging bgp packet receive verbose命令用来打开接收到packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的详细调试信息。

<RT1>display debugging

BGP verbose recv open debugging is on

BGP verbose recv update debugging is on

BGP verbose recv keepalive debugging is on

BGP verbose recv route-refresh debugging is on

BGP verbose recv mp-update debugging is on

目前，**debugging bgp packet receive verbose**命令的实现和debugging bgp packet recieve没有差别，请参考**debugging bgp packet receive** 命令。

【举例】

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debugging bgp packet send

【命令】

debugging bgp packet send

【视图】

用户视图

【参数】

无

【描述】

debugging bgp packet send命令用来打开发送的packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的调试信息。

<RT1>display debugging

BGP send open debugging is on

BGP send update debugging is on

BGP send keepalive debugging is on

BGP send route-refresh debugging is on

BGP send mp-update debugging is on

【举例】

例1：在RT2和RT3上建立BGP和邻居关系过程中，显示所有发送的packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的调试信息。

*0.22046908 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179

*0.22046908 RT2 RM/7/RTDBG:BGP SEND message type 1 (Open) length 39

*0.22046908 RT2 RM/7/RTDBG:BGP SEND Capabilities:

*0.22046908 RT2 RM/7/RTDBG:multi-protocol afi(1), safi(1) route-refresh

*0.22046908 RT2 RM/7/RTDBG:BGP SEND version 4 as 100 holdtime 180 id 10.1.1.2 authcode 0

\\ 只发送的BGP open报文信息

*0.22046923 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179

*0.22046923 RT2 RM/7/RTDBG:BGP SEND message type 4 (KeepAlive) length 19

\\ 只发送的BGP keepalive报文信息

*0.22055954 RT2 RM/7/RTDBG:BGP SEND 20.1.1.2+1097 -> 20.1.1.1+179

*0.22055970 RT2 RM/7/RTDBG:BGP SEND message type 2 (Update) length 57

*0.22056001 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code Origin(1): Incomplete
*0.22056017 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code ASPath(2): <null>
*0.22056048 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code NextHop(3): 20.1.1.2
*0.22056064 RT2 RM/7/RTDBG:BGP SEND flags 0x40 code LocalPref(5): 100
*0.22056095 RT2 RM/7/RTDBG:BGP SEND 2.2.2.2/32, 10.1.1.0/24, 20.1.1.0/24
*0.22056111 RT2 RM/7/RTDBG:Total IPV4 reach routes: 3
\\ 只有发送的BGP update报文信息

其它报文类似，其结果是只有发送的打印出。
2. debugging bgp packet send verbose
【命令】
debugging bgp packet send verbose
【视图】
用户视图
【参数】
无
【描述】
debugging bgp packet send verbose命令用来打开发送的packet报文(包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文)的详细调试信息。
<RT1>display debugging
BGP verbose send open debugging is on
BGP verbose send update debugging is on
BGP verbose send keepalive debugging is on
BGP verbose send route-refresh debugging is on
BGP verbose send mp-update debugging is on
目前，**debugging bgp packet send verbose**命令的实现和**debugging bgp packet send**没有差别，请参考**debugging bgp packet send**命令。
【举例】
略
debugging bgp packet verbose
【命令】
debugging bgp packet verbose
【视图】
用户视图
【参数】
无
【描述】
debugging bgp packet verbose命令用来打开所有packet报文（包括open报文，keepalive报文，update报文，routerefresh报文，mp-update报文）的详细调试信息（包括接收发送）。
<RT1>display debugging
BGP verbose open debugging is on
BGP verbose update debugging is on
BGP verbose keepalive debugging is on
BGP verbose route-refresh debugging is on
BGP verbose mp-update debugging is on
目前，**debugging bgp packet verbose**命令的实现和**debugging bgp packet**没有差别，请参考**debugging bgp packet**命令。
【举例】
略