

blacklisted status permanently based on the validation counts. Once velocity learning is completed, messages from a VLR with a failed validation may be discarded based on the VLR being classified as blacklisted.

Referring to the message flow in Figure 4, in line 1, VLR **202** sends a
5 send authentication information or location update request message to routing
node **100**. Routing node **100** performs a VLR security status check using the
data stored in the static and dynamic profile tables. Performing the VLR
security status check may include performing a lookup in the static and
dynamic profile tables using the VLR ID 1234. In this example, the
10 configuration of the dynamic profile table is assumed to be the same as that
illustrated above in Table 3. Because the security status of the VLR having the
ID 1234 is blacklisted, routing node **100** may discard the send authentication
information or location update request message. If the security status of the
VLR had been whitelisted, the message would have been routed or forwarded
15 to home HLR **200**, e.g., based on configured global title translation (GTT)
rules. GTT involves translating the global title address stored in the signaling
connection control part (SCCP) of the message into a point code and using
the point code to route the message to a destination. If the security status had
been set to graylisted, validation testing would be performed, and the message
20 would be routed or discarded based on the status of the entry in the dynamic
profile table at the conclusion of the validation testing. Thus, in active mode,
the dynamically learned entries in the security database can be used by
routing node **100** to perform security screening of messages from foreign
mobility management network nodes.

25 Although the message flows in Figure 1-4 illustrate dynamic learning
for SS7 message types. The subject matter described herein is not limited to
performing dynamic learning and security screening only for SS7 message.
Routing node **100** may also be used to perform dynamic learning and security
screening for Diameter messages that are used for the same or similar
30 purposes as the corresponding SS7 messages illustrated in Figures 1-4.
Rather than receiving the messages from an MSC/VLR, in Diameter networks,
the messages used for dynamic learning and security screening may be
received from an MME. Rather than querying an HLR for the mobility