



## Understanding Host Data Structures

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This chapter describes the format of the Full Host Profile data block that conveys a set of data describing a single host. The eStreamer server generates and sends these blocks on request for host data. For information about the client request procedure, the message structure, and the delivery method, see [Host Data and Multiple Host Data Message Format, page 2-30](#).

eStreamer uses the series 1 data block structure to package these Full Host profile blocks. For the general structure of series 1 blocks, see [Series 1 Data Block Header, page 4-61](#). The Full Host Profile data block contains a number of encapsulated blocks which are individually described in the subsections where they are defined in [Understanding Discovery & Connection Data Structures, page 4-1](#).

See the following sections for more information about current and legacy Full Host Profile data blocks:

- [Full Host Profile Data Block 5.3+, page 5-1](#) describes the current Full Host Profile data block structure.
- [Full Host Profile Data Block 5.0 - 5.0.2, page B-245](#) describes the legacy Full Host Profile data block structure for versions 5.0 - 5.0.2.

### Full Host Profile Data Block 5.3+

The Full Host Profile data block for version 5.3+ contains a full set of data describing one host. It has the format shown in the graphic below and explained in the following table. Note that, except for List data blocks, the graphic does not show the fields of the encapsulated data blocks. These encapsulated data blocks are described separately in [Understanding Discovery & Connection Data Structures, page 4-1](#). The Full Host Profile data block a block type value of 149. It supersedes the prior version, which has a block type of 140.



#### Note

An asterisk (\*) next to a block name in the following diagram indicates that multiple instances of the data block may occur.

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The following diagram shows the format of the Full Host Profile data block for 5.3+:

| Byte                    | 0  |   |   |   |   |   |   |   | 1  |   |    |    |    |    |    |    | 2  |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |
|-------------------------|--|---|---|---|---|---|---|---|--|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| Bit                     | 0  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
|                         | Full Host Profile Data Block (149)             |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Data Block Length                              |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Host ID  |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Host ID, continued                             |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Host ID, continued                             |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Host ID, continued                             |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| IP Addresses            | List Block Type (11)                           |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length                              |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | IP Address Data Blocks (143)*                  |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Hops   |   |   |   |   |   |   |   | Generic List Block Type (31)                   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Type, continued             |   |   |   |   |   |   |   | Generic List Block Length                      |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| OS Derived Fingerprints | Generic List Block Length, continued           |   |   |   |   |   |   |   | Operating System Fingerprint Block Type (130)* |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | OS Fingerprint Block Type (130)*, con't        |   |   |   |   |   |   |   | Operating System Fingerprint Block Length      |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | OS Fingerprint Block Length, con't             |   |   |   |   |   |   |   | Operating System Derived Fingerprint Data...   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Type (31)                   |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length                      |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Server Fingerprints     | Operating System Fingerprint Block Type (130)* |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Operating System Fingerprint Block Length      |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Operating System Server Fingerprint Data...    |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Type (31)                   |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length                      |   |   |   |   |   |   |   |  |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Byte                      | 0  |   |   |   |   |   |   |   | 1 |   |    |    |    |    |    |    | 2  |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |
|---------------------------|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                           | 0  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Client Fingerprints       | Operating System Fingerprint Block Type (130)* |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Fingerprint Block Length      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Client Fingerprint Data...    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Type (31)                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Length                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| VDB Native Fingerprints 1 | Operating System Fingerprint Block Type (130)* |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Fingerprint Block Length      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System VDB Fingerprint Data...       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Type (31)                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Length                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| VDB Native Fingerprints 2 | Operating System Fingerprint Block Type (130)* |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Fingerprint Block Length      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System VDB Fingerprint Data...       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Type (31)                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Length                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| User Fingerprints         | Operating System Fingerprint Block Type (130)* |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Fingerprint Block Length      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System User Fingerprint Data...      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Type (31)                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Length                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Scan Fingerprints         | Operating System Fingerprint Block Type (130)* |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Fingerprint Block Length      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Operating System Scan Fingerprint Data...      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Type (31)                   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                           | Generic List Block Length                      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Byte                     | 0  |   |   |   |   |   |   |   | 1 |   |    |    |    |    |    |    | 2  |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |
|--------------------------|--|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                          | 0  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Application Fingerprints | Operating System Fingerprint Block Type (130)*   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Fingerprint Block Length        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Application Fingerprint Data... |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Type (31)                     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Length                        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Conflict Fingerprints    | Operating System Fingerprint Block Type (130)*   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Fingerprint Block Length        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Conflict Fingerprint Data...    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Type (31)                     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Length                        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Mobile Fingerprints      | Operating System Fingerprint Block Type (130)*   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Fingerprint Block Length        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Mobile Fingerprint Data...      |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Type (31)                     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Length                        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| IPv6 Server Fingerprints | Operating System Fingerprint Block Type (130)*   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Fingerprint Block Length        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System IPv6 Server Fingerprint Data... |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Type (31)                     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Length                        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| IPv6 Client Fingerprints | Operating System Fingerprint Block Type (130)*   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System Fingerprint Block Length        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Operating System IPv6 Client Fingerprint Data... |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Type (31)                     |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                          | Generic List Block Length                        |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Byte                    | 0   |   |   |   |   |   |   |   | 1 |   |    |    |    |    |    |         | 2  |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |
|-------------------------|---|---|---|---|---|---|---|---|---|---|----|----|----|----|----|---------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                         | 0   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15      | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Ipv6 DHCP Fingerprints  | Operating System Fingerprint Block Type (130)*  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Operating System Fingerprint Block Length       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Operating System IPv6 DHCP Fingerprint Data...  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Type (31)                    |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length                       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| User Agent Fingerprints | Operating System Fingerprint Block Type (130)*  |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Operating System Fingerprint Block Length       |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Operating System User Agent Fingerprint Data... |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| (TCP) Full Server Data  | List Block Type (11)...                         |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length...                            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (TCP) Full Server Data Blocks (104)*            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| (UDP) Full Server Data  | List Block Type (11)                            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length                               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (UDP) Full Server Data Blocks (104)*            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Network Protocol Data   | List Block Type (11)                            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length                               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (Network) Protocol Data Blocks (4)*             |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Transport Protocol Data | List Block Type (11)                            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length                               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (Transport) Protocol Data Blocks (4)*           |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| MAC Address Data        | List Block Type (11)                            |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length                               |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Host MAC Address Data Blocks (95)*              |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Last Seen               |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Host Type               |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |         |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Business Criticality    |   |   |   |   |   |   |   |   |   |   |    |    |    |    |    | VLAN ID |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

| Byte                    | 0  |   |   |   |   |   |   |   | 1             |   |    |    |    |    |    |    | 2   |    |    |    |    |    |    |    | 3  |    |    |    |    |    |    |    |
|-------------------------|--|---|---|---|---|---|---|---|---------------|---|----|----|----|----|----|----|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
|                         | 0  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8             | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16  | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |
| Bit                     | VLAN Type  |   |   |   |   |   |   |   | VLAN Priority |   |    |    |    |    |    |    | Generic List Block Type (31)                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Host Client Data        | Generic List Block Type, continued   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    | Generic List Block Length                       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length, continued   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    | Full Host Client Application Data Blocks (112)* |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| NetBios Name            | String Block Type (0)  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Name                    | String Block Length  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | NetBIOS Name String...   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Notes Data              | String Block Type (0)  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | String Block Length  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Notes String....   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| (VDB) Host Vulns        | Generic List Block Type (31)   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (VDB) Host Vulnerability Data Blocks (85)*                                     |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3rd Pty/VDB) Host Vulns | Generic List Block Type (31)   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (Third Party/VDB) Host Vulnerability Data Blocks (85)*                         |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| 3rd Pty Scan Host Vulns | Generic List Block Type (31)   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | (Third Party Scan) Host Vulnerability Data Blocks with Original Vuln IDs (85)* |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| Attribute Value Data    | List Block Type (11)   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | List Block Length  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Attribute Value Data Blocks *  |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Mobile   |   |   |   |   |   |   |   | Jailbroken    |   |    |    |    |    |    |    | Generic List Block Type (31)                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
| IOC State               | Generic List Block Type, continued   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    | Generic List Block Length                       |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |
|                         | Generic List Block Length, continued   |   |   |   |   |   |   |   |               |   |    |    |    |    |    |    | IOC State Data Blocks (150)*                    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |

The following table describes the components of the Full Host Profile for 5.3+ record.

**Table 5-1 Full Host Profile Record 5.3+ Fields**

| Field   | Data Type | Description  |
|---|-----------|--|
| Host ID   | uint8[16] | Unique ID number of the host. This is a UUID.  |
| List Block Type   | uint32    | Initiates a List data block comprising IP address data blocks conveying TCP service data. This value is always 11.   |
| List Block Length   | uint32    | Number of bytes in the list. This number includes the eight bytes of the list block type and length fields, plus the length of all encapsulated IP address data blocks.  |
| IP Address  | variable  | IP addresses of the host and when each IP address was last seen. See <a href="#">Host IP Address Data Block, page 4-95</a> for a description of this data block.   |
| Hops  | uint8     | Number of network hops from the host to the device.  |
| Generic List Block Type   | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data derived from the existing fingerprints for the host. This value is always 31.   |
| Generic List Block Length                                       | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |
| Operating System Derived Fingerprint Data Blocks *              | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host derived from the existing fingerprints for the host. See <a href="#">Operating System Fingerprint Data Block 5.1+, page 4-156</a> for a description of this data block. |
| Generic List Block Type   | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using a server fingerprint. This value is always 31.   |
| Generic List Block Length                                       | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |
| Operating System Fingerprint (Server Fingerprint) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using a server fingerprint. See <a href="#">Operating System Fingerprint Data Block 5.1+, page 4-156</a> for a description of this data block.               |
| Generic List Block Type   | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using a client fingerprint. This value is always 31.   |
| Generic List Block Length                                       | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |
| Operating System Fingerprint (Client Fingerprint) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using a client fingerprint. See <a href="#">Operating System Fingerprint Data Block 5.1+, page 4-156</a> for a description of this data block.               |
| Generic List Block Type   | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using a Cisco VDB fingerprint. This value is always 31.  |

Table 5-1 Full Host Profile Record 5.3+ Fields (continued)

| Field  | Data Type | Description   |
|--|-----------|---|
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |
| Operating System Fingerprint (VDB) Native Fingerprint 1) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using the fingerprints in the Cisco vulnerability database (VDB). See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block. |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using a Cisco VDB fingerprint. This value is always 31.   |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |
| Operating System Fingerprint (VDB) Native Fingerprint 2) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using the fingerprints in the Cisco vulnerability database (VDB). See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block. |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data added by a user. This value is always 31.  |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |
| Operating System Fingerprint (User Fingerprint) Data Blocks *          | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host added by a user. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.   |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data added by a vulnerability scanner. This value is always 31.   |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |
| Operating System Fingerprint (Scan Fingerprint) Data Blocks *          | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host added by a vulnerability scanner. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.  |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data added by an application. This value is always 31.  |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |



Table 5-1 Full Host Profile Record 5.3+ Fields (continued)

| Field  | Data Type | Description  |
|--|-----------|--|
| Operating System Fingerprint (Application Fingerprint) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host added by an application. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.                          |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data selected through fingerprint conflict resolution. This value is always 31.  |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |
| Operating System Fingerprint (Conflict Fingerprint) Data Blocks *    | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host selected through fingerprint conflict resolution. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block. |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying mobile device fingerprint data. This value is always 31.   |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |
| Operating System Fingerprint (Mobile) Data Blocks *                  | variable  | Operating System Fingerprint data blocks containing information about the operating system on a mobile device host. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.                                    |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using an IPv6 server fingerprint. This value is always 31.   |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |
| Operating System Fingerprint (IPv6 Server Fingerprint) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using an IPv6 server fingerprint. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.      |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using an IPv6 client fingerprint. This value is always 31.   |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.   |

**Table 5-1 Full Host Profile Record 5.3+ Fields (continued)**

| Field  | Data Type | Description   |
|--|-----------|---|
| Operating System Fingerprint (IPv6 Client Fingerprint) Data Blocks * | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using an IPv6 client fingerprint. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block. |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using an IPv6 DHCP fingerprint. This value is always 31.  |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |
| Operating System Fingerprint (IPv6 DHCP) Data Blocks *               | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using an IPv6 DHCP fingerprint. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.   |
| Generic List Block Type  | uint32    | Initiates a Generic List data block comprising Operating System Fingerprint data blocks conveying fingerprint data identified using a user agent fingerprint. This value is always 31.  |
| Generic List Block Length  | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Operating System Fingerprint data blocks.  |
| Operating System Fingerprint (User Agent) Data Blocks *              | variable  | Operating System Fingerprint data blocks containing information about the operating system on a host identified using a user agent fingerprint. See <a href="#">Operating System Fingerprint Data Block 5.1+</a> , page 4-156 for a description of this data block.   |
| List Block Type  | uint32    | Initiates a List data block comprising Full Server data blocks conveying TCP service data. This value is always 11.   |
| List Block Length  | uint32    | Number of bytes in the list. This number includes the eight bytes of the list block type and length fields, plus the length of all encapsulated Full Server data blocks.  |
| (TCP) Full Server Data Blocks *                                      | variable  | List of Full Server data blocks conveying data about the TCP services on the host. See <a href="#">Full Host Server Data Block 4.10.0+</a> , page 4-137 for a description of this data block.   |
| List Block Type  | uint32    | Initiates a List data block comprising Full Server data blocks conveying UDP service data. This value is always 11.   |
| List Block Length  | uint32    | Number of bytes in the list. This number includes the eight bytes of the list block type and length fields, plus the length of all encapsulated Full Server data blocks.  |
| (UDP) Full Server Data Blocks *                                      | variable  | List of Full Server data blocks conveying data about the UDP sub-servers on the host. See <a href="#">Full Host Server Data Block 4.10.0+</a> , page 4-137 for a description of this data block.  |
| List Block Type  | uint32    | Initiates a List data block comprising Protocol data blocks conveying network protocol data. This value is always 11.   |

**Table 5-1 Full Host Profile Record 5.3+ Fields (continued)**

| Field                              | Data Type | Description   |
|------------------------------------|-----------|---|
| List Block Length                  | uint32    | Number of bytes in the list. This number includes the eight bytes of the list block type and length fields, plus the length of all encapsulated Protocol data blocks.   |
| (Network) Protocol Data Blocks *   | variable  | List of Protocol data blocks conveying data about the network protocols on the host. See <a href="#">Protocol Data Block, page 4-74</a> for a description of this data block.   |
| List Block Type                    | uint32    | Initiates a List data block comprising Protocol data blocks conveying transport protocol data. This value is always 11.   |
| List Block Length                  | uint32    | Number of bytes in the list. This number includes the eight bytes of the list block type and length fields, plus the length of all encapsulated Protocol data blocks.   |
| (Transport) Protocol Data Blocks * | variable  | List of Protocol data blocks conveying data about the transport protocols on the host. See <a href="#">Protocol Data Block, page 4-74</a> for a description of this data block.   |
| List Block Type                    | uint32    | Initiates a List data block containing Host MAC Address data blocks. This value is always 11.   |
| List Block Length                  | uint32    | Number of bytes in the list, including the list header and all encapsulated Host MAC Address data blocks.   |
| Host MAC Address Data Blocks *     | variable  | List of Host MAC Address data blocks. See <a href="#">Host MAC Address 4.9+, page 4-113</a> for a description of this data block.   |
| Last Seen                          | uint32    | UNIX timestamp that represents the last time the system detected host activity.   |
| Host Type                          | uint32    | Indicates host type. Values include: <ul style="list-style-type: none"> <li>• 0 — Host</li> <li>• 1 — Router</li> <li>• 2 — Bridge</li> <li>• 3 — NAT (network address translation device)</li> <li>• 4 — LB (load balancer)</li> </ul> |
| Business Criticality               | uint16    | Indicates criticality of host to business.  |
| VLAN ID                            | uint16    | VLAN identification number that indicates which VLAN the host is a member of.   |
| VLAN Type                          | uint8     | Type of packet encapsulated in the VLAN tag.  |
| VLAN Priority                      | uint8     | Priority value included in the VLAN tag.  |
| Generic List Block Type            | uint32    | Initiates a Generic List data block comprising Host Vulnerability data blocks conveying Client Application data. This value is always 31.   |
| Generic List Block Length          | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated Client Application data blocks.  |

**Table 5-1 Full Host Profile Record 5.3+ Fields (continued)**

| Field   | Data Type | Description  |
|---|-----------|--|
| Full Host Client Application Data Blocks *          | variable  | List of Client Application data blocks. See <a href="#">Full Host Client Application Data Block 5.0+</a> , page 4-151 for a description of this data block.  |
| String Block Type                                   | uint32    | Initiates a String data block for the host NetBIOS name. This value is always 0.   |
| String Block Length                                 | uint32    | Number of bytes in the String data block, including eight bytes for the string block type and length fields, plus the number of bytes in the NetBIOS name string.  |
| NetBIOS Name  | string    | Host NetBIOS name string.  |
| String Block Type                                   | uint32    | Initiates a String data block for host notes. This value is always 0.  |
| String Block Length                                 | uint32    | Number of bytes in the notes String data block, including eight bytes for the string block type and length fields, plus the number of bytes in the notes string.   |
| Notes   | string    | Contains the contents of the Notes host attribute for the host.  |
| Generic List Block Type                             | uint32    | Initiates a Generic List data block comprising Host Vulnerability data blocks conveying VDB vulnerability data. This value is always 31.   |
| Generic List Block Length                           | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated data blocks.  |
| (VDB) Host Vulnerability Data Blocks *              | variable  | List of Host Vulnerability data blocks for vulnerabilities identified in the Cisco vulnerability database (VDB). See <a href="#">Host Vulnerability Data Block 4.9.0+</a> , page 4-110 for a description of this data block.   |
| Generic List Block Type                             | uint32    | Initiates a Generic List data block comprising Host Vulnerability data blocks conveying third-party scan vulnerability data. This value is always 31.  |
| Generic List Block Length                           | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated data blocks.  |
| (Third Party/VDB) Host Vulnerability Data Blocks *  | variable  | Host Vulnerability data blocks sourced from a third party scanner and containing information about host vulnerabilities cataloged in the Cisco vulnerability database (VDB). See <a href="#">Host Vulnerability Data Block 4.9.0+</a> , page 4-110 for a description of this data block.           |
| Generic List Block Type                             | uint32    | Initiates a Generic List data block comprising Host Vulnerability data blocks conveying third party scan vulnerability data. This value is always 31.  |
| Generic List Block Length                           | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated data blocks.  |
| (Third Party Scan) Host Vulnerability Data Blocks * | variable  | Host Vulnerability data blocks sourced from a third party scanner. Note that the host vulnerability IDs for these data blocks are the third party scanner IDs, not Cisco-detected IDs. See <a href="#">Host Vulnerability Data Block 4.9.0+</a> , page 4-110 for a description of this data block. |
| List Block Type                                     | uint32    | Initiates a List data block comprising Attribute Value data blocks conveying attribute data. This value is always 11.  |

**Table 5-1 Full Host Profile Record 5.3+ Fields (continued)**

| Field                         | Data Type | Description  |
|-------------------------------|-----------|--|
| List Block Length             | uint32    | Number of bytes in the List data block, including the list header and all encapsulated data blocks.  |
| Attribute Value Data Blocks * | variable  | List of Attribute Value data blocks. See <a href="#">Attribute Value Data Block, page 4-80</a> for a description of the data blocks in this list.                            |
| Mobile                        | uint8     | A true-false flag indicating whether the operating system is running on a mobile device.   |
| Jailbroken                    | uint8     | A true-false flag indicating whether the mobile device operating system is jailbroken.   |
| Generic List Block Type       | uint32    | Initiates a Generic List data block comprising IOC State data blocks. This value is always 31.   |
| Generic List Block Length     | uint32    | Number of bytes in the Generic List data block, including the list header and all encapsulated IOC State data blocks.  |
| IOC State Data Blocks *       | variable  | IOC State data blocks containing information about compromises on a host. See <a href="#">IOC State Data Block for 5.3+, page 4-32</a> for a description of this data block. |

