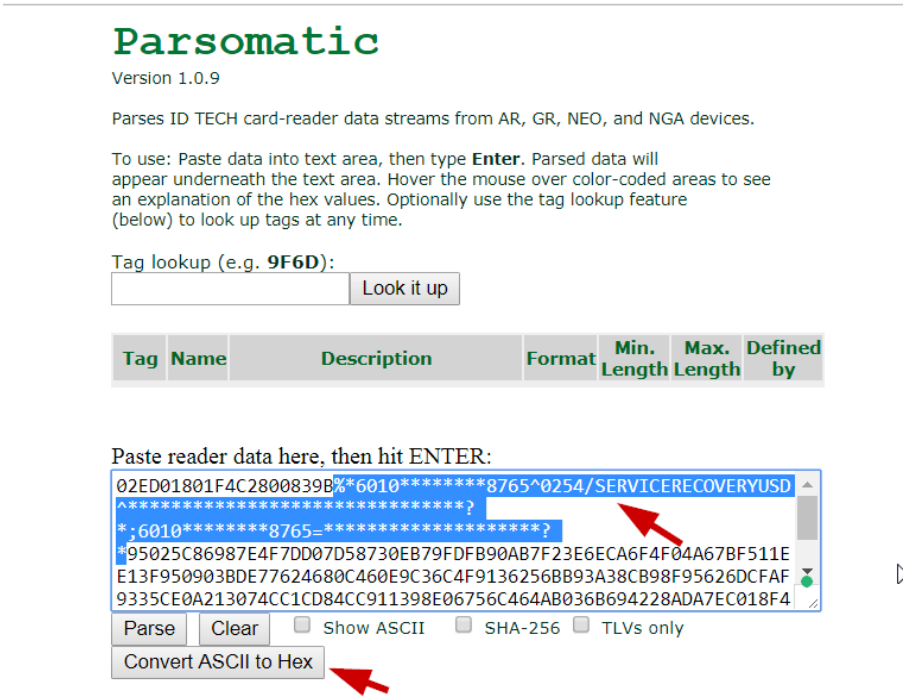
How to parse the USB/KB encrypted data correctly with Parsomatic?

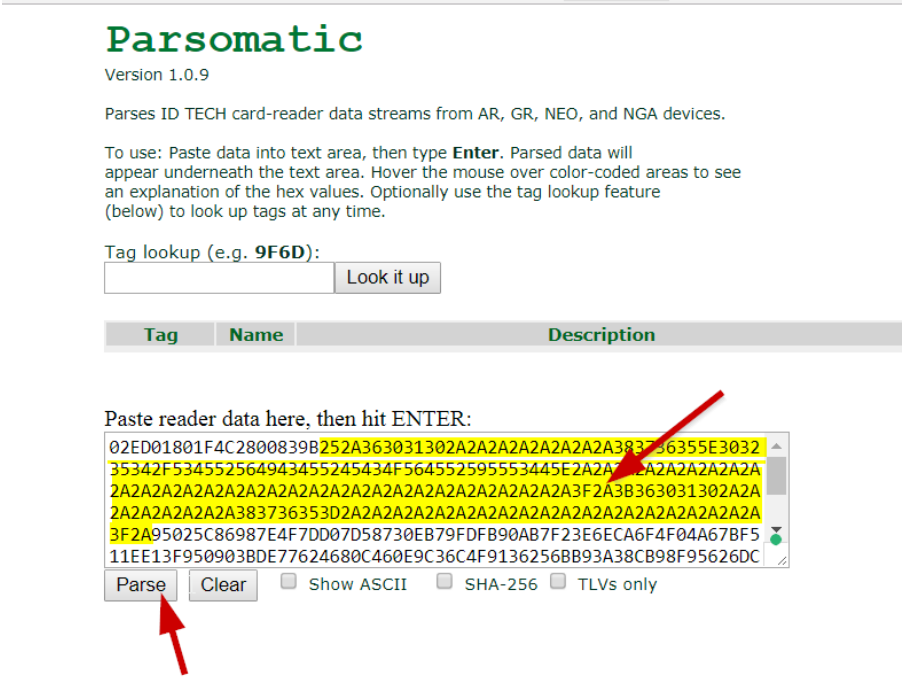
When I drop swipe data from a USB keyboard interface reader into the tool, it doesn't parse correctly. How can I get the data correctly parsed with Parsomatic?

The output from a USB/keyboard interface reader contains ASCII and HEX combined data. With Parsomatic, it only parses the data correctly when it's all in Hex. What you can do is:

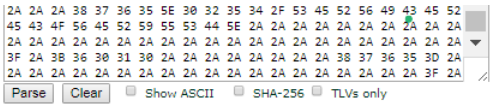
1. Highlight the mask data field which is in ACSII with USB/KB interface reader.



2. Click the "Convert ASCII to Hex" button below the data window once you have the ASCII data highlighted. That'll get the ASCII data converted to Hex (in case you don't see the Convert ASCII button on screen, try clicking on free space and after detecting ASCII in the window, it should pop up).



3. Click the "Parse" button to get the Hex data parsed correctly.

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02 ED 01 80 1F 4C 28 00 83 9B 25 2A 36 30 31 30 2A 2A 2A 2A 2A 2A 2A
2A 38 37 36 35 5E 30 32 35 34 2F 53 45 52 56 49 43 45 52 45 43 4F 56
45 52 59 55 53 44 5E 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A
2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 3F 2A 3B 36 30 31 30 2A
2A 2A 2A 2A 2A 2A 2A 2A 38 37 36 35 3D 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A
2A 2A 2A 2A 2A 2A 2A 2A 2A 3F 2A 95 02 5C 86 98 7E 4F 7D D0 7D 58 73
0E B7 9F DF B9 0A B7 F2 3E 6E CA 6F 4F 04 A6 7B F5 11 EE 13 F9 50 90
3B DE 77 62 46 80 C4 60 E9 C3 6C 4F 91 36 25 6B B9 3A 38 CB 98 F9 56
26 DC FA F9 33 5C E0 A2 13 07 4C C1 CD 84 CC 91 13 98 E0 67 56 C4 64
AB 03 6B 69 42 28 AD A7 EC 01 8F 49 5A 01 3A F8 A0 4C 97 62 88 FE 2F
80 27 1E 6E 53 D9 87 DE 19 AC A2 70 7B FF 2C 78 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00 00 00 00 00 00 00 00 00 00 36 31 33 54 35 33 35 36 31 38 62 99 49
00 75 00 02 A0 03 08 10 8E 03
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STX	02
LENGTH	ED 01
Card Encode Type	80
Track Status (1F)	0------- 0=Reserved for future use -0------ 1: Field 10 "optional bytes length" exists (0: No Field 10) --0----- 1: Track 3 sampling data exists (0: Track 3 sampling data does not exist) ---1---- 1: Track 2 sampling data exists (0: Track 2 sampling data does not exist) ----1--- 1: Track 1 sampling data exists (0: Track 1 sampling data does not exist) -----1-- 1: Track 3 decode success (0: Track 3 decode fail) ------1- 1: Track 2 decode success (0: Track 2 decode fail) -------1 1: Track 1 decode success (0: Track 1 decode fail)
Track 1 Length	4C
Track 2 Length	28
Track 3 Length	00
Clear/Mask Data Sent Status (83)	1------- Bit 7: 1 – Serial Number present; 0–not present -0------ Bit 6: 1– PIN Encryption Key; 0–Data Encryption Key --0----- Bit 5: 1– Chip present on card. (First byte of service code was '2' or '6'.) Use EMV transaction if possible. ---0---- Bit 4: 0 – TDES; 1 – AES ----0--- Bit 3: 1– if fixed key; 0 DUKPT Key Management -----0-- Bit 2: 1– if Track3 clear/mask data present ------1- Bit 1: 1– if Track2 clear/mask data present -------1 Bit 0: 1– if Track1 clear/mask data present
Encrypted/Hash Data Sent Status (9B)	1------- Bit 7: if 1, KSN present -0------ Bit 6: if 1, session ID present --0----- Bit 5: if 1, track3 hash data (SHA digest) present ---1---- Bit 4: if 1, track2 hash data (SHA digest) present ----1--- Bit 3: if 1, track1 hash data (SHA digest) present -----0-- Bit 2: if 1, track3 encrypted data present ------1- Bit 1: if 1, track2 encrypted data present -------1 Bit 0: if 1, track1 encrypted data present
Track1 Data	25 2A 36 30 31 30 2A 2A 2A 2A 2A 2A 2A 38 37 36 35 5E 30 32 35 34 2F 53 45 52 56 49 43 45 52 45 43 4F 56 45 52 59 55 53 44 5E 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 3F 2A
Track2 Data	3B 36 30 31 30 2A 2A 2A 2A 2A 2A 2A 38 37 36 35 3D 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 2A 3F 2A
Track1 Encrypted Data	95 02 5C 86 98 7E 4F 7D D0 7D 58 73 0E B7 9F DF B9 0A B7 F2 3E 6E CA 6F 4F 04 A6 7B F5 11 EE 13 F9 50 90 3B DE 77 62 46 80 C4 60 E9 C3 6C 4F 91 36 25 6B B9 3A 38 CB 98 F9 56 26 DC FA F9 33 5C E0 A2 13 07 4C C1 CD 84 CC 91 13 98 E0 67 56 C4 Decrypt this data
Track2 Encrypted Data	64 AB 03 6B 69 42 28 AD A7 EC 01 8F 49 5A 01 3A F8 A0 4C 97 62 88 FE 2F 80 27 1E 6E 53 D9 87 DE 19 AC A2 70 7B FF 2C 78 Decrypt this data
Track 1 Hashed	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Track 2 Hashed	00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
Reader Serial Number	36 31 33 54 35 33 35 36 31 38
KSN	62 99 49 00 75 00 02 A0 03 08
LRC	10
Checksum	8E
ETX	03

Related articles

- EMV - home
- How to reset a reader to default settings in MagSwipe Configuration Utility
- How to clone the configuration setting from a known working MiniMag II or SecureMag reader to a new reader?
- How to use the SecureMag Demo to collect the required data for troubleshooting?
- How to tell if my SecuRED is in USB/HID or USB/KB and how to check the security level?