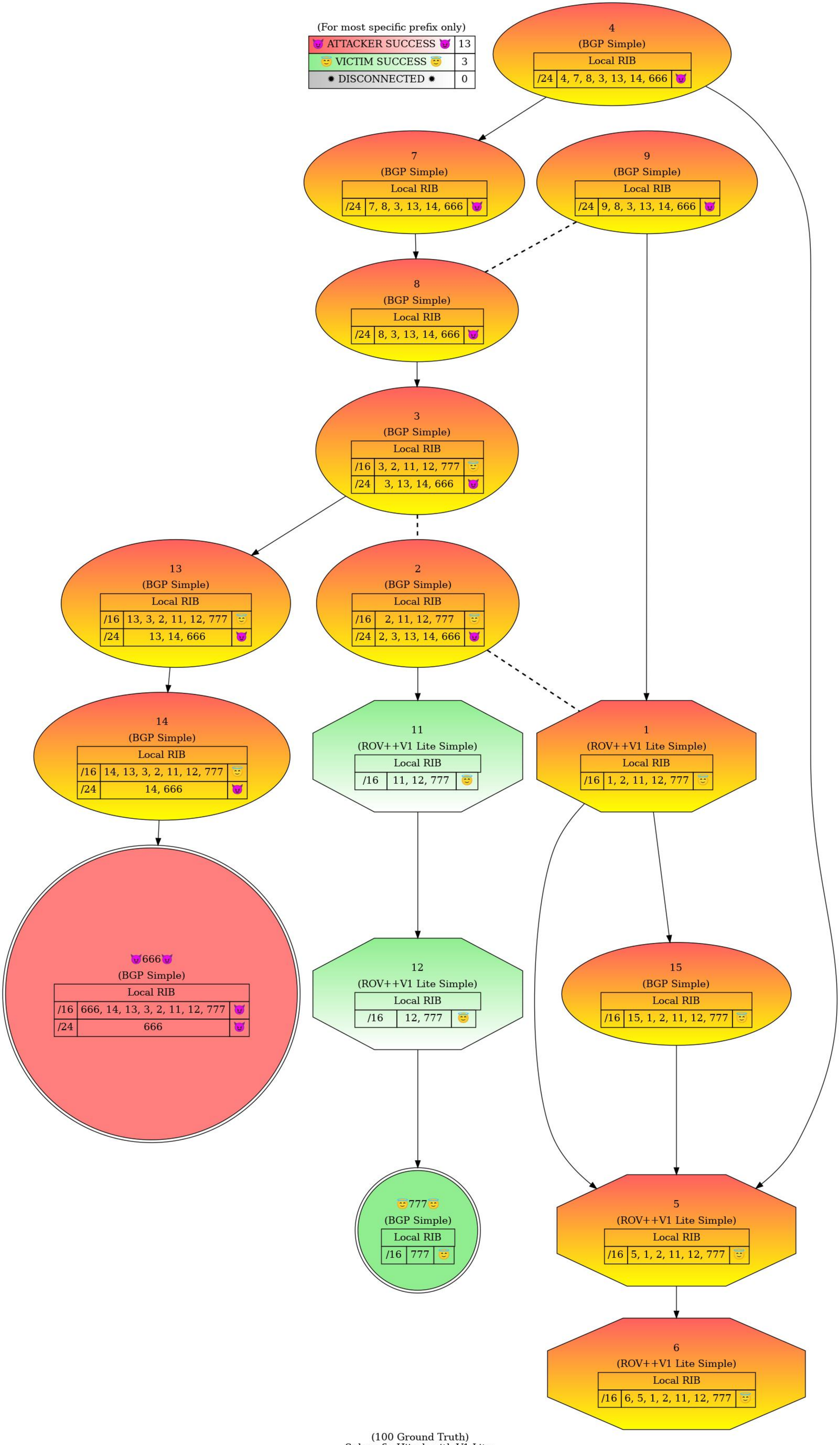
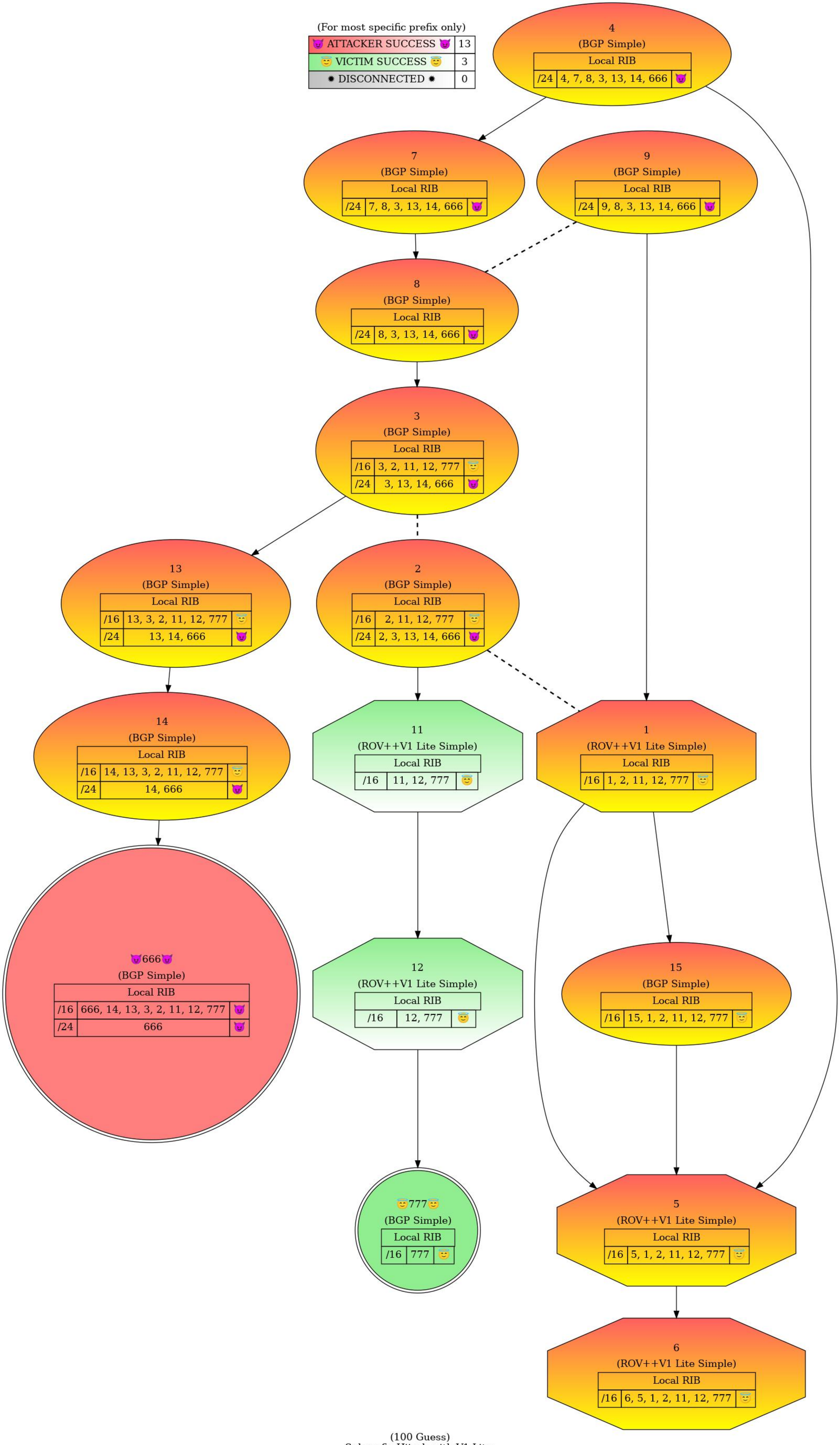
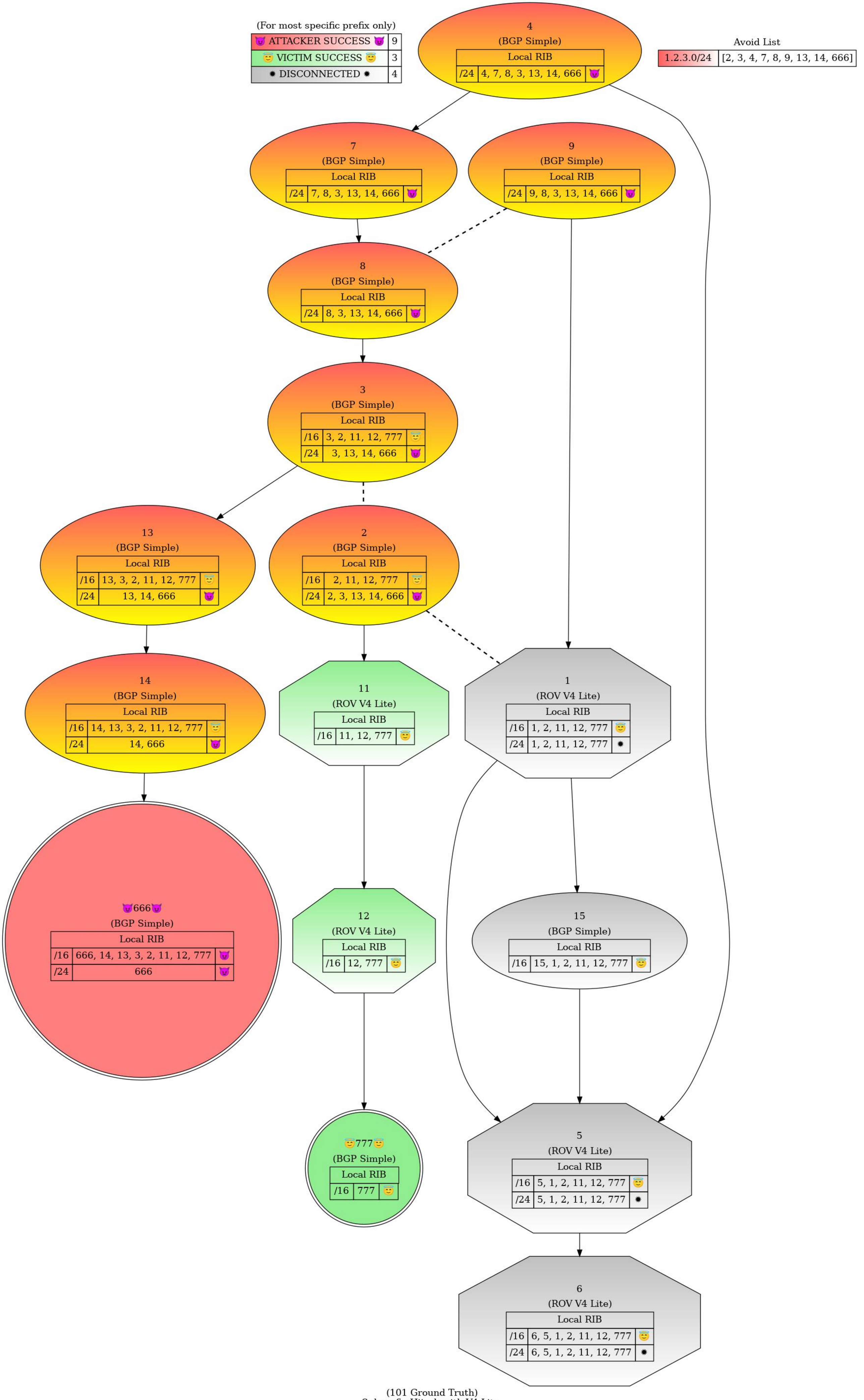


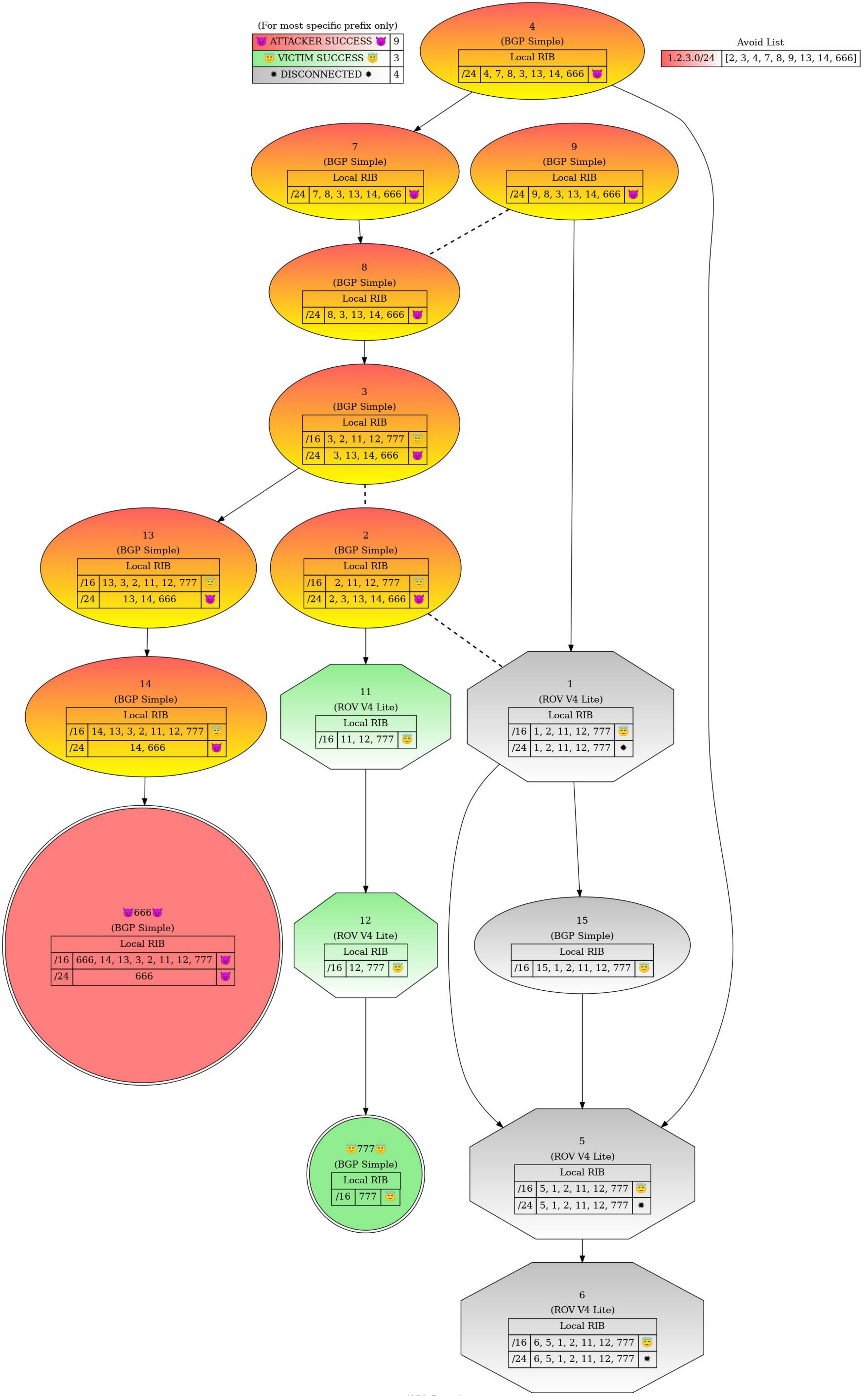

(100 Ground Truth)
Subprefix Hijack with V1 Lite.



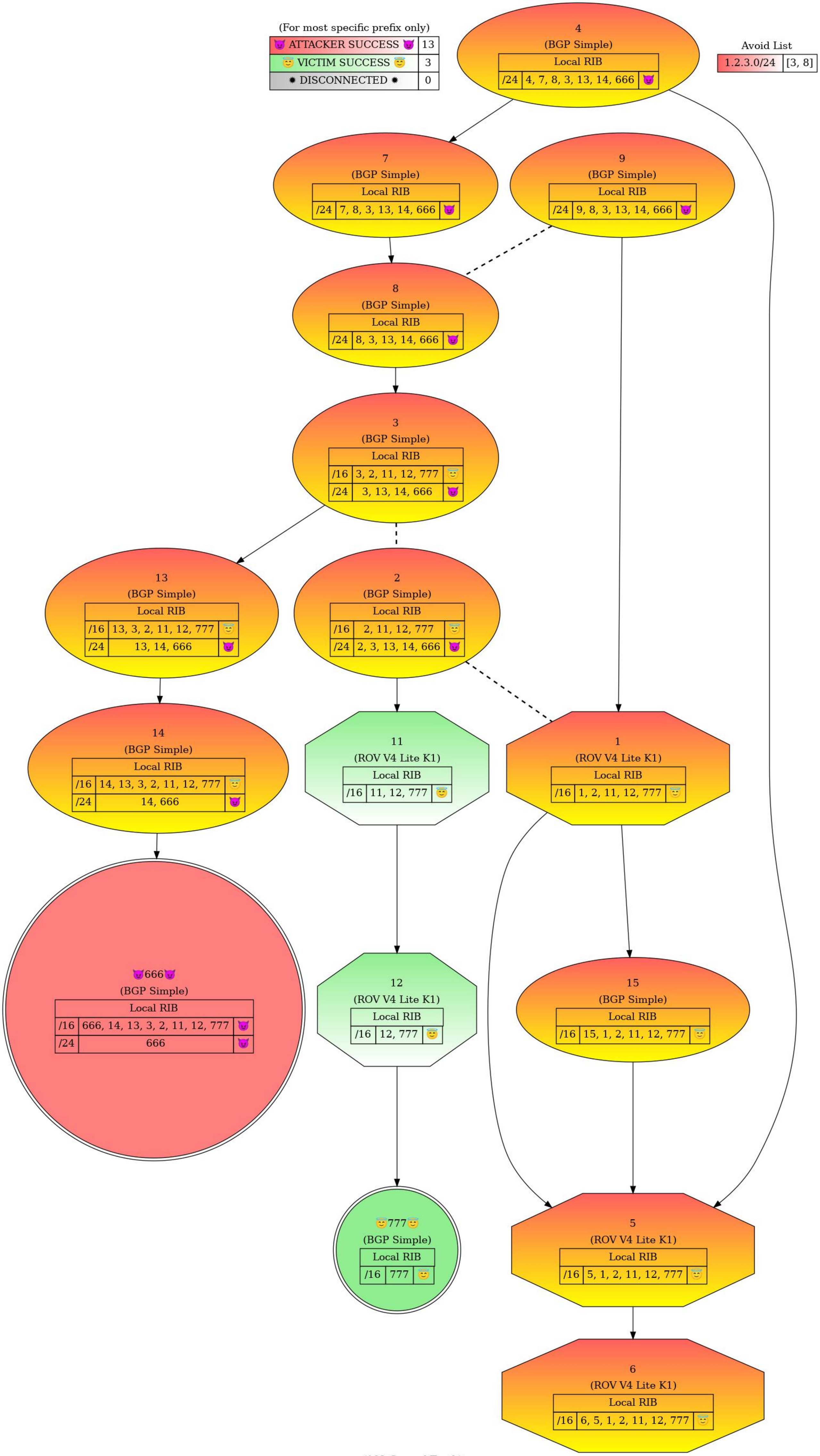

(100 Guess)
Subprefix Hijack with V1 Lite.



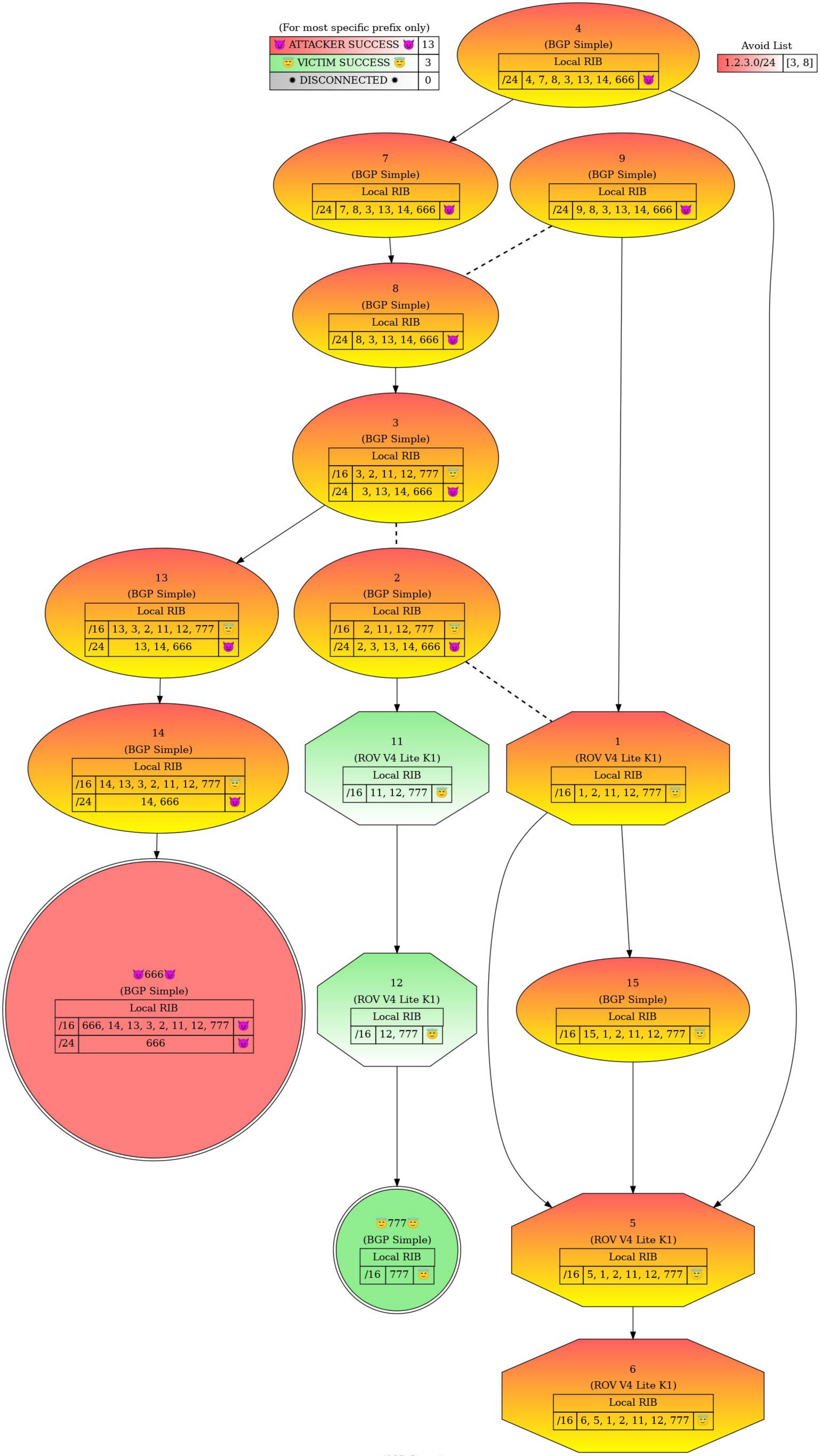

(101 Ground Truth)
Subprefix Hijack with V4 Lite.



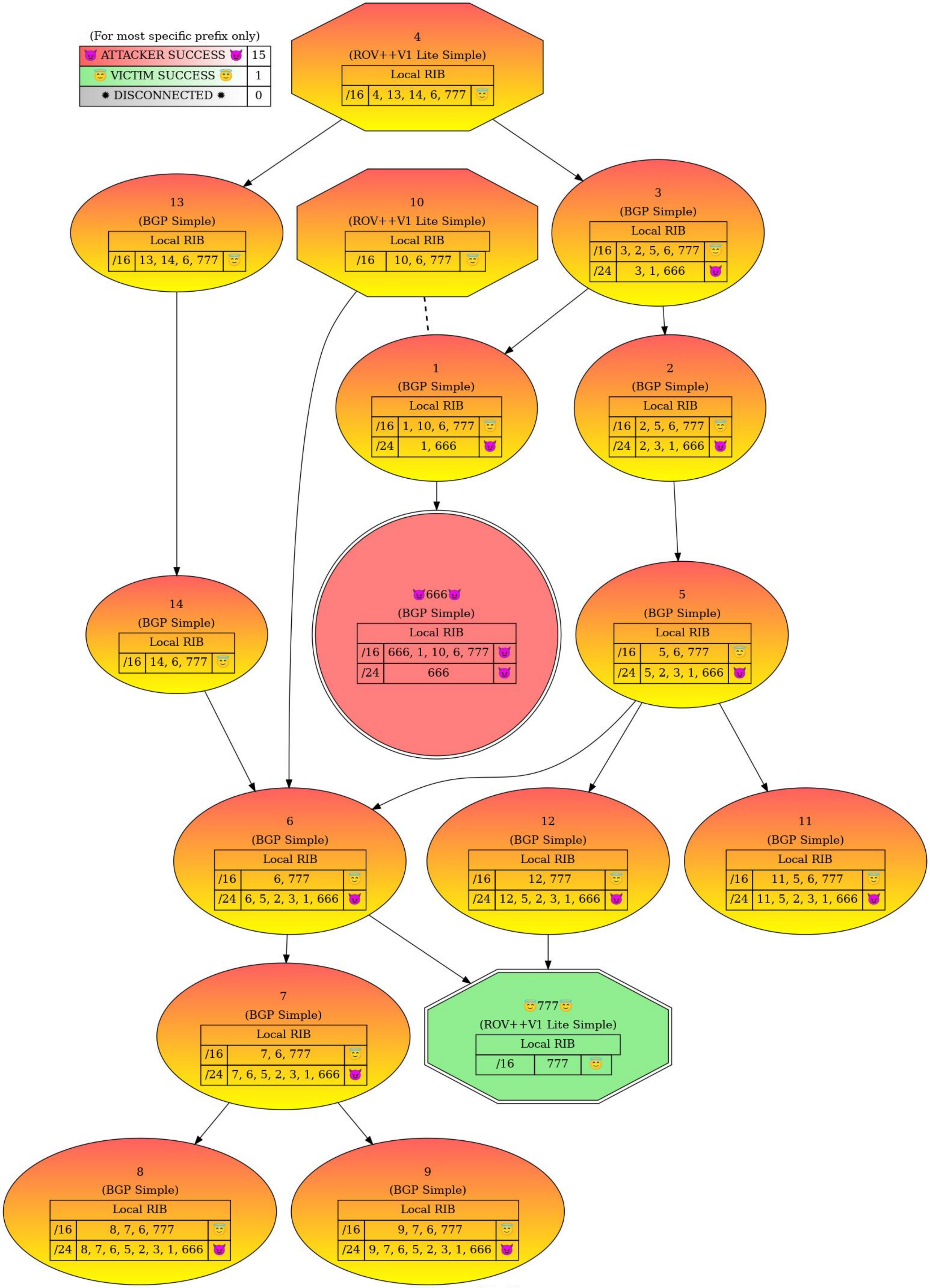

(101 Guess)
Subprefix Hijack with V4 Lite.



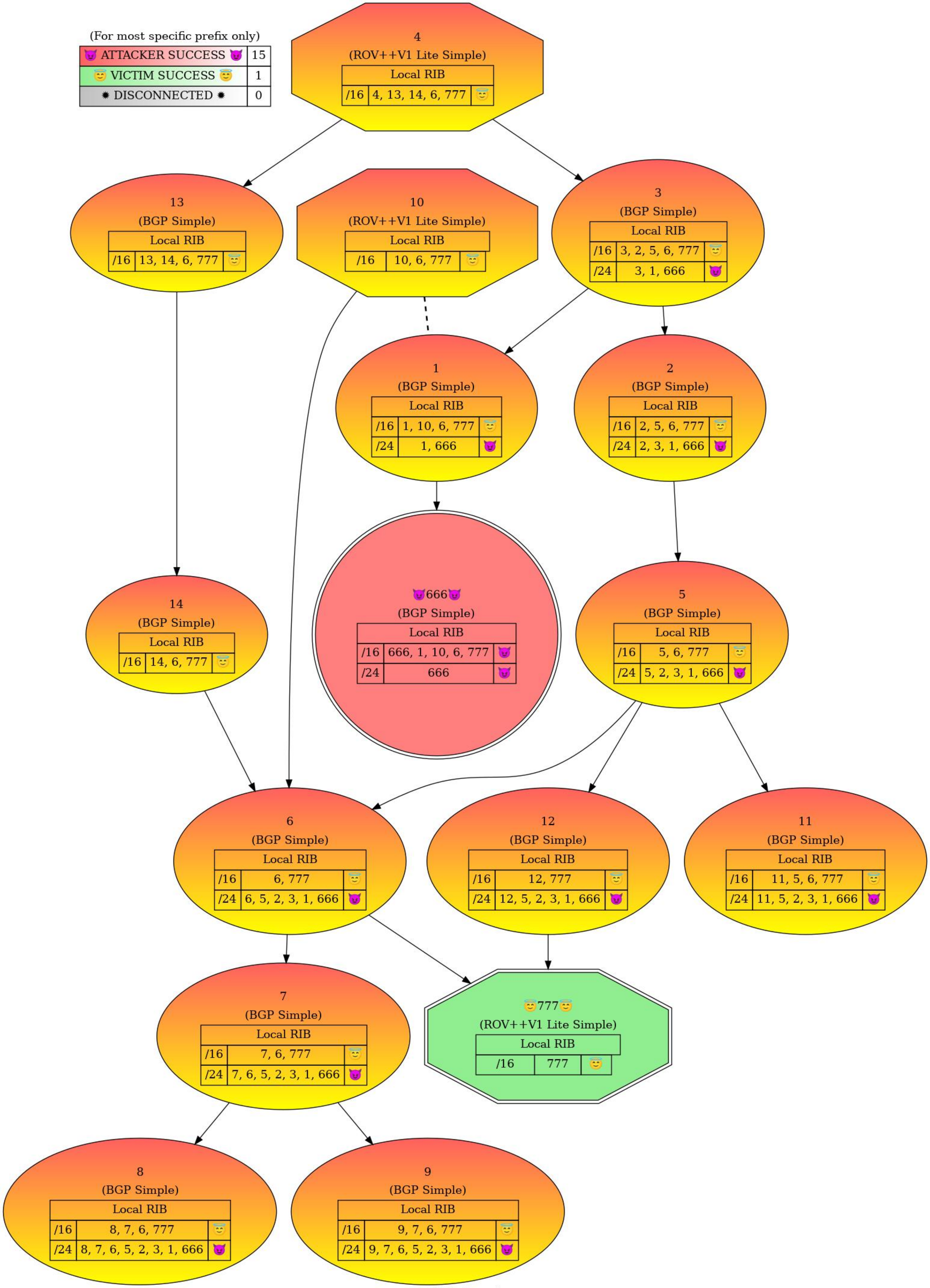

(102 Ground Truth)
Subprefix Hijack with V4 Lite k=1.



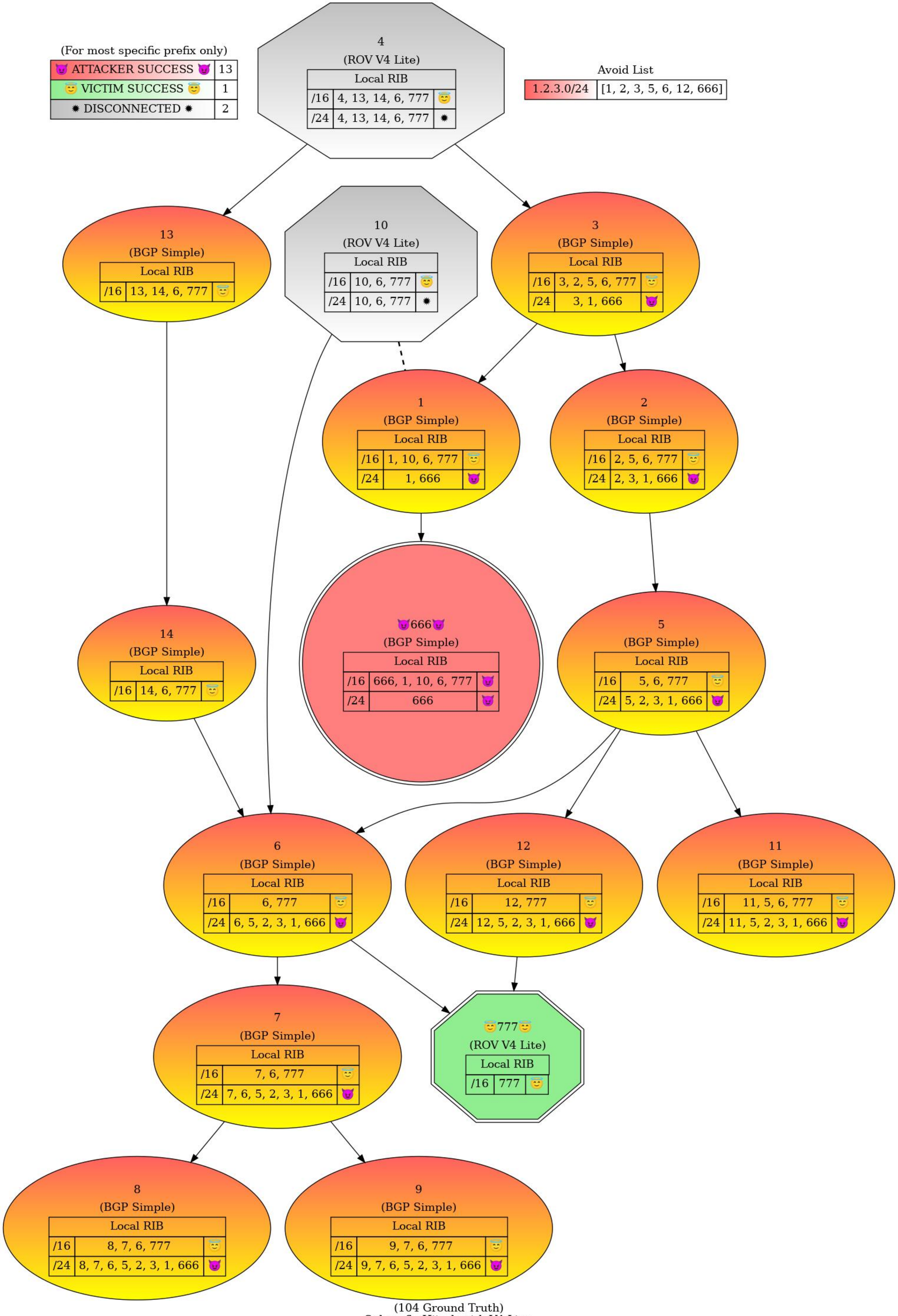

(102 Guess)
Subprefix Hijack with V4 Lite k=1.



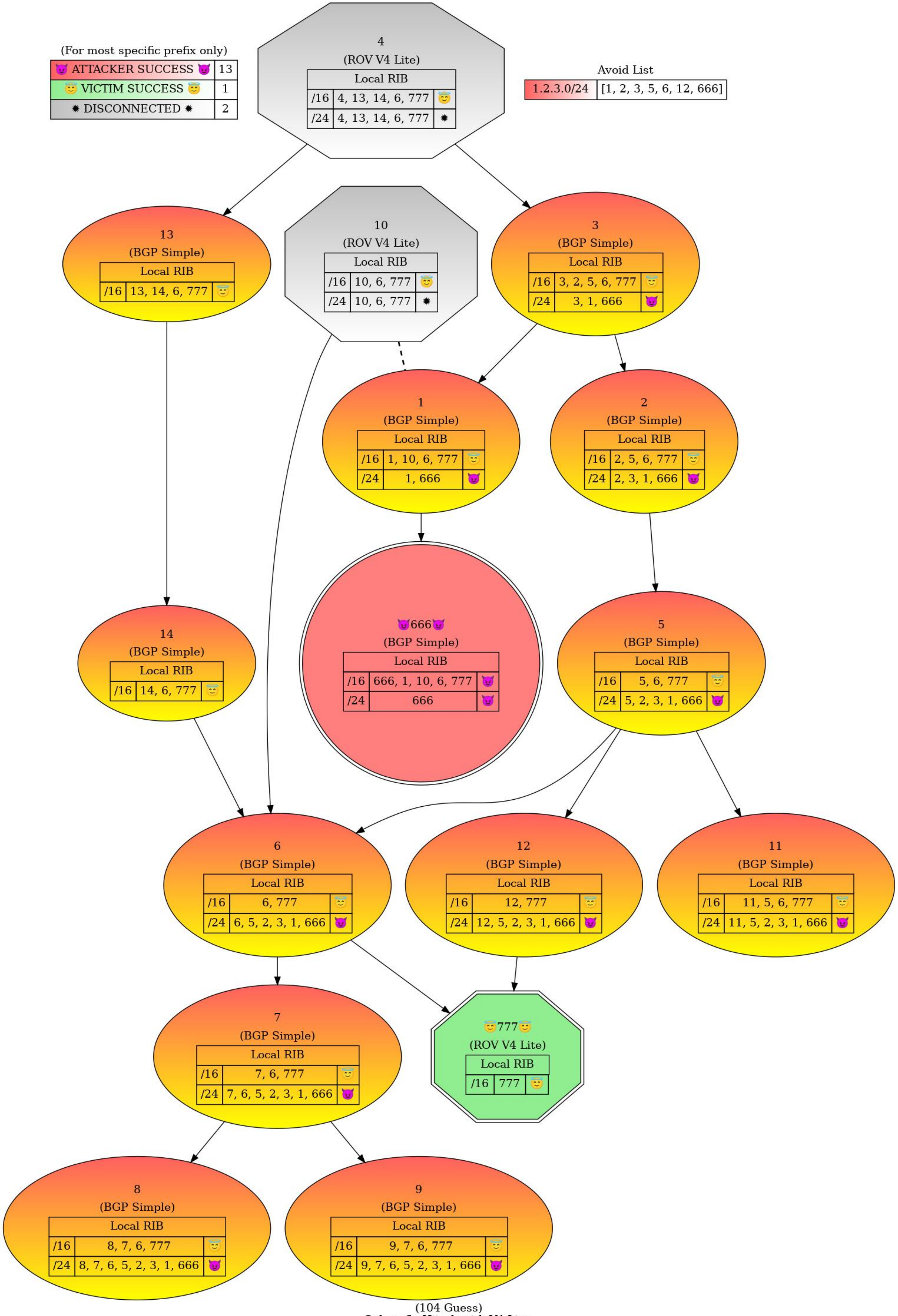

(103 Ground Truth)
Subprefix Hijack with V1 Lite.



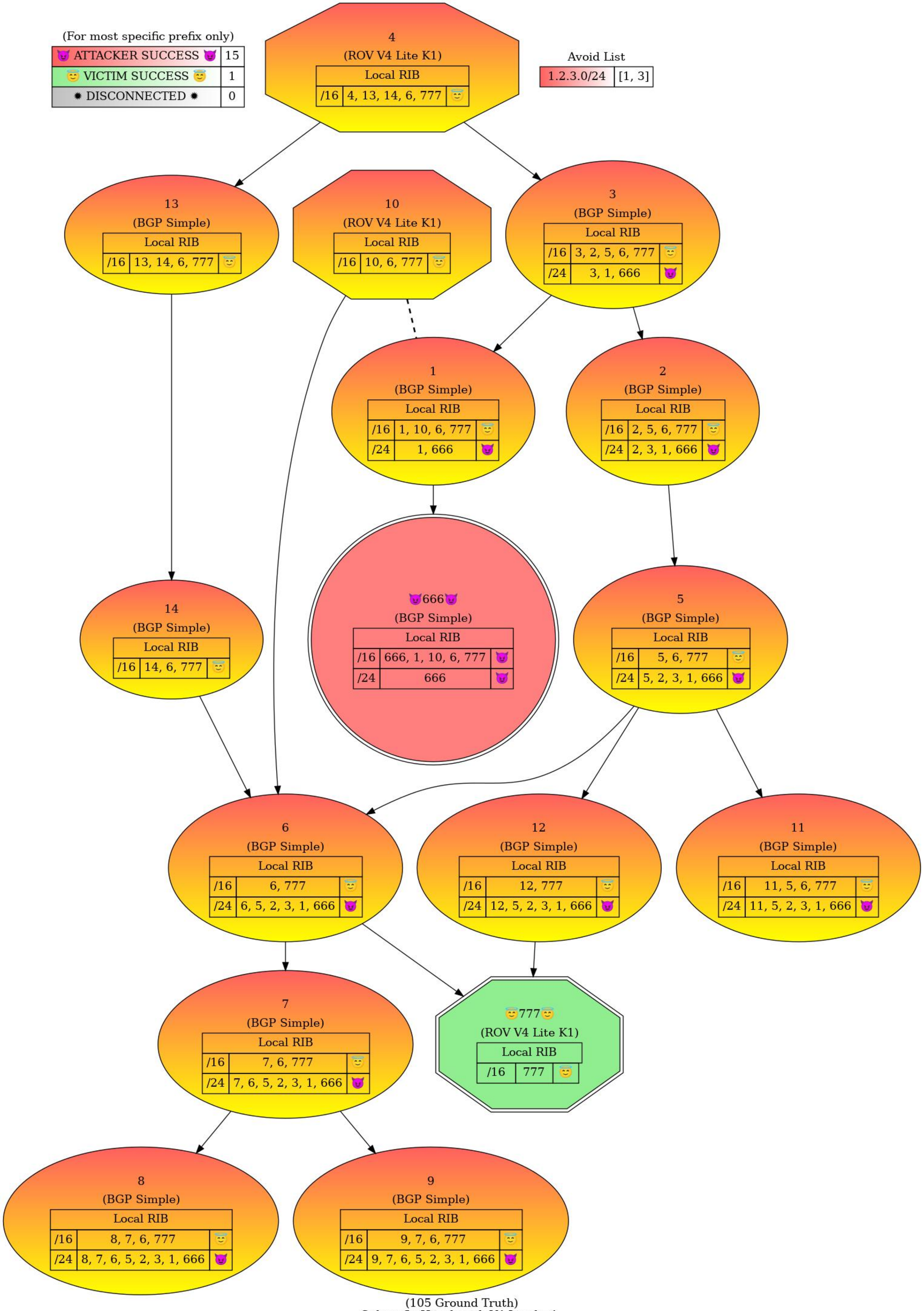

(103 Guess)
Subprefix Hijack with V1 Lite.



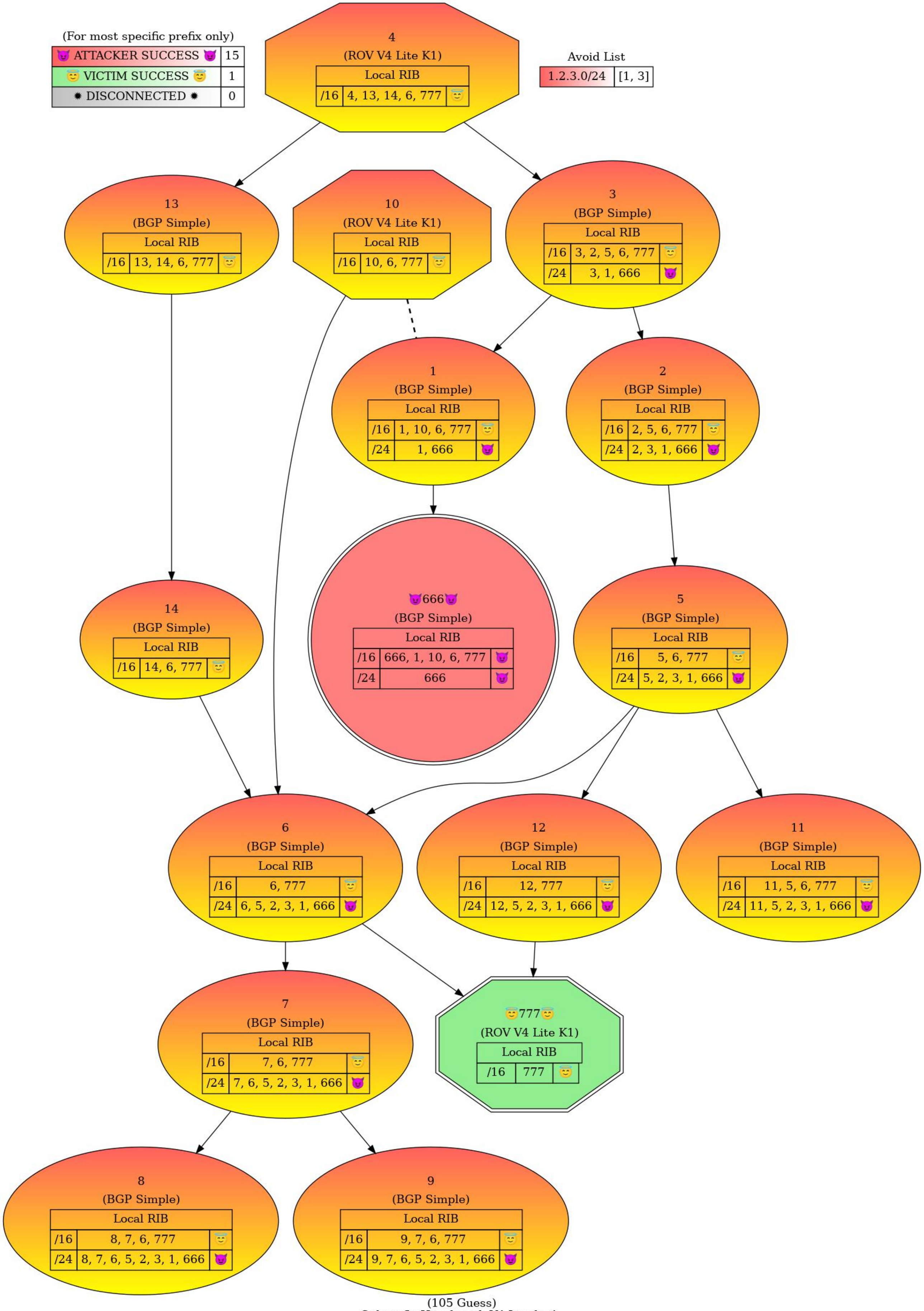

(104 Ground Truth)
Subprefix Hijack with V4 Lite.



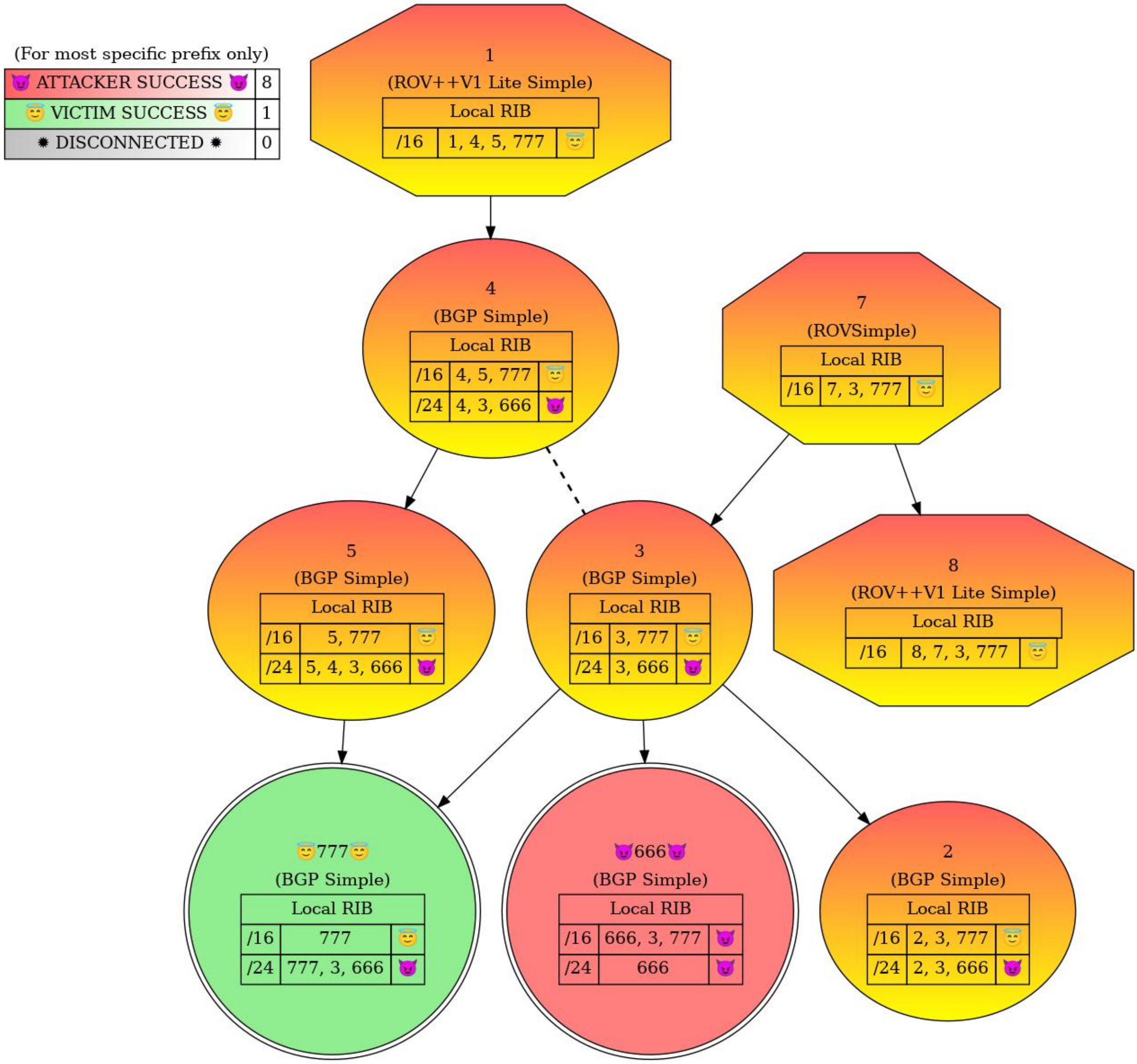

(104 Guess)
Subprefix Hijack with V4 Lite.



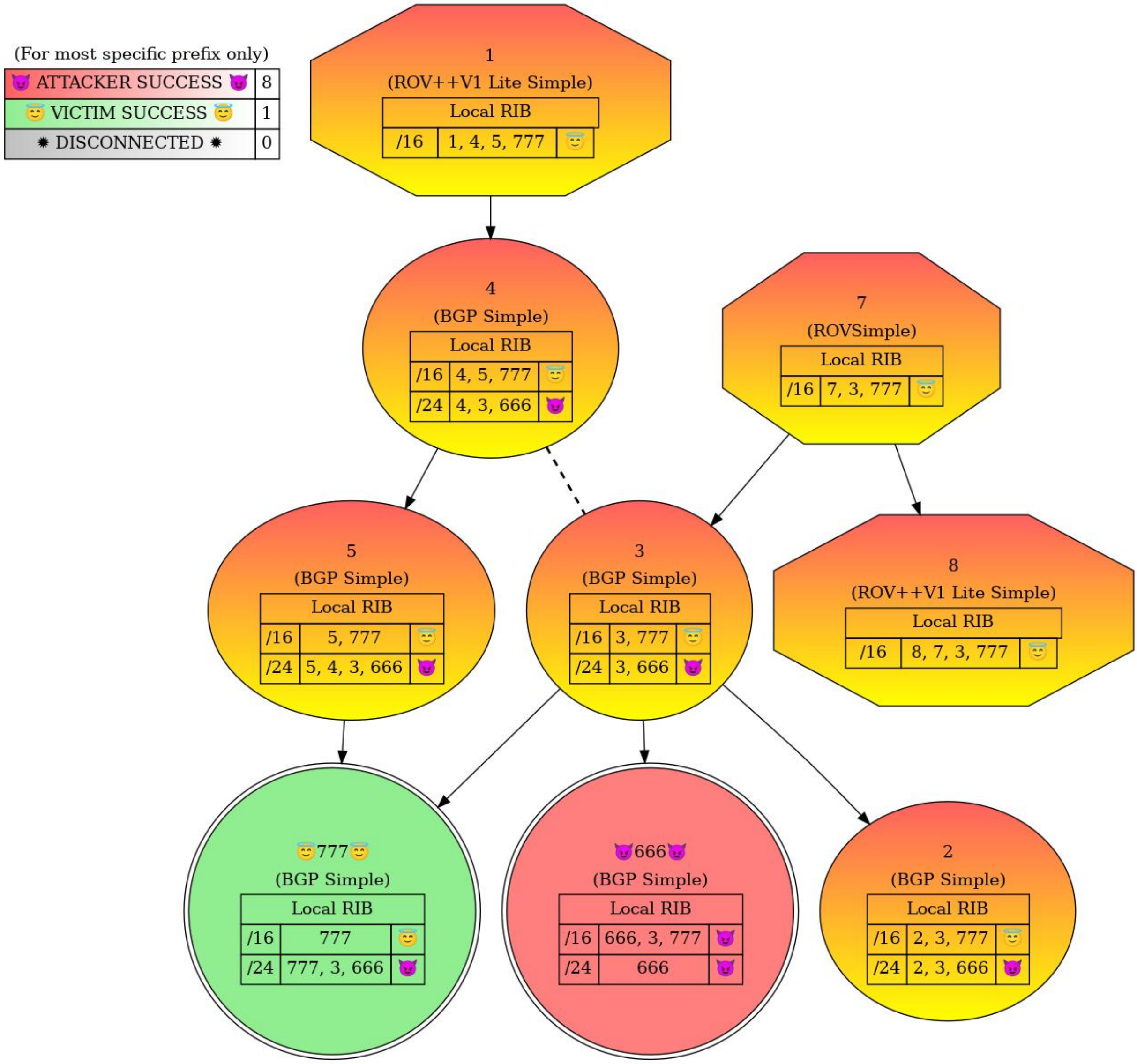

(105 Ground Truth)
Subprefix Hijack with V4 Lite k=1.



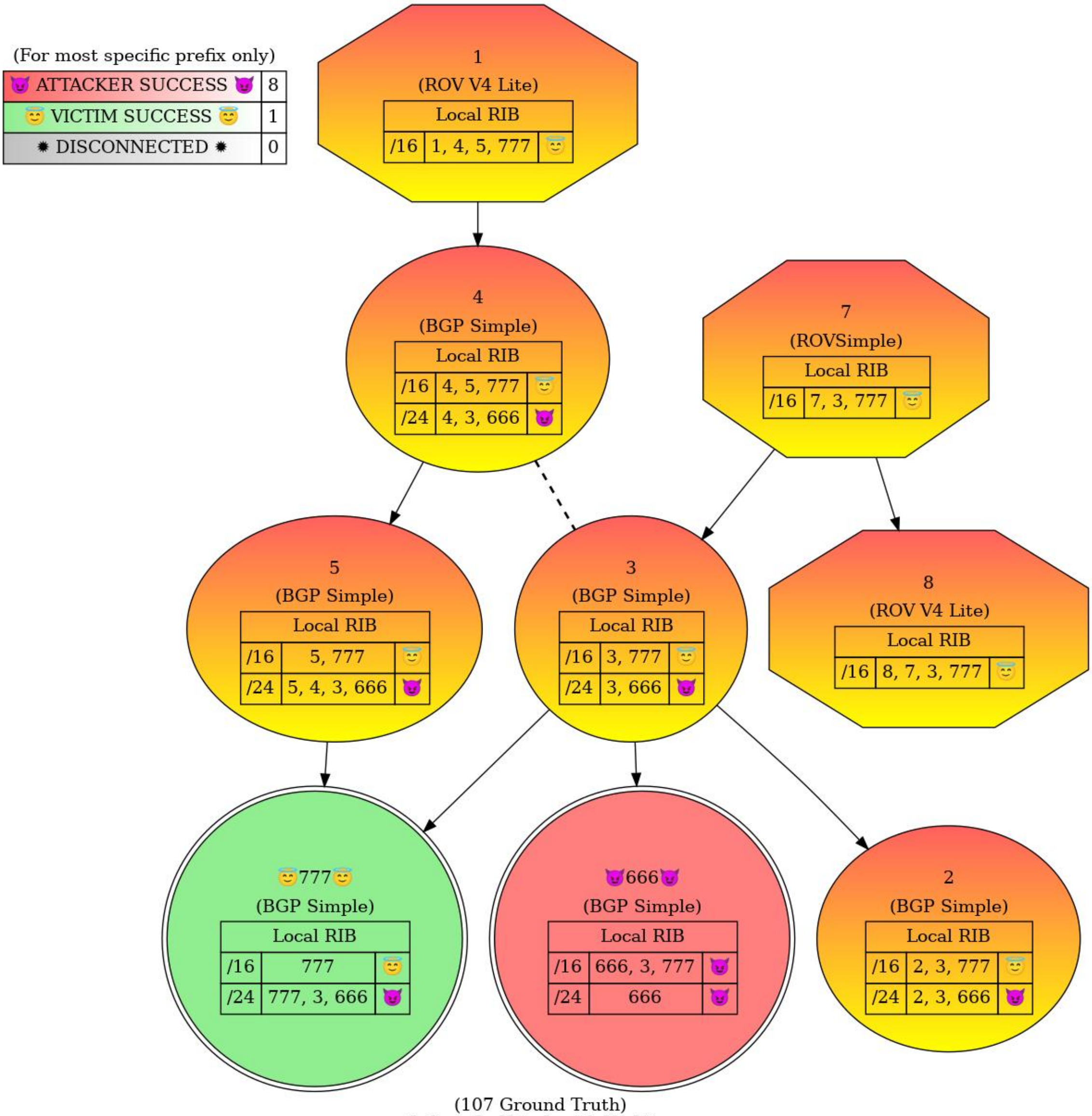

(105 Guess)
Subprefix Hijack with V4 Lite k=1.



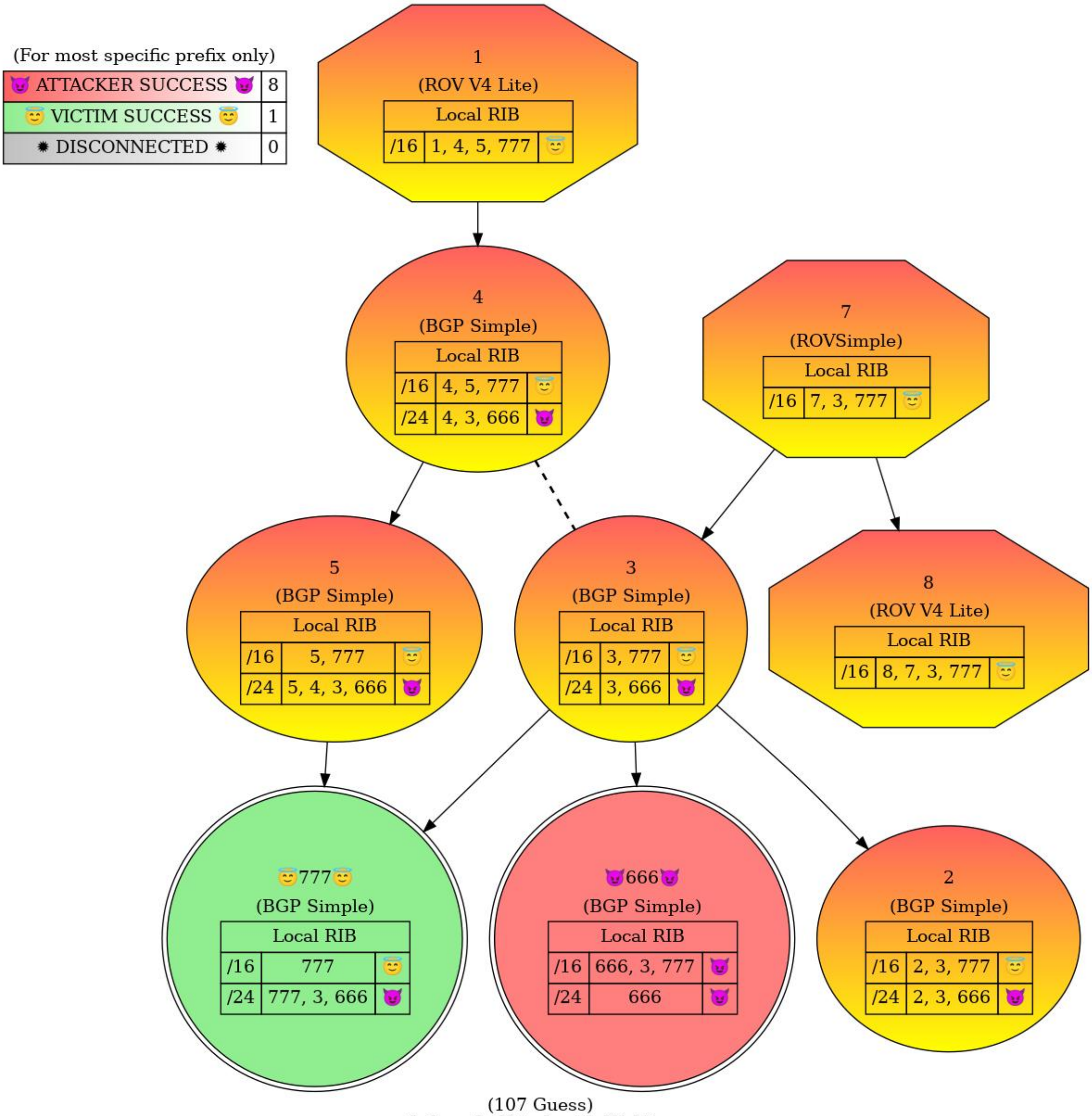

(106 Ground Truth)
Subprefix Hijack with V1 Lite.



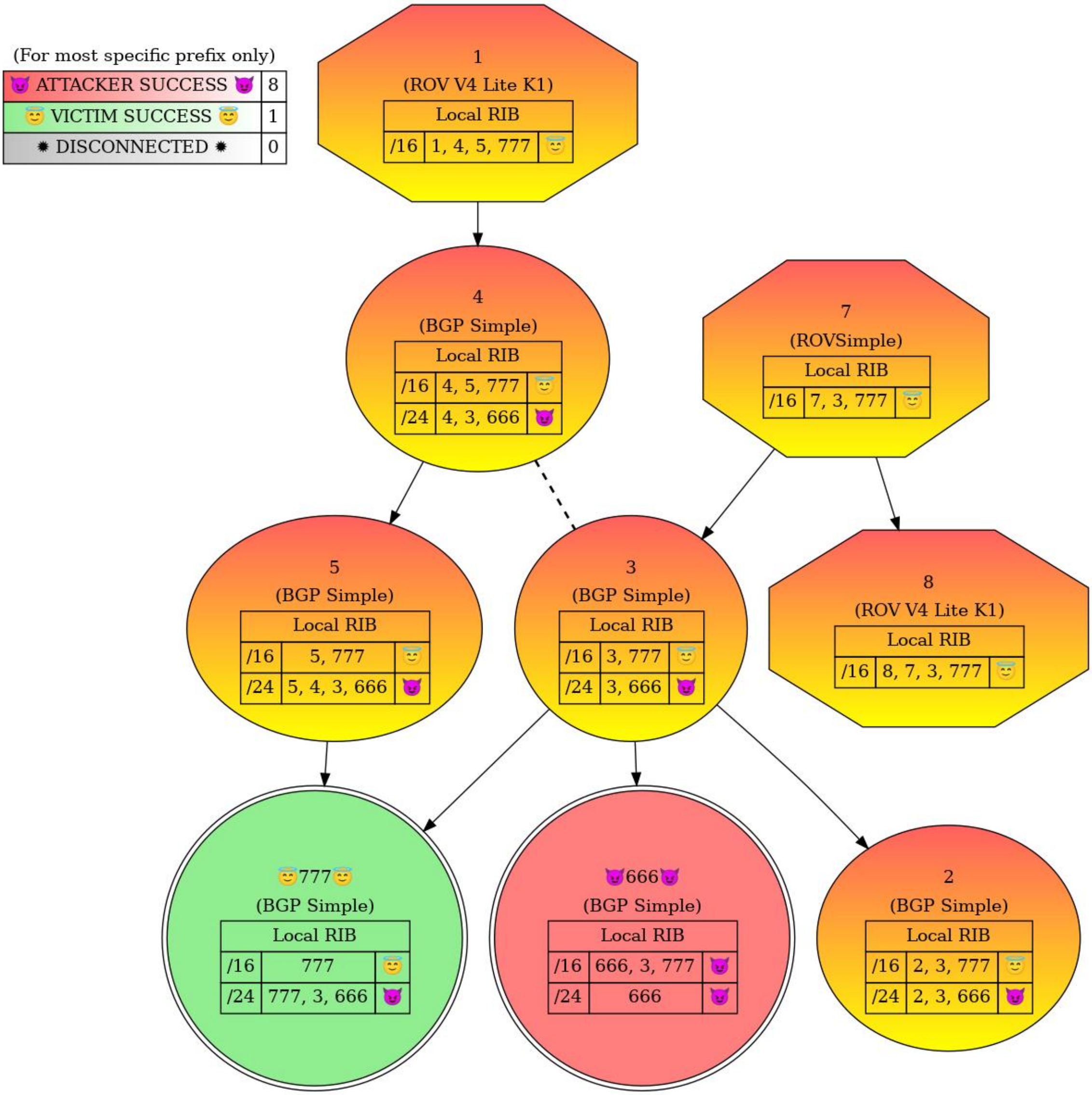

(106 Guess)
Subprefix Hijack with V1 Lite.



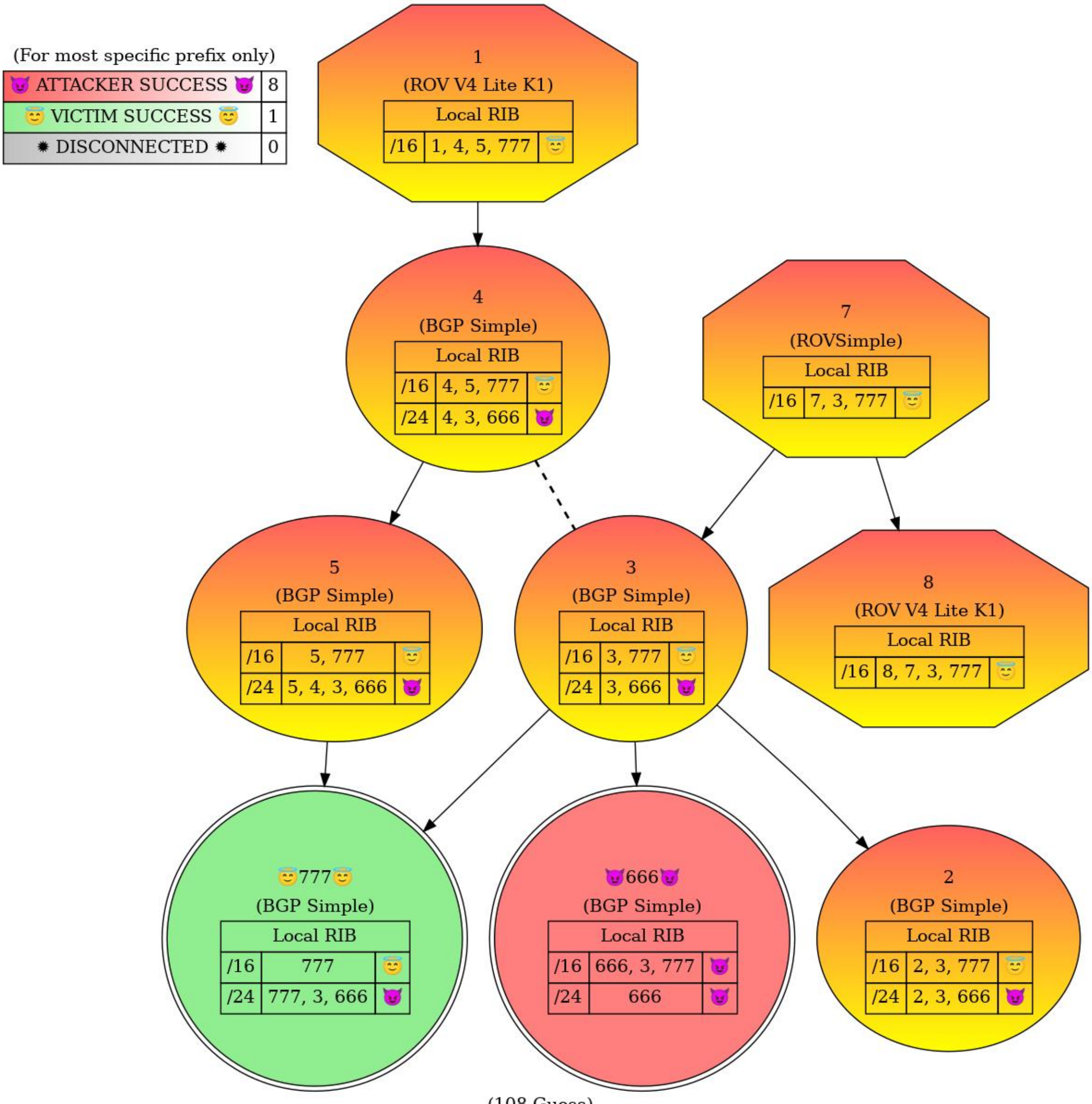

(107 Ground Truth)
Subprefix Hijack with V4 Lite.



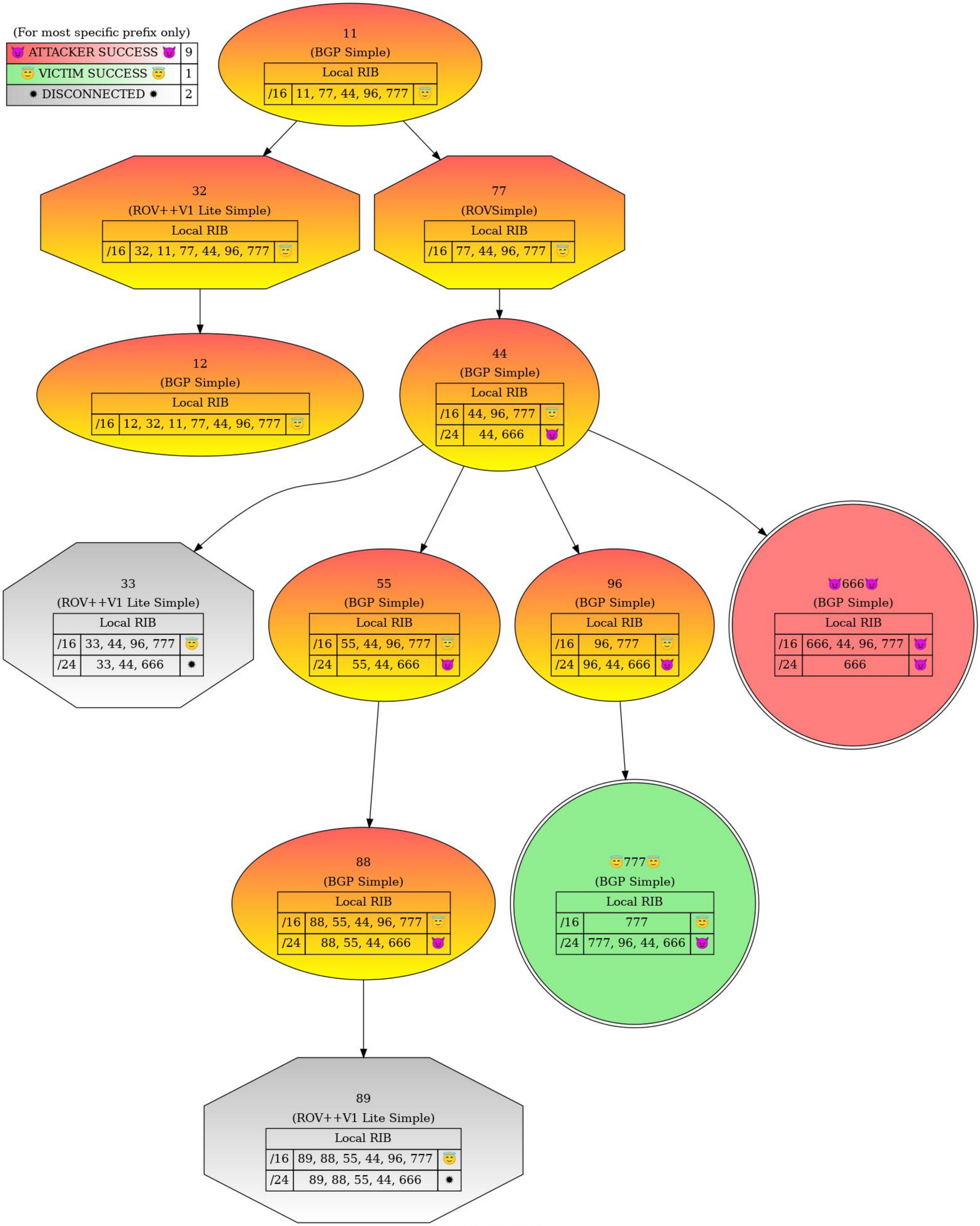

(107 Guess)
Subprefix Hijack with V4 Lite.



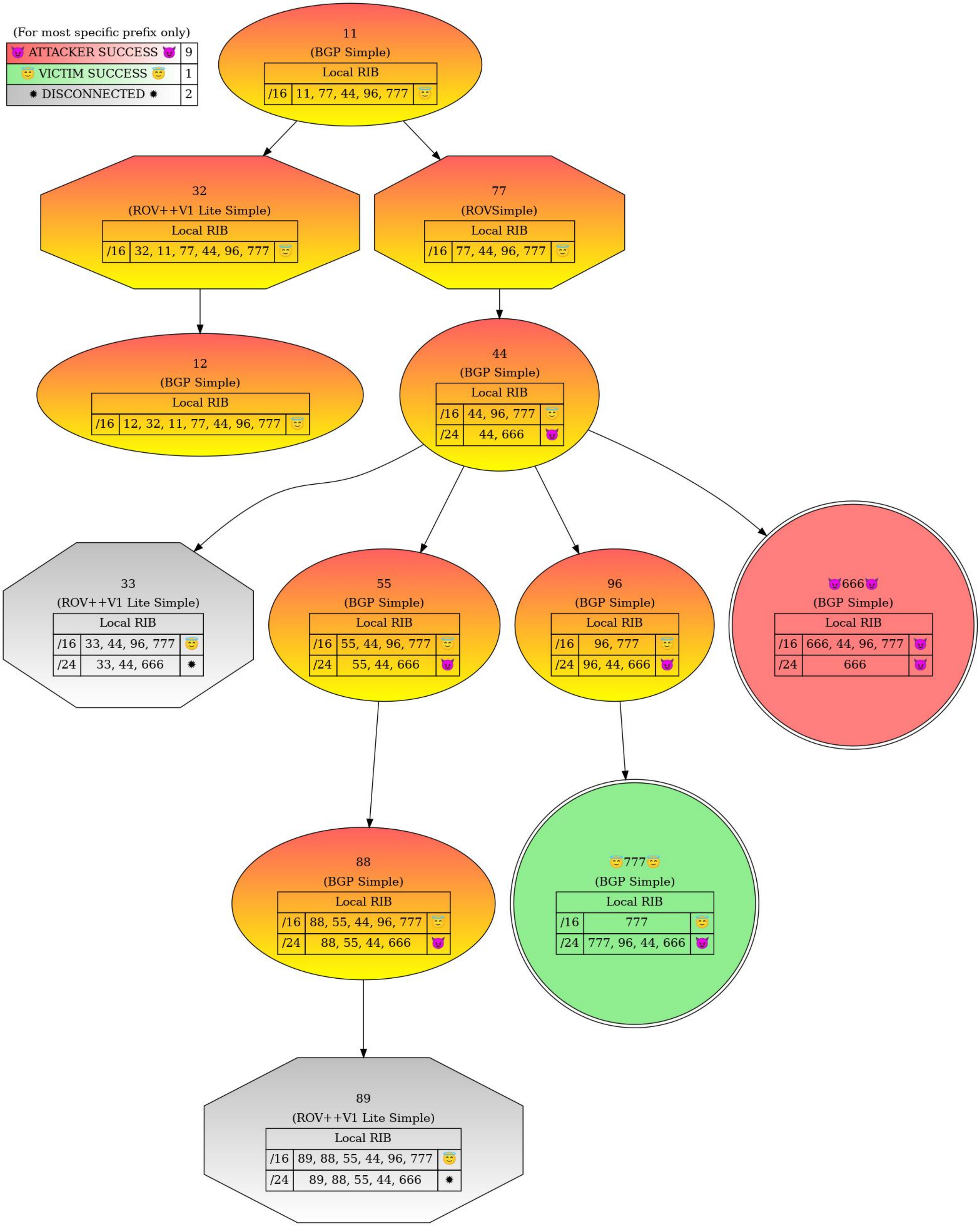

(108 Ground Truth)
Subprefix Hijack with V4 Lite k=1.



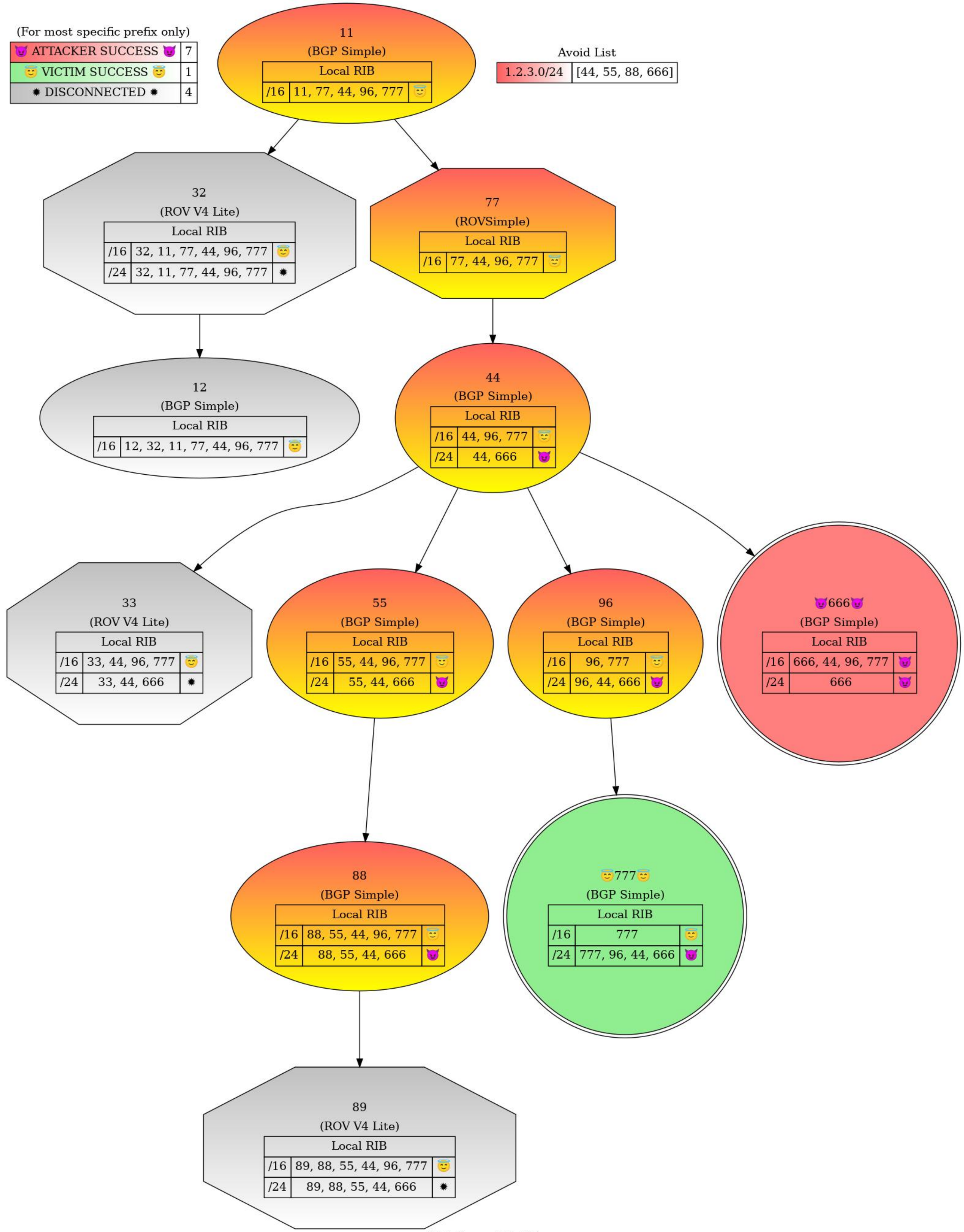

(108 Guess)
Subprefix Hijack with V4 Lite k=1.



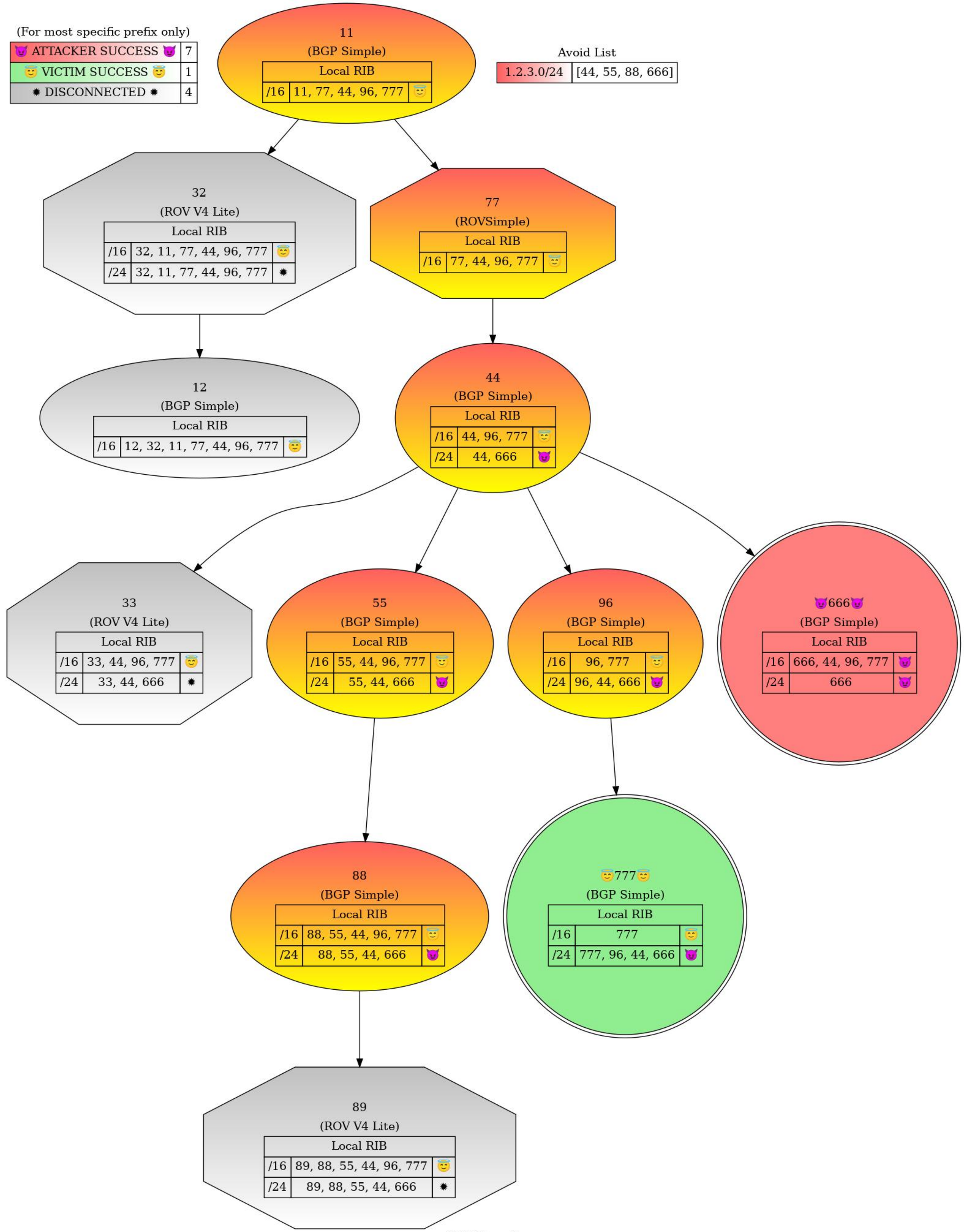

(109 Ground Truth)
Subprefix Hijack with V1 Lite.



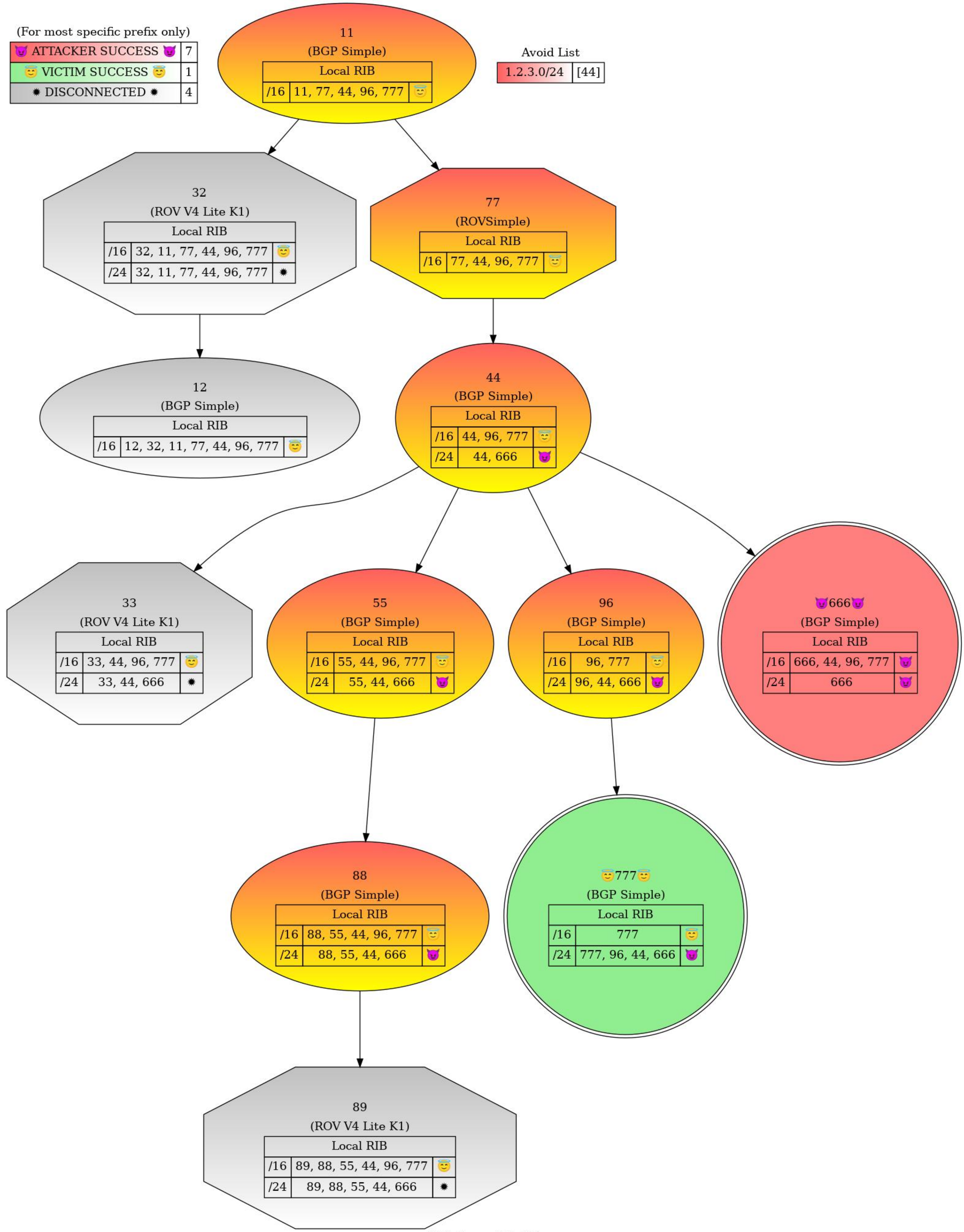

(109 Guess)
Subprefix Hijack with V1 Lite.



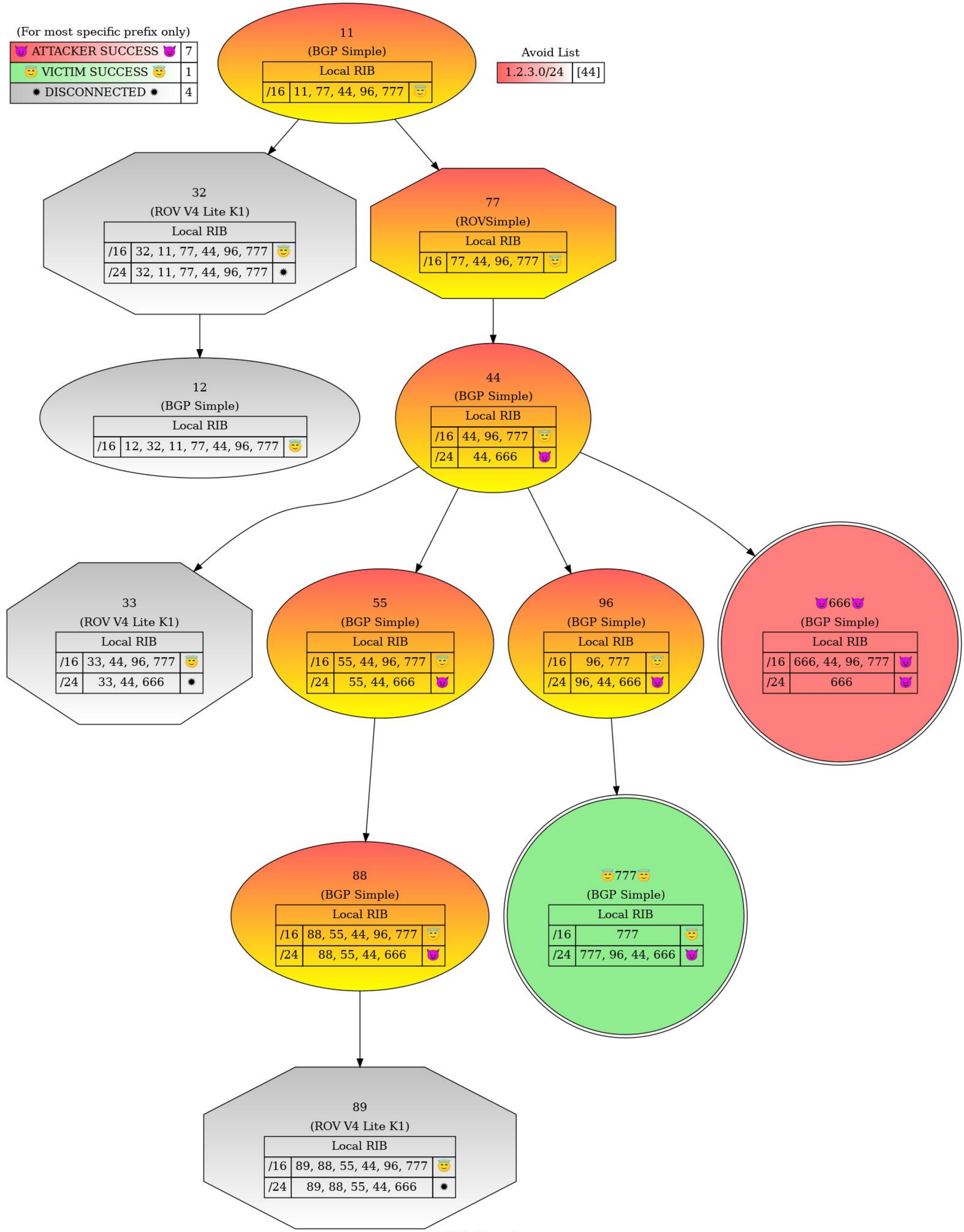

(110 Ground Truth)
Subprefix Hijack with V4 Lite.



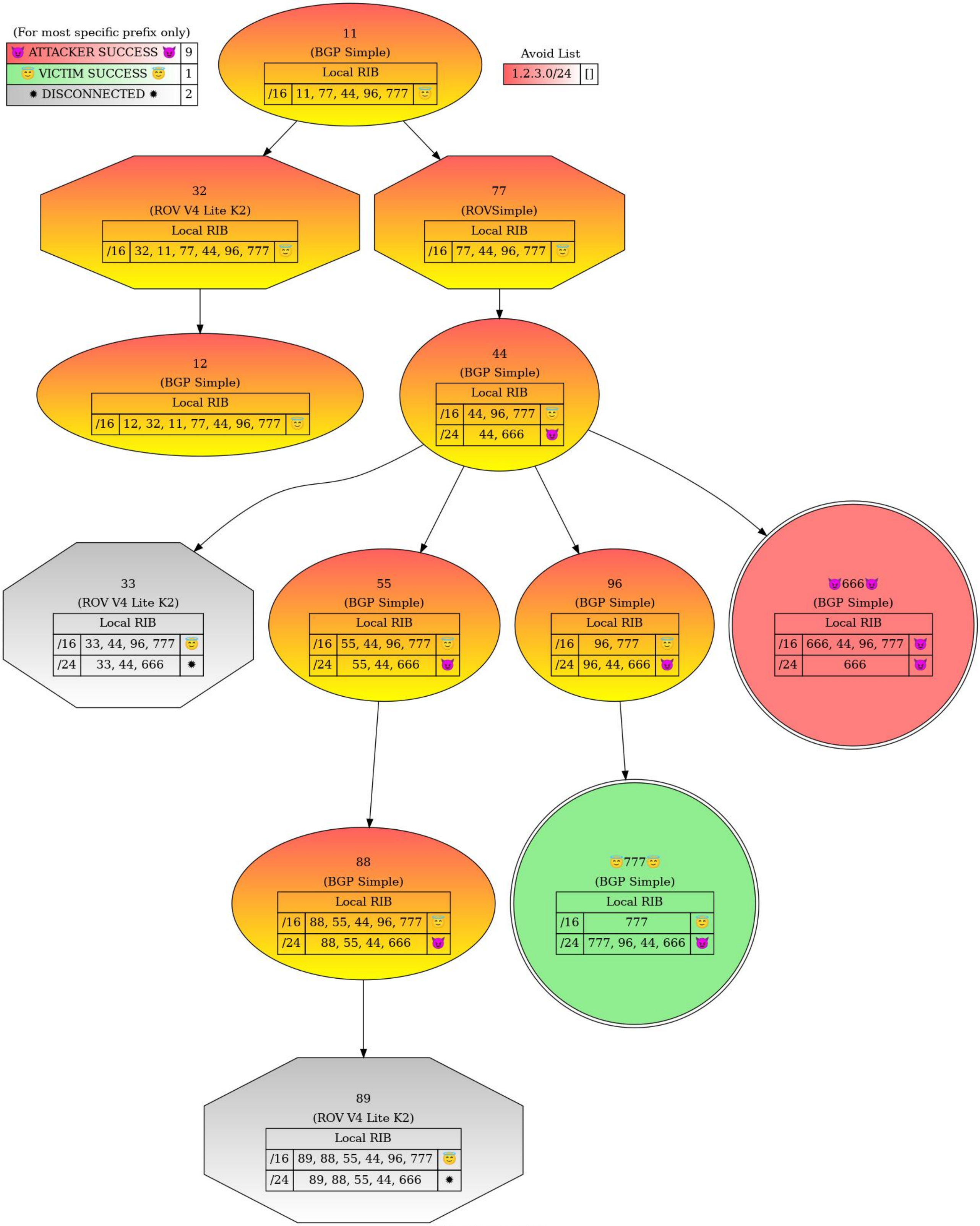

(110 Guess)
Subprefix Hijack with V4 Lite.



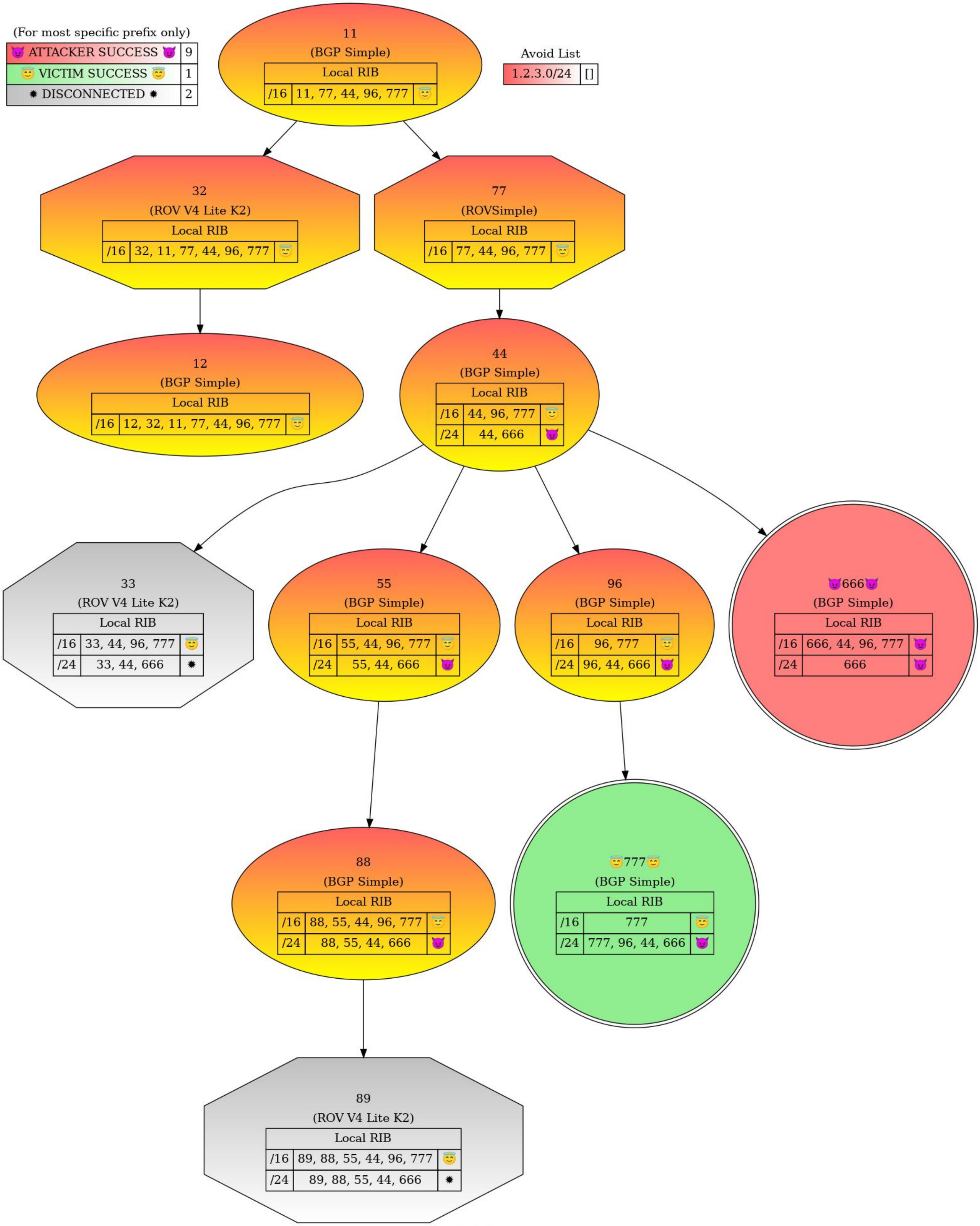

(111 Ground Truth)
Subprefix Hijack with V4 Lite k=1.



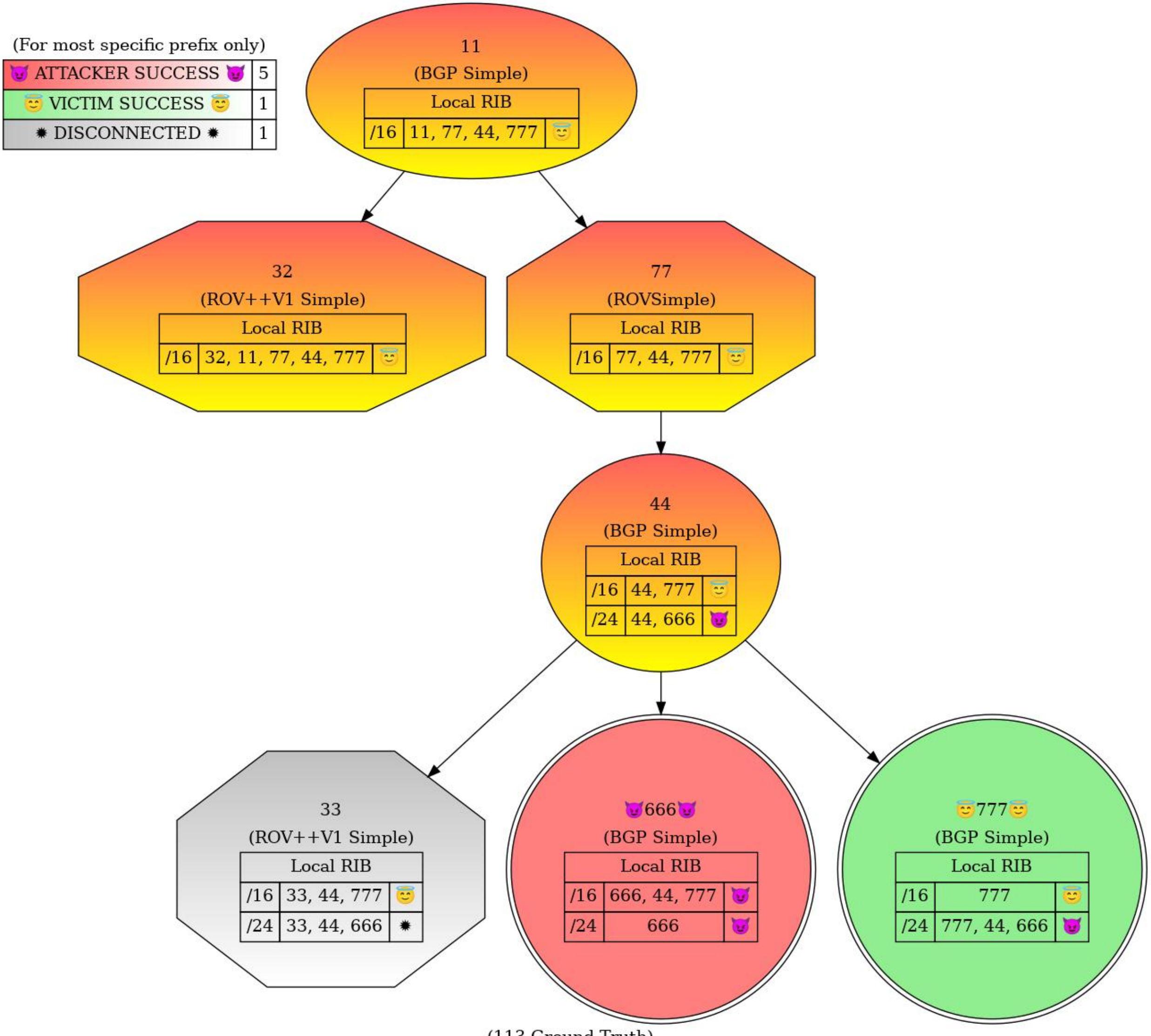

(111 Guess)
Subprefix Hijack with V4 Lite k=1.



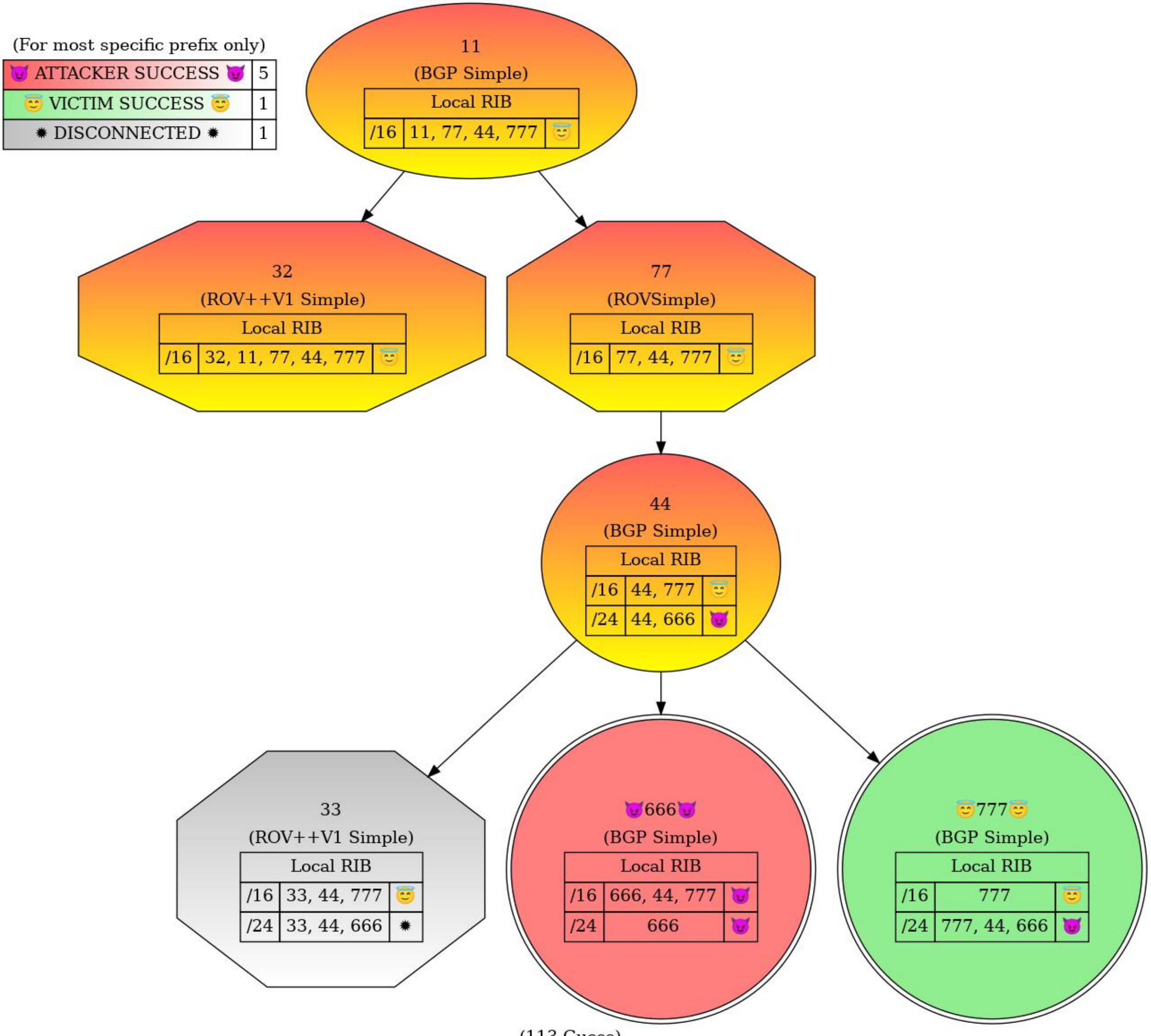

(112 Ground Truth)
Subprefix Hijack with V4 Lite k=2.



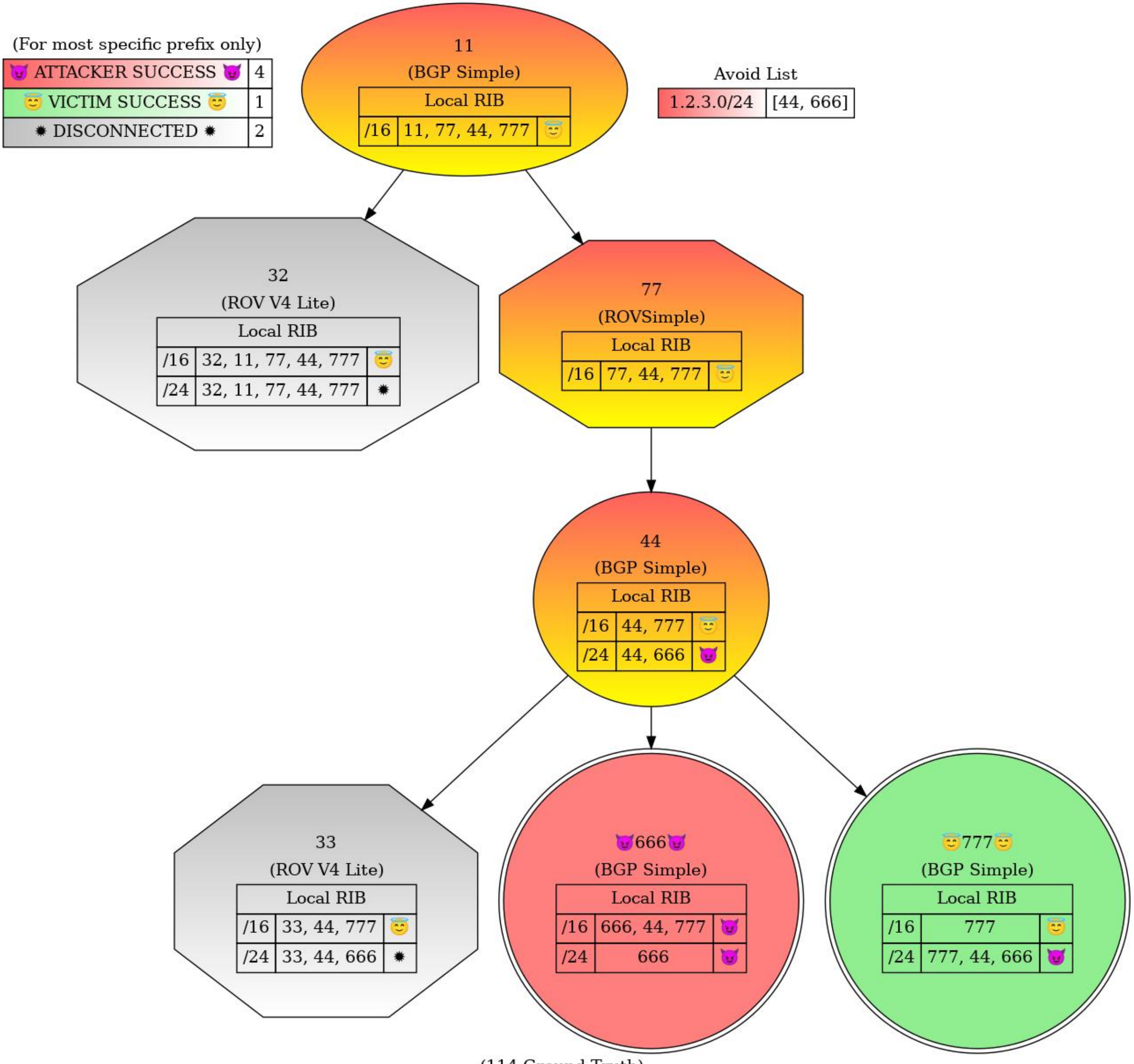

(112 Guess)
Subprefix Hijack with V4 Lite k=2.



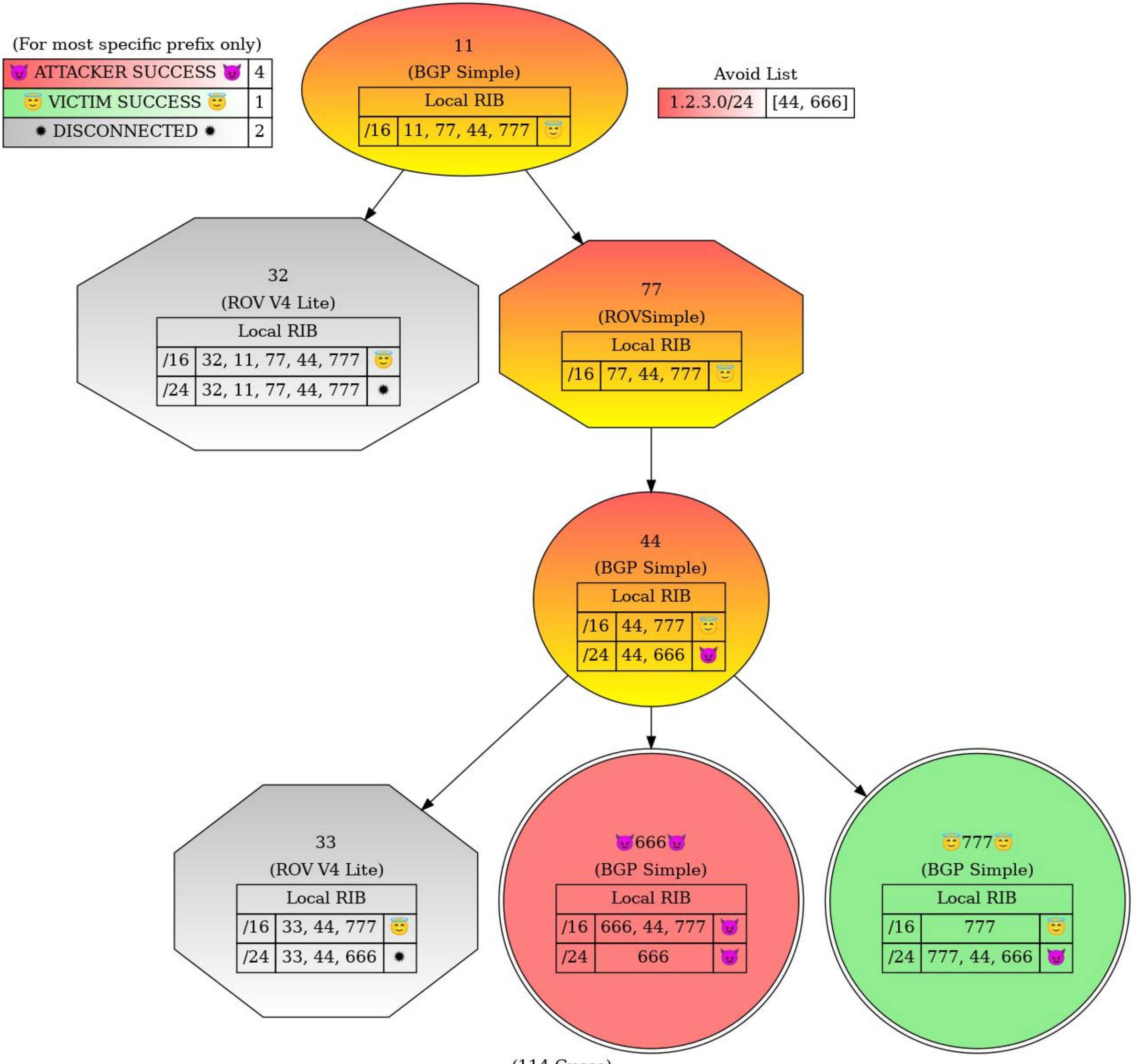

(113 Ground Truth)
Subprefix Hijack with V1 Lite



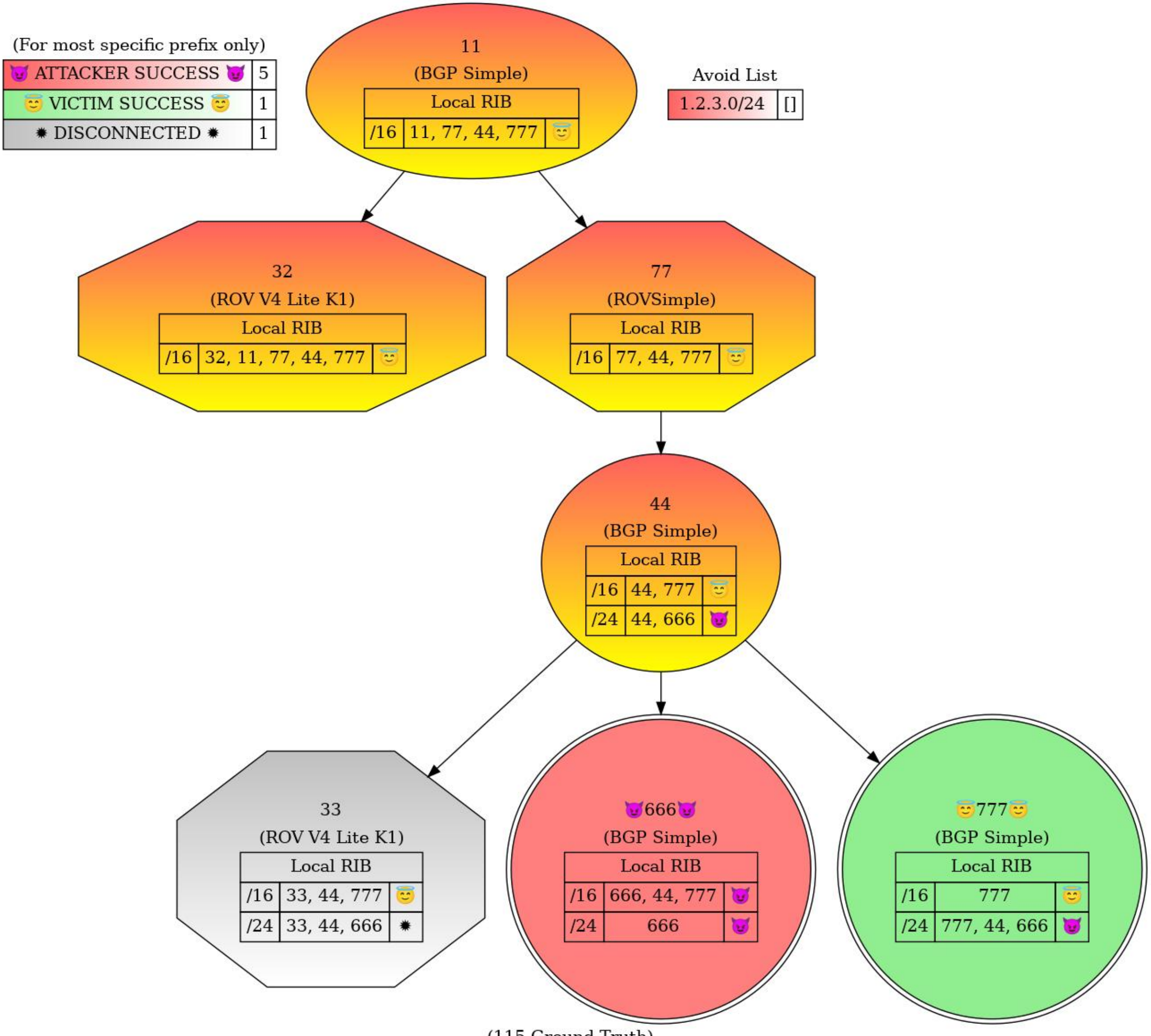

(113 Guess)
Subprefix Hijack with V1 Lite



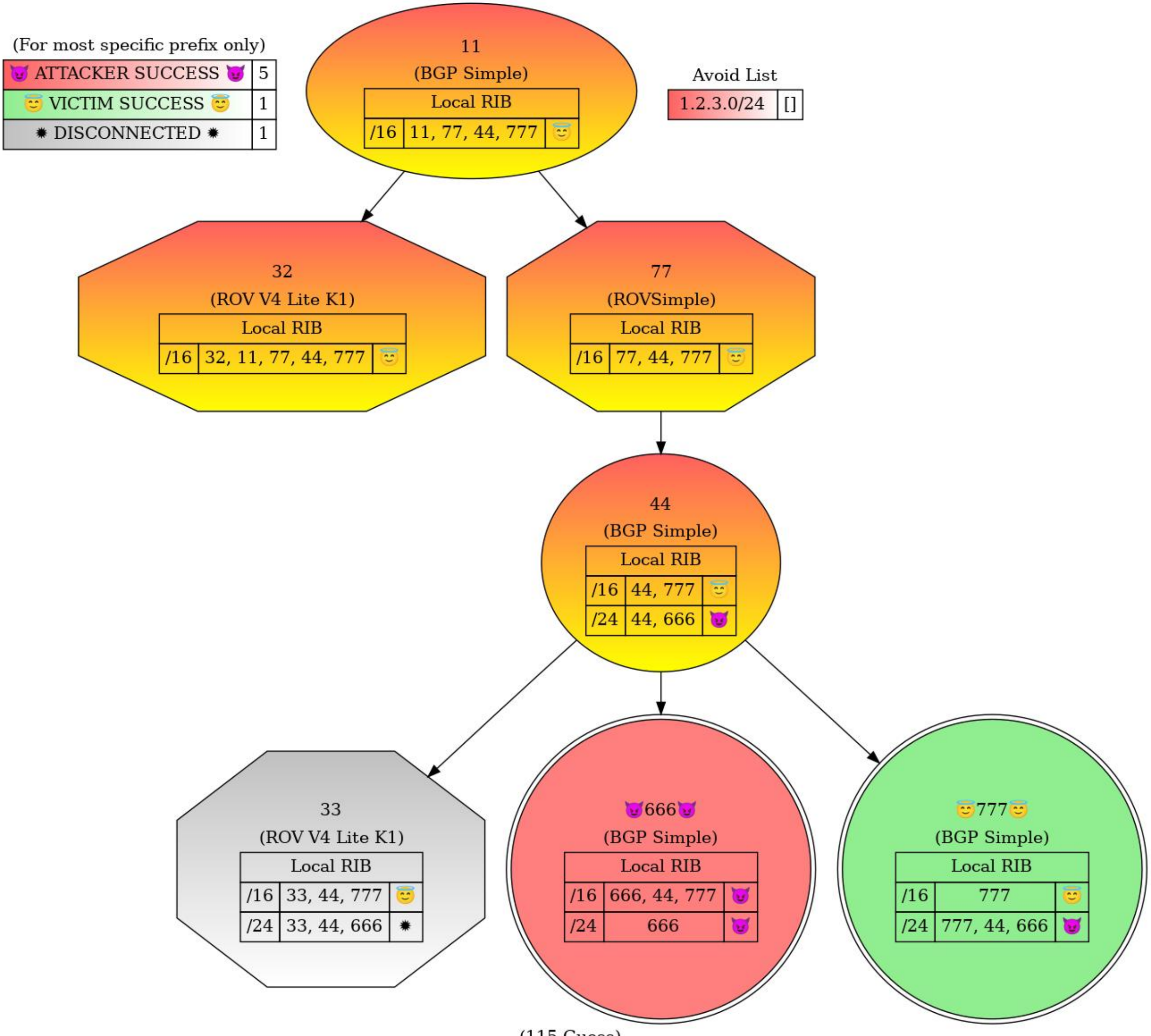

(114 Ground Truth)
Subprefix Hijack with V4 Lite



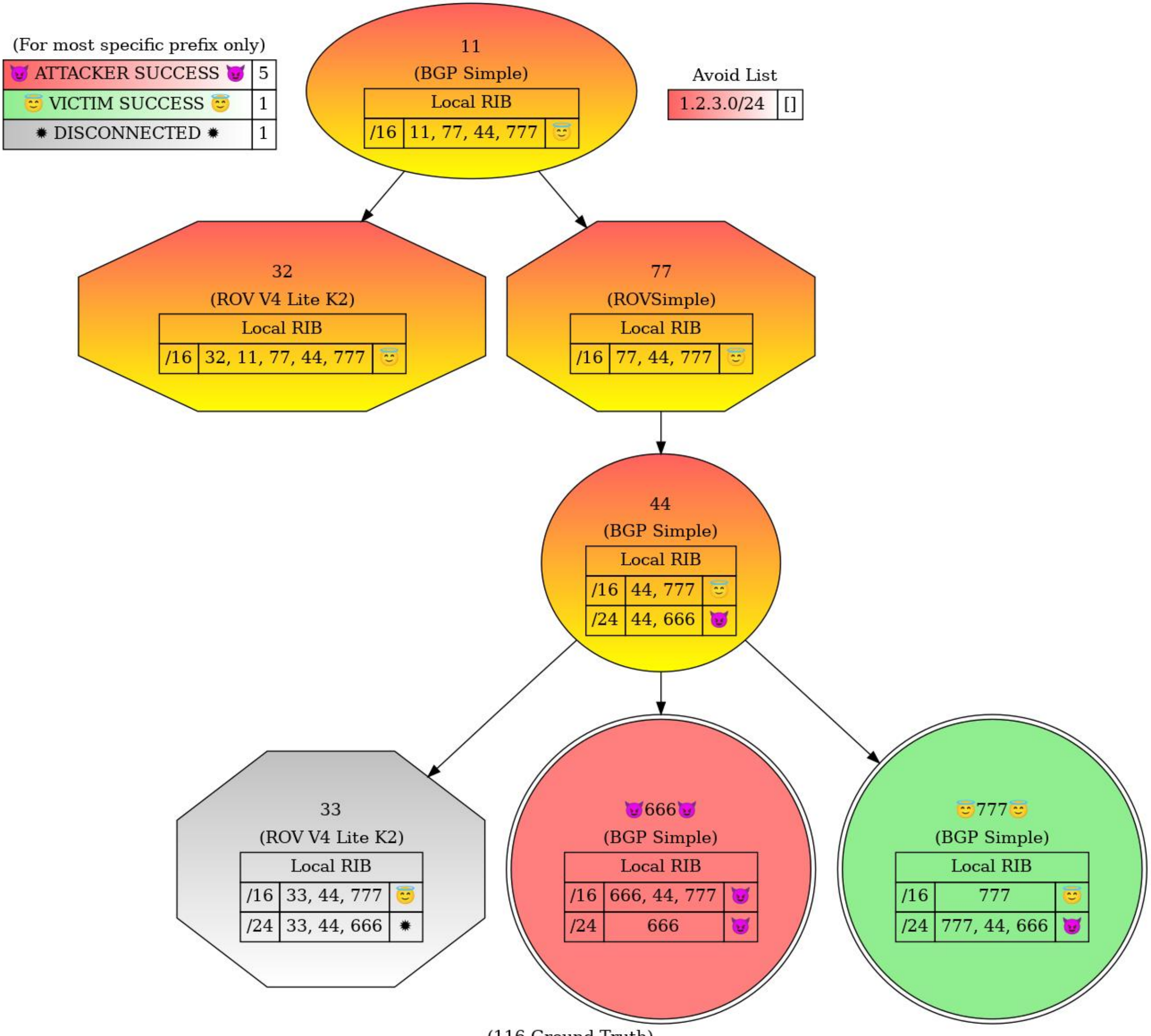

(114 Guess)
Subprefix Hijack with V4 Lite



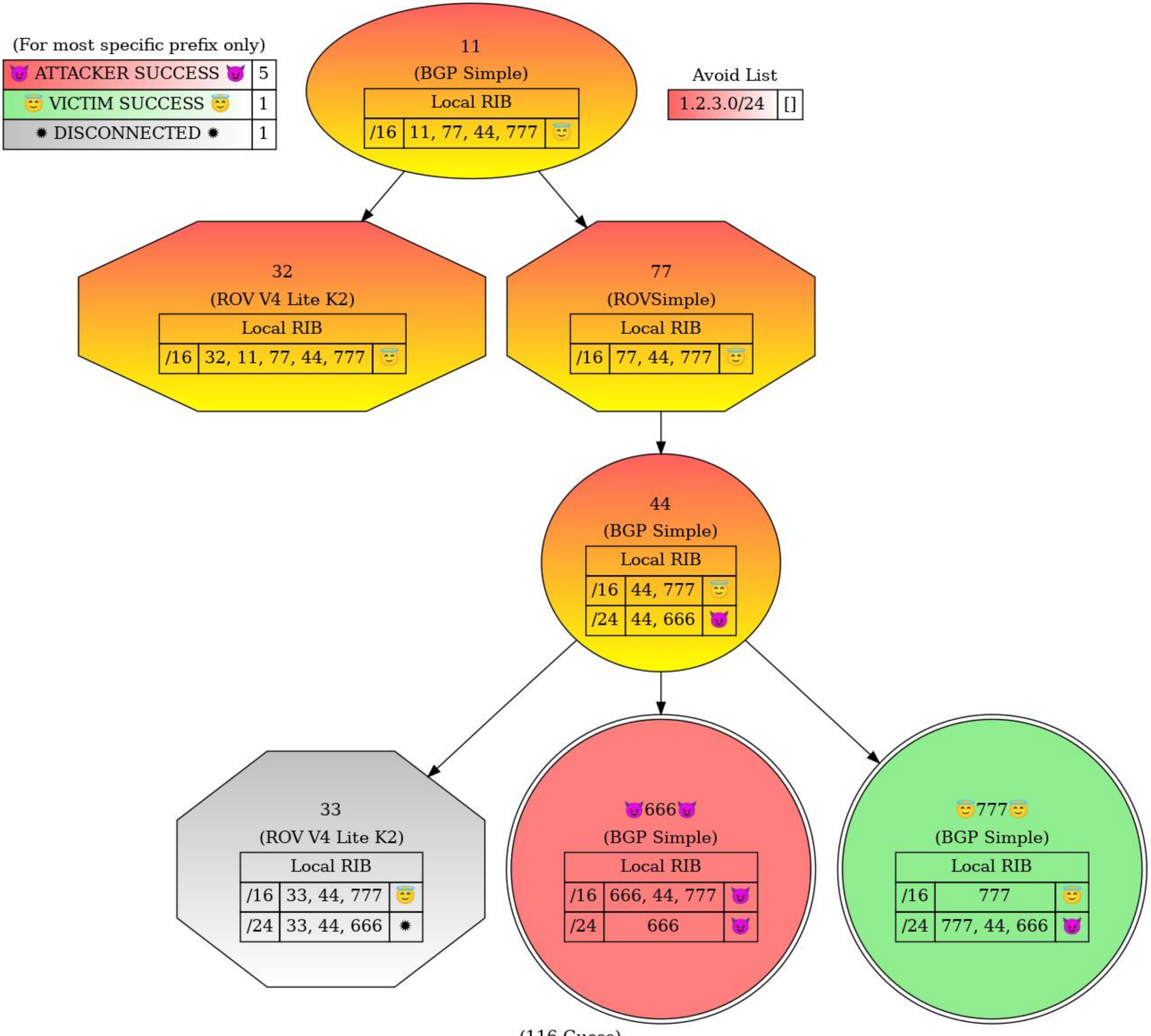

(115 Ground Truth)
Subprefix Hijack with V4 Lite k=1



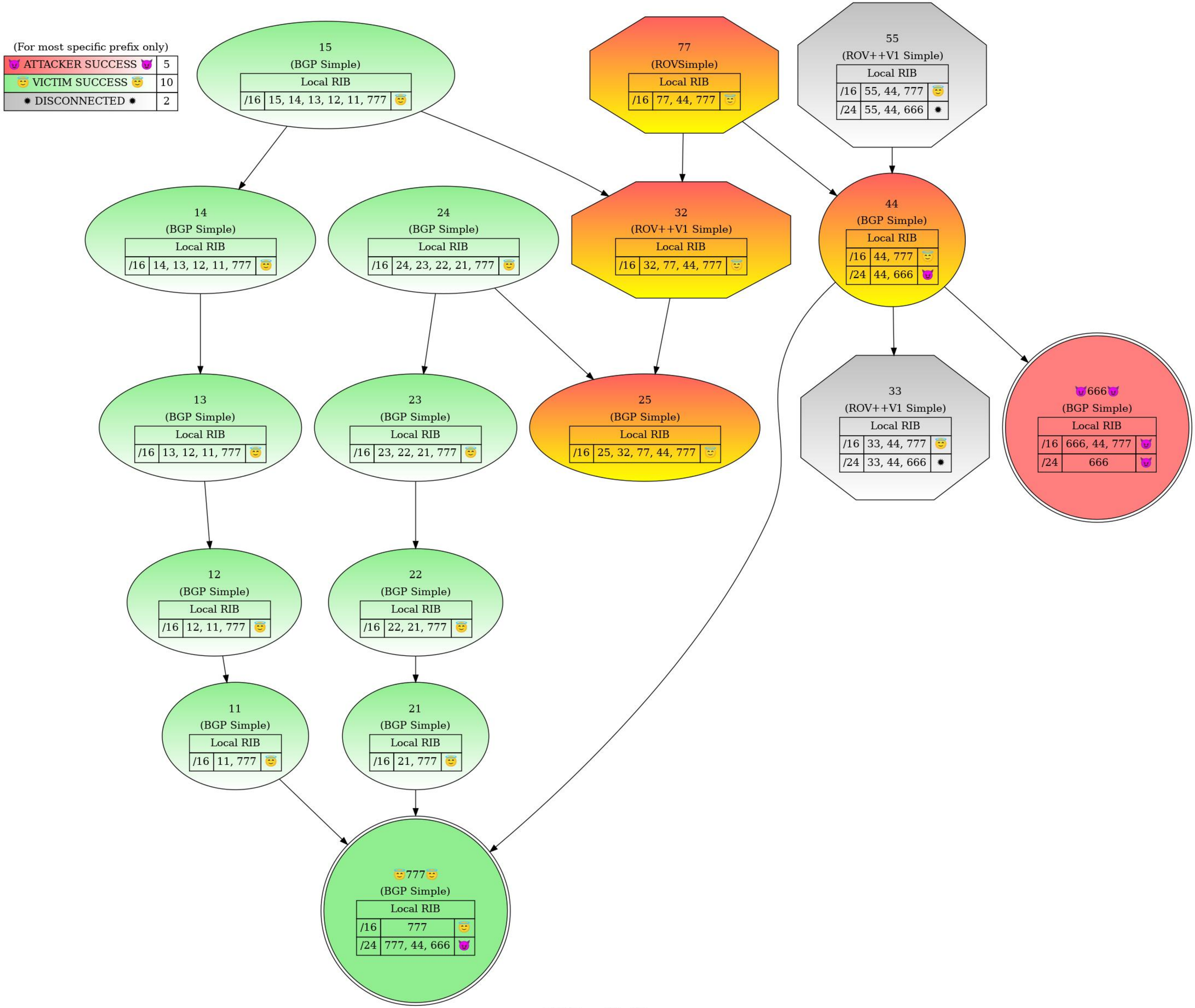

(115 Guess)
Subprefix Hijack with V4 Lite k=1



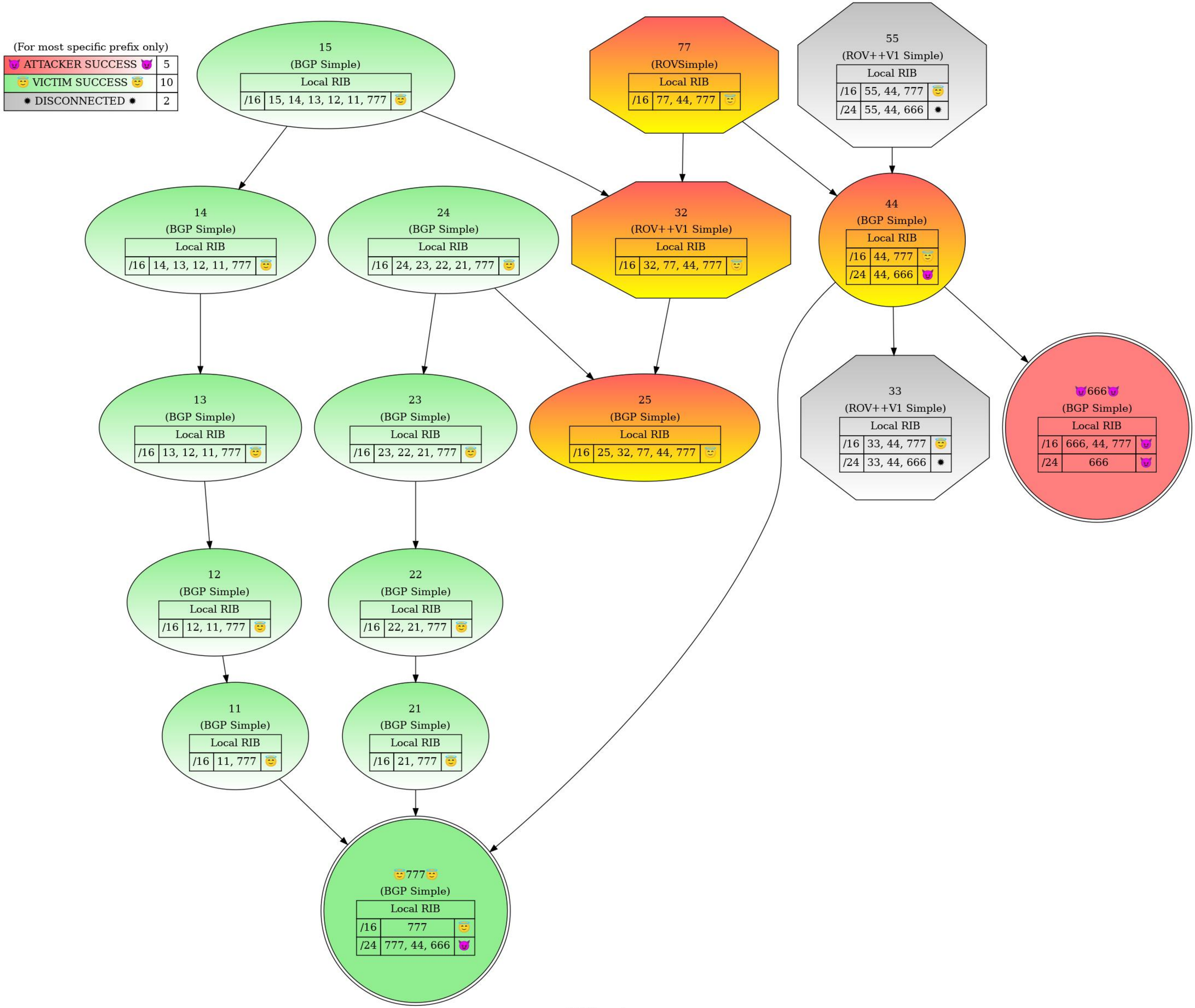

(116 Ground Truth)
Subprefix Hijack with V4 Lite k=2



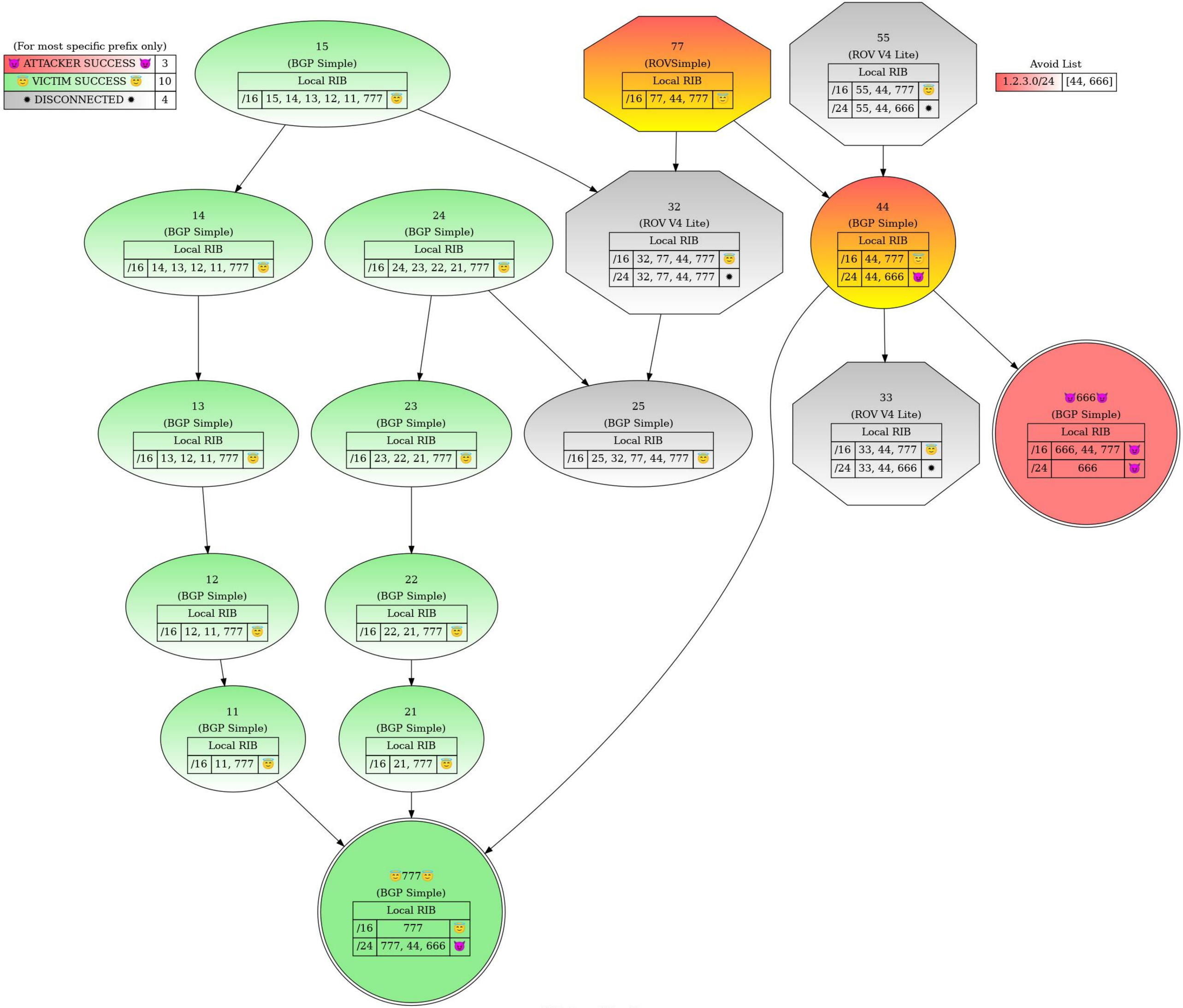

(116 Guess)
Subprefix Hijack with V4 Lite k=2



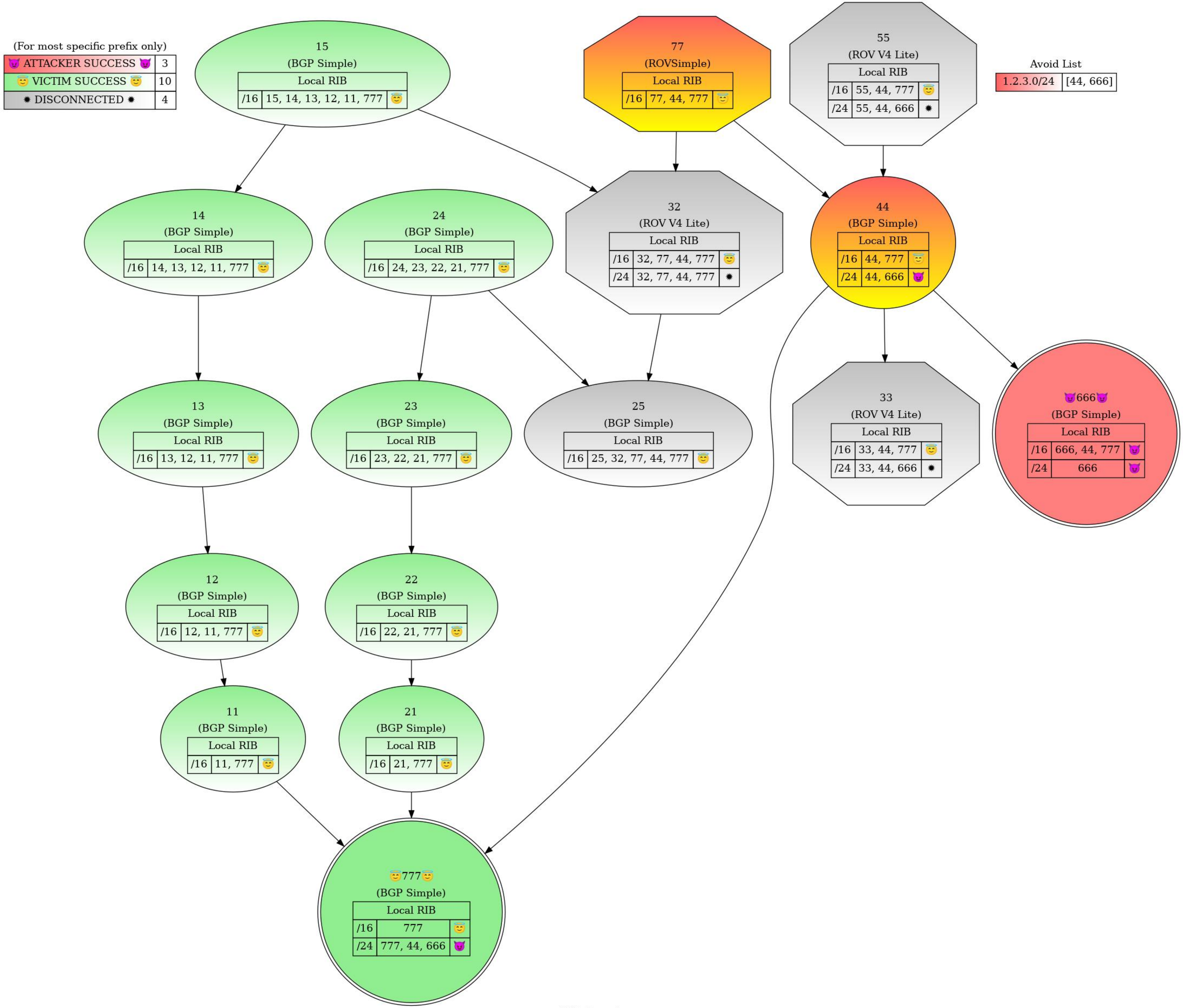

(117 Ground Truth)
Subprefix Hijack with V1 Lite



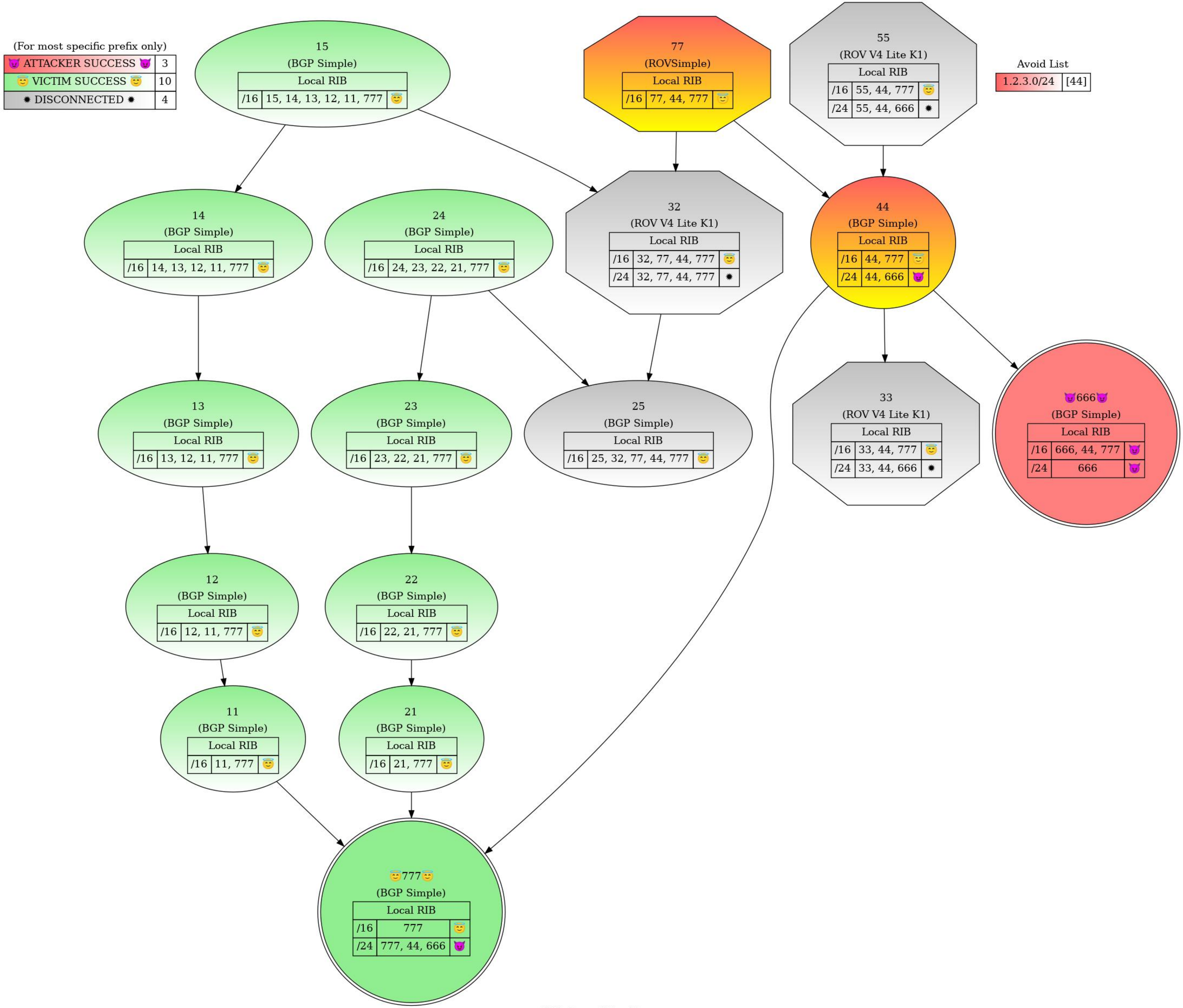

(117 Guess)
Subprefix Hijack with V1 Lite



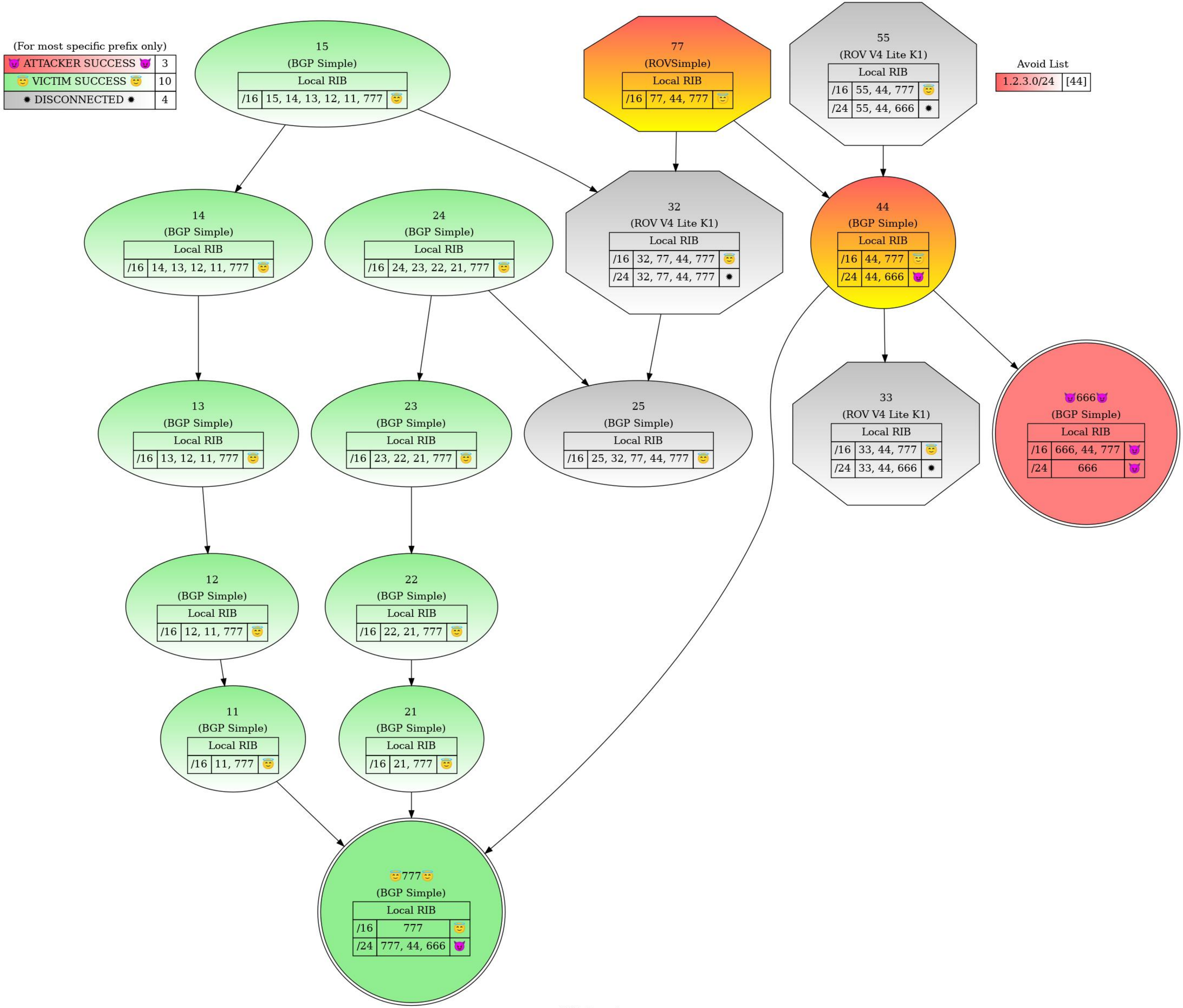

(118 Ground Truth)
Subprefix Hijack with V4 Lite



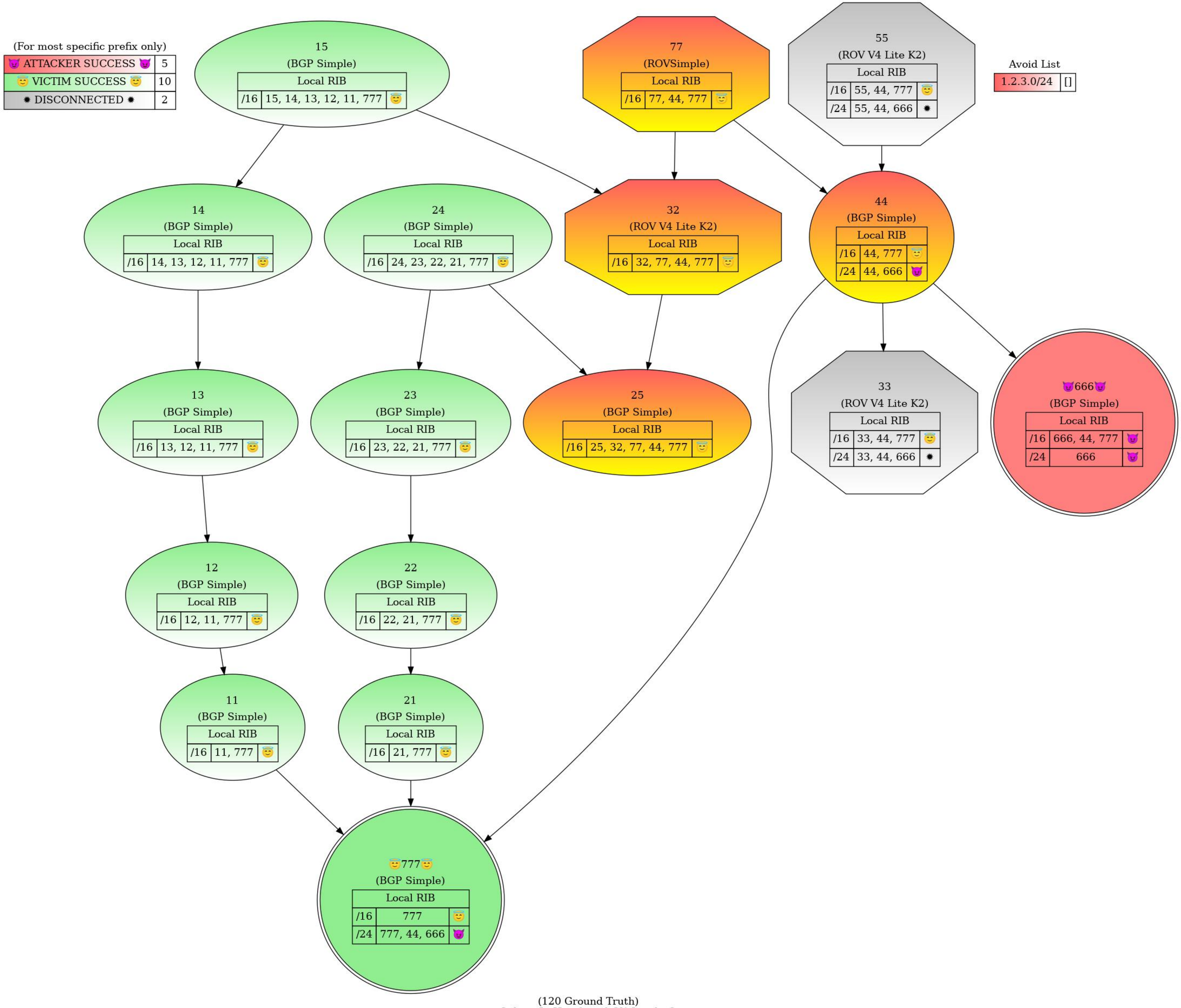

(118 Guess)
Subprefix Hijack with V4 Lite



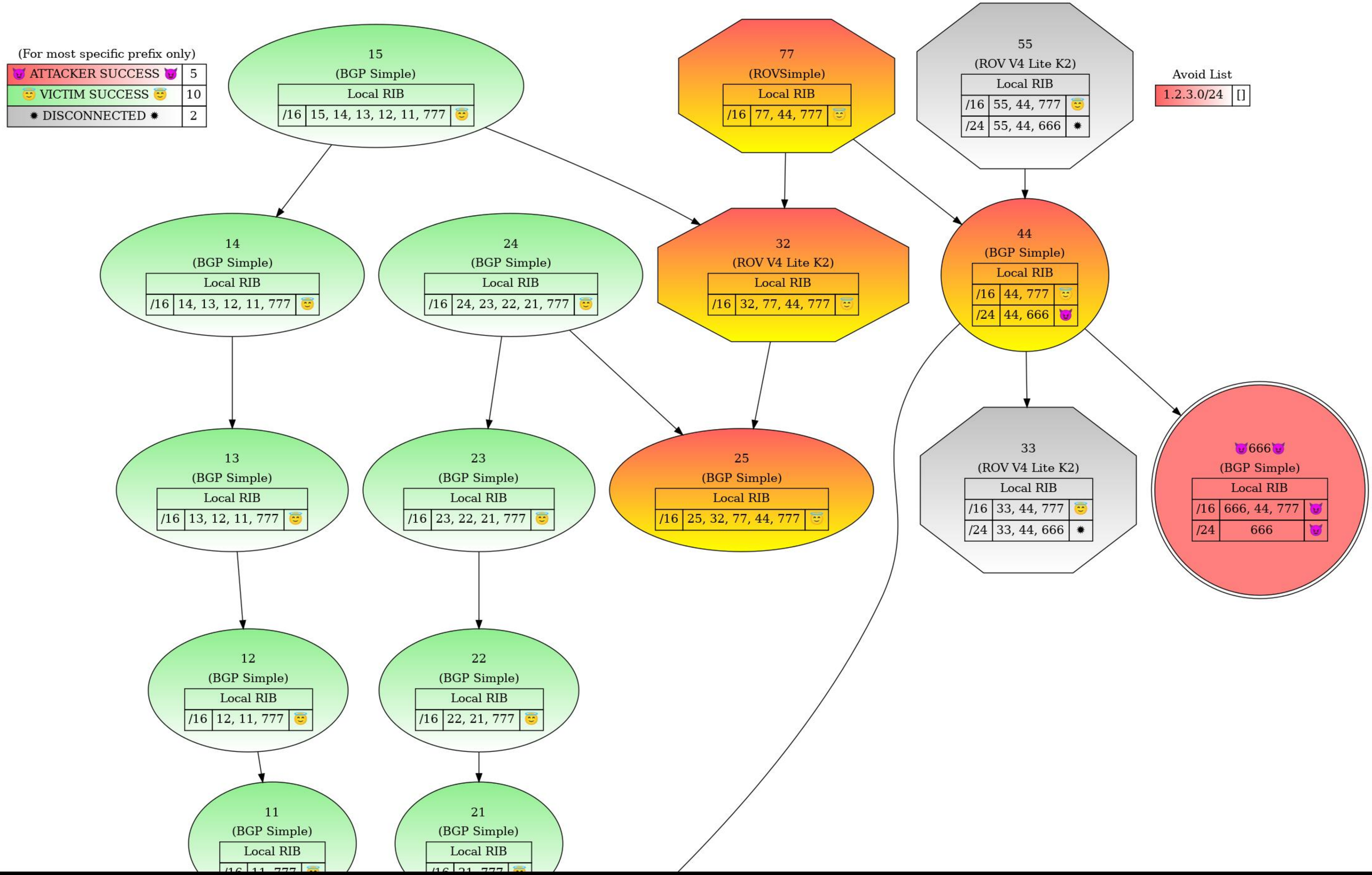

(119 Ground Truth)
Subprefix Hijack with V4 Lite k=1

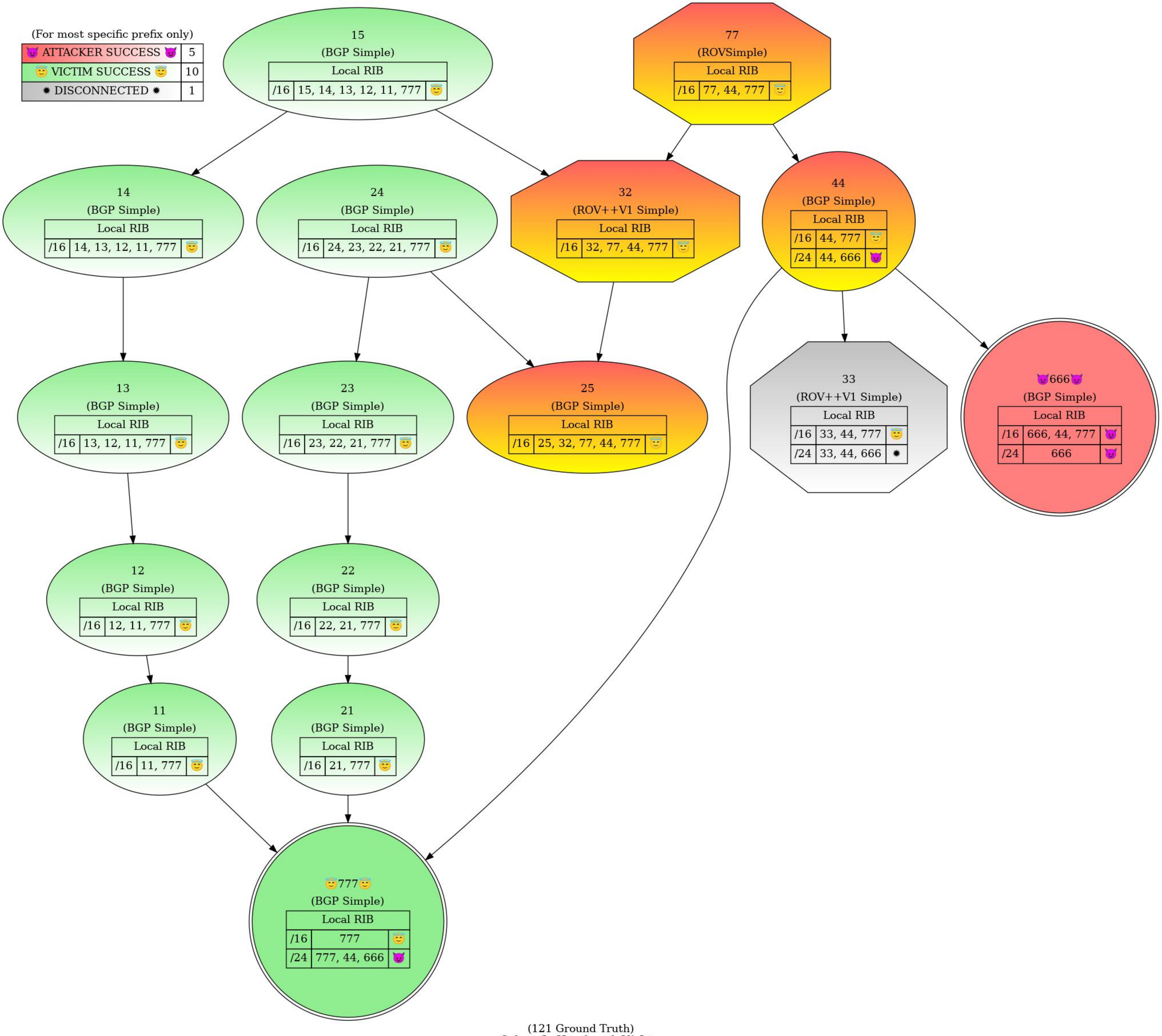



(119 Guess)
Subprefix Hijack with V4 Lite k=1

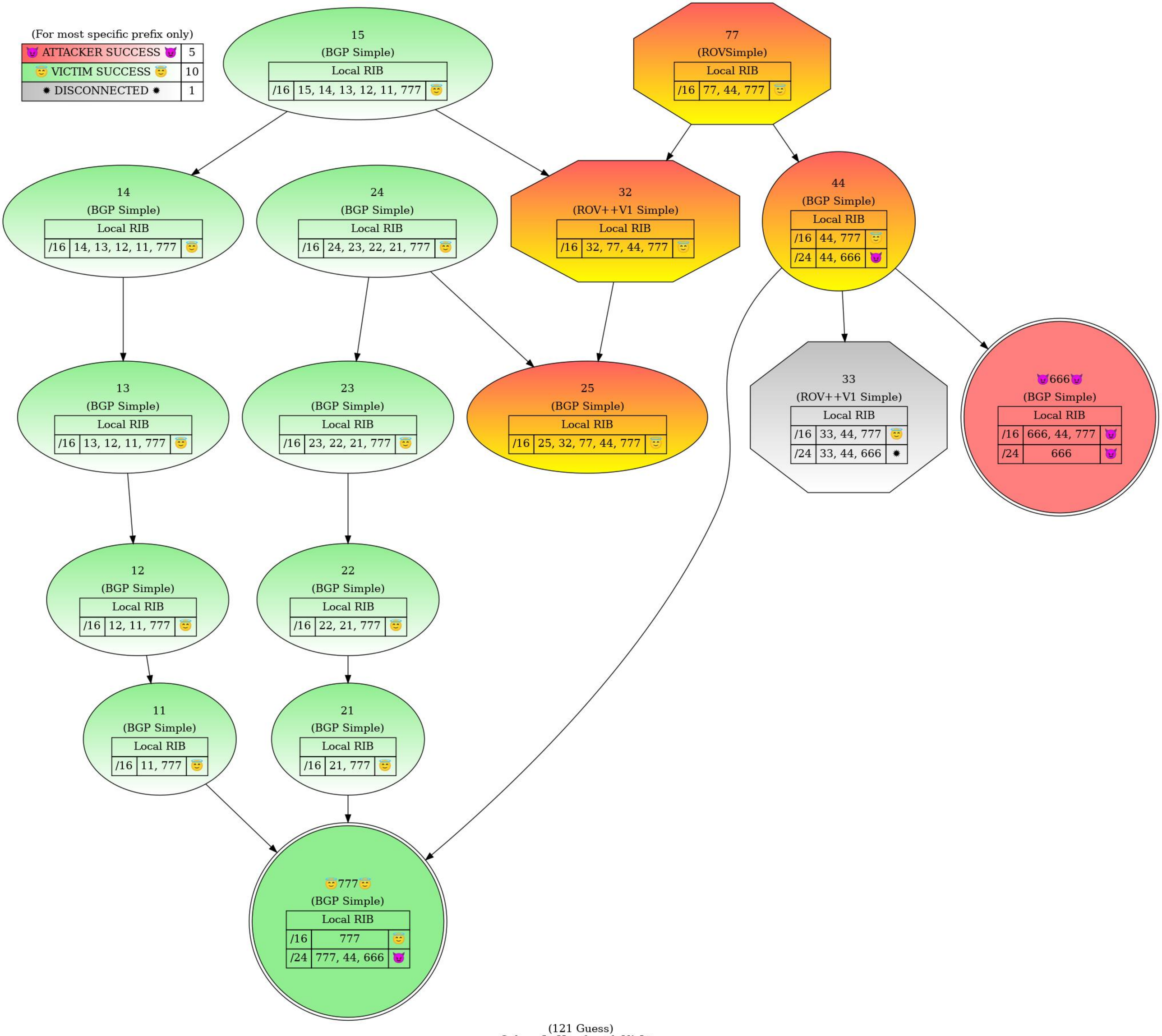



(120 Ground Truth)
Subprefix Hijack with V4 Lite k=2

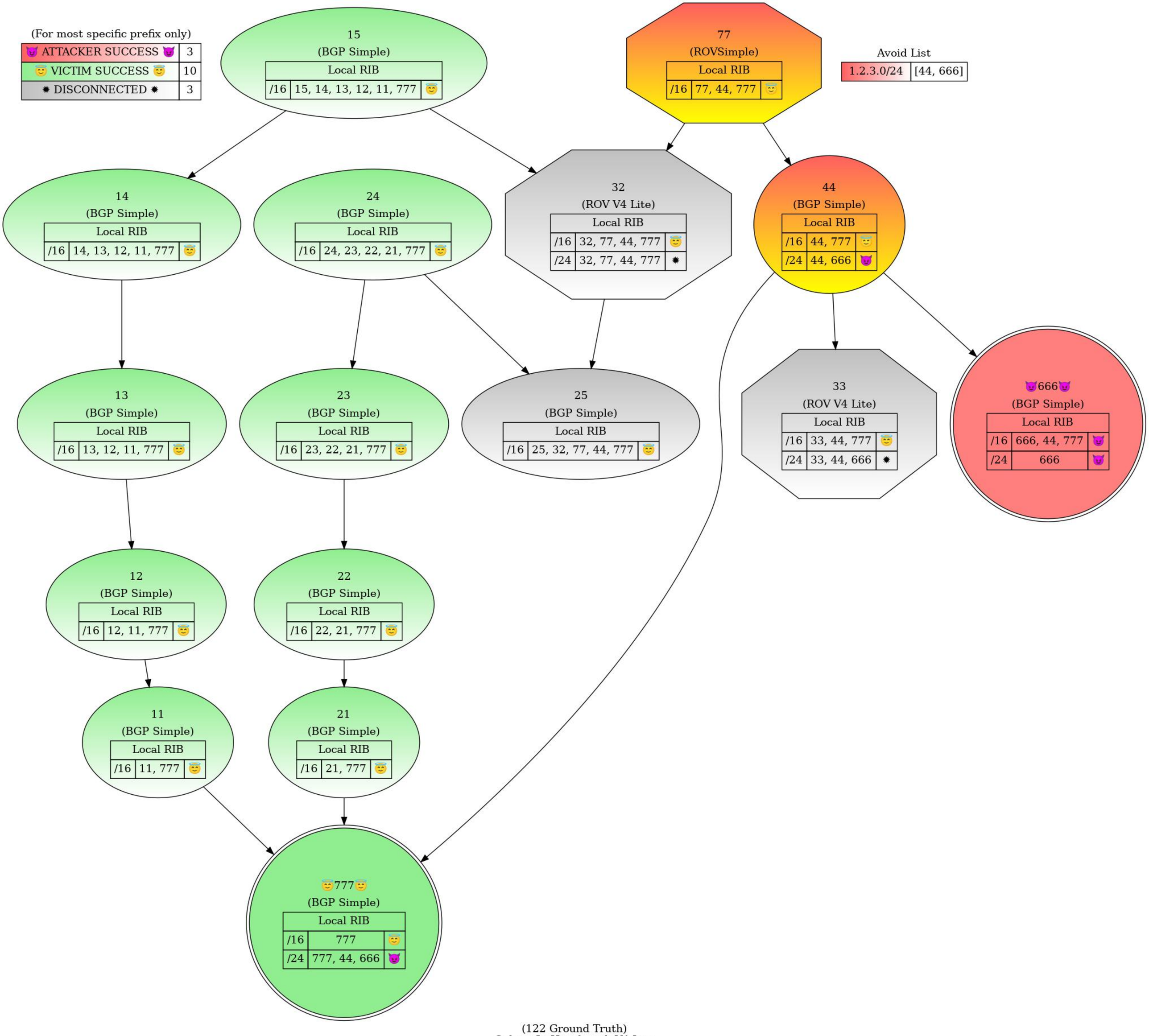

(For most specific prefix only)
ATTACKER SUCCESS 5
VICTIM SUCCESS 10
DISCONNECTED 2
15 (BGP Simple) Local RIB /16 15, 14, 13, 12, 11, 777
77 (ROVSimple) Local RIB /16 77, 44, 777
55 (ROV V4 Lite K2) Local RIB /16 55, 44, 777 /24 55, 44, 666
Avoid List
1.2.3.0/24 []
14 (BGP Simple) Local RIB /16 14, 13, 12, 11, 777
24 (BGP Simple) Local RIB /16 24, 23, 22, 21, 777
32 (ROV V4 Lite K2) Local RIB /16 32, 77, 44, 777
44 (BGP Simple) Local RIB /16 44, 777 /24 44, 666
13 (BGP Simple) Local RIB /16 13, 12, 11, 777
23 (BGP Simple) Local RIB /16 23, 22, 21, 777
25 (BGP Simple) Local RIB /16 25, 32, 77, 44, 777
33 (ROV V4 Lite K2) Local RIB /16 33, 44, 777 /24 33, 44, 666
666 (BGP Simple) Local RIB /16 666, 44, 777 /24 666
12 (BGP Simple) Local RIB /16 12, 11, 777
22 (BGP Simple) Local RIB /16 22, 21, 777
11 (BGP Simple) Local RIB
21 (BGP Simple) Local RIB



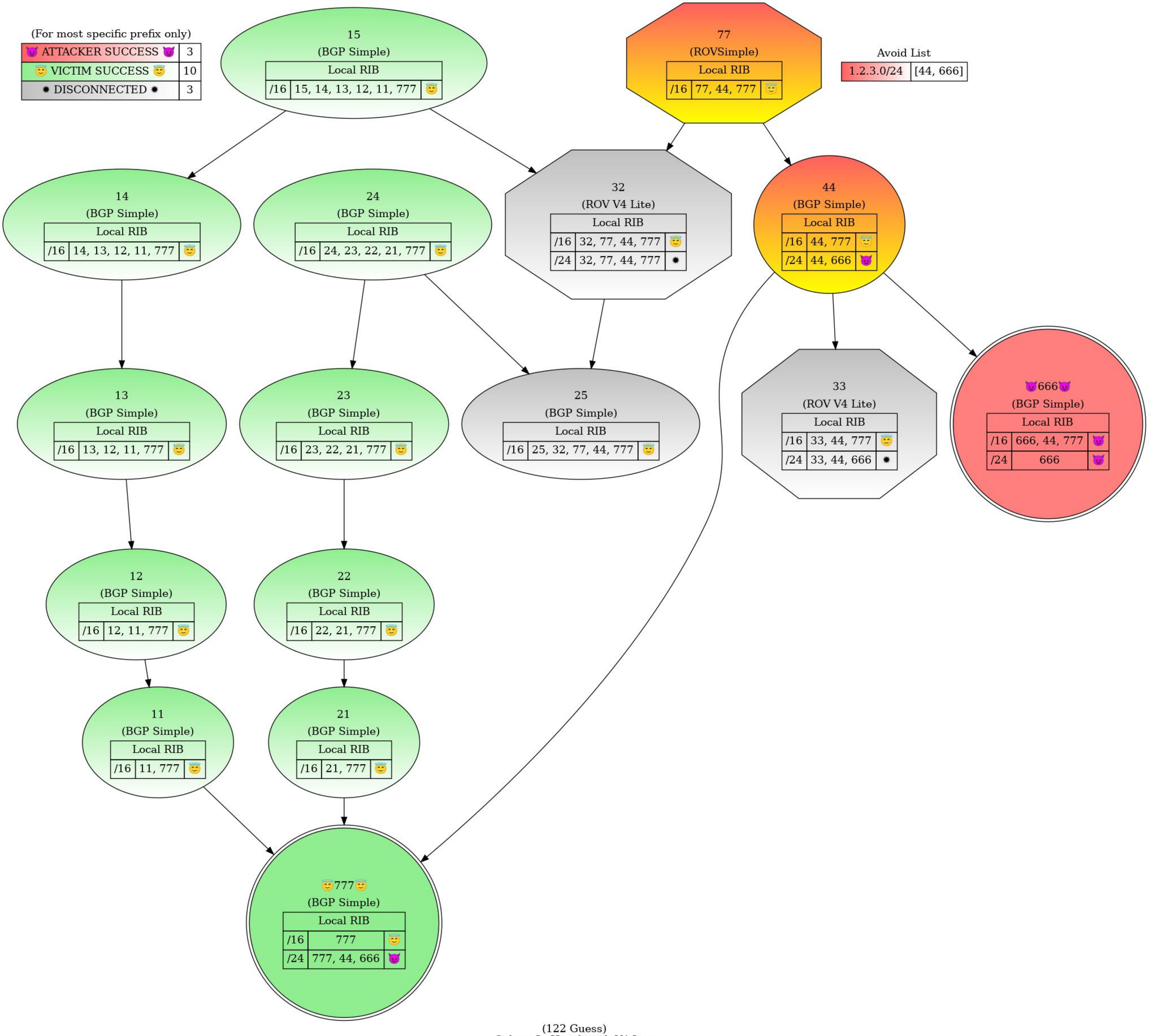

(121 Ground Truth)
Subprefix Hijack with V1 Lite



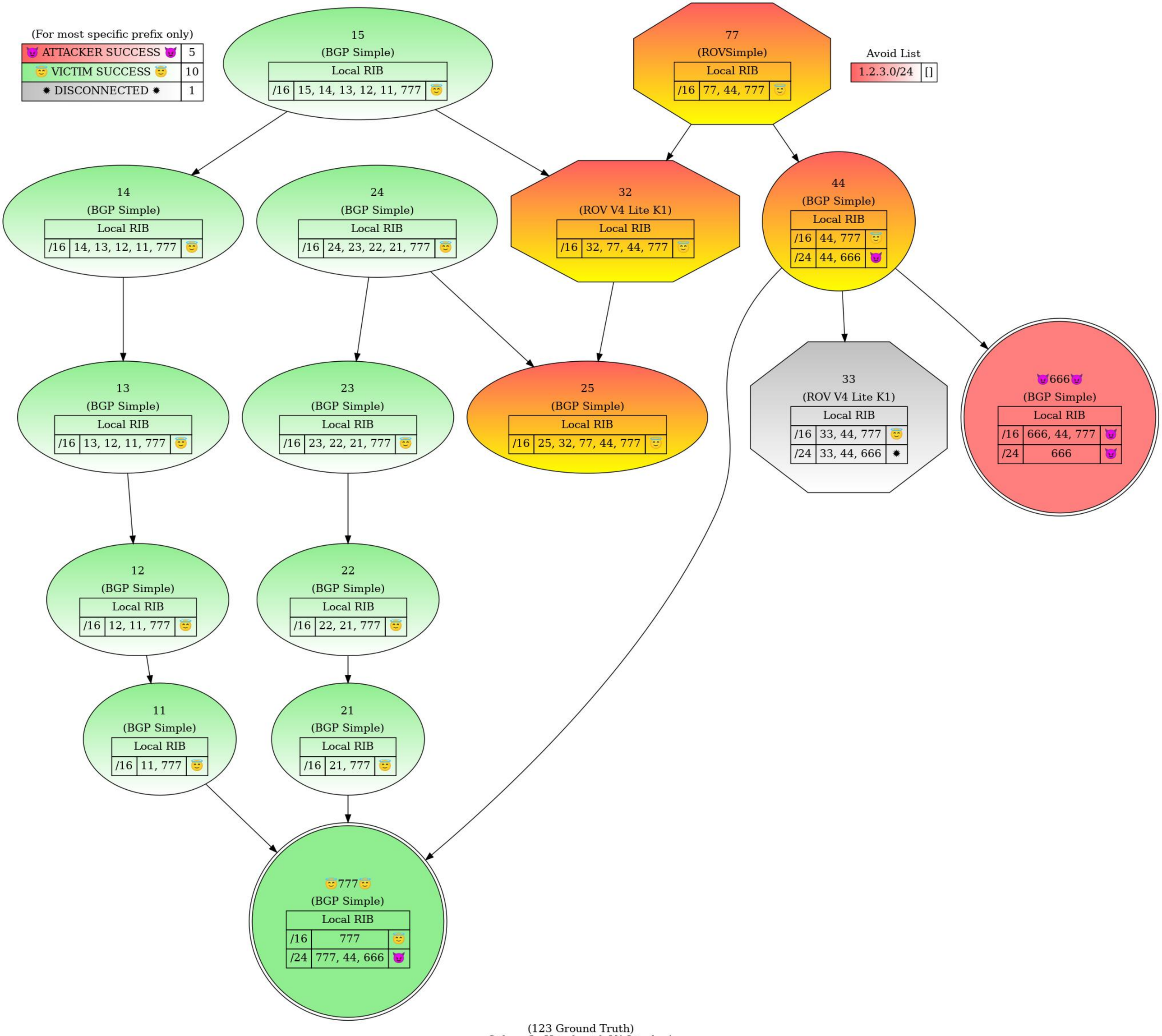

(121 Guess)
Subprefix Hijack with V1 Lite



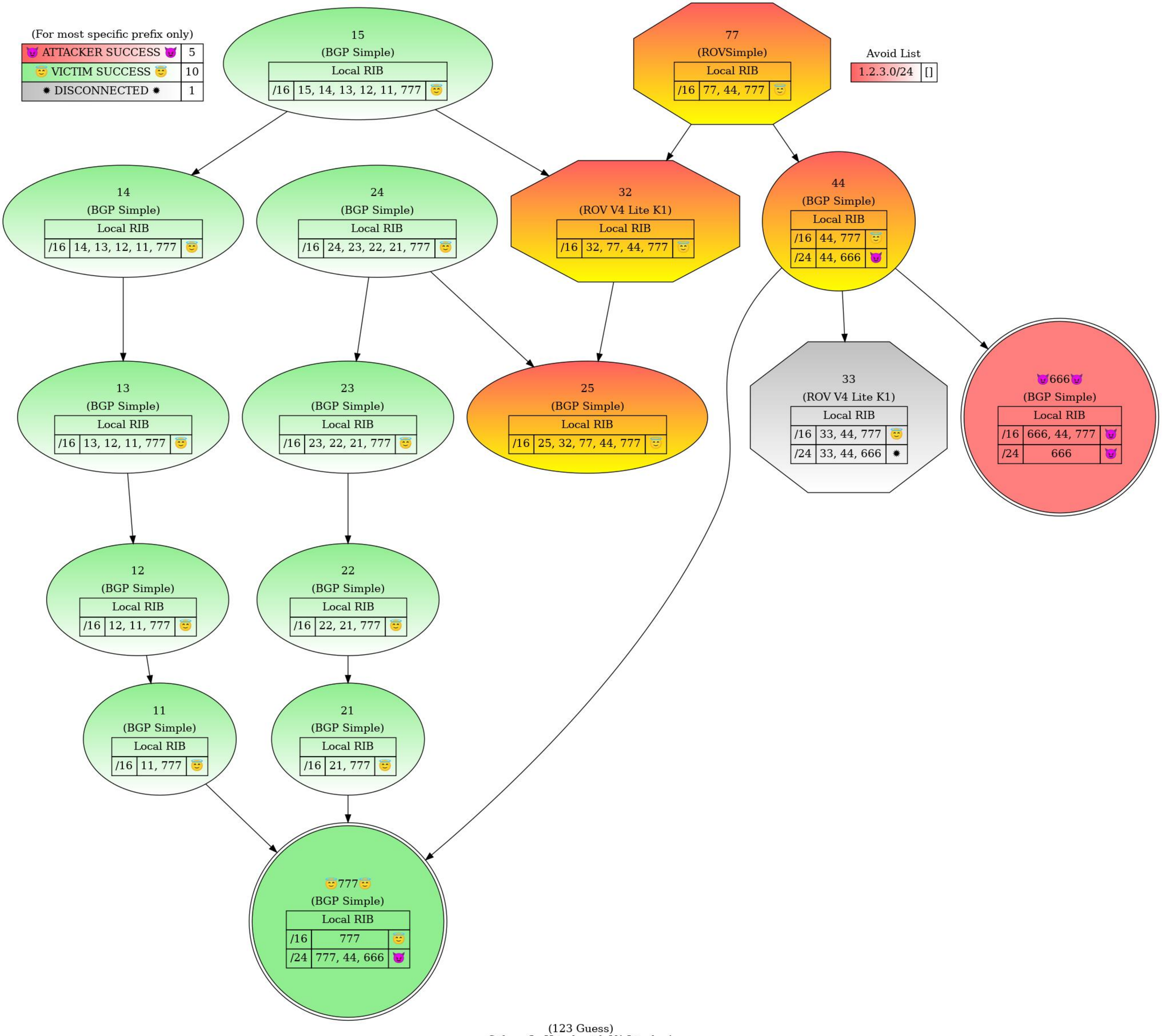

(122 Ground Truth)
Subprefix Hijack with V4 Lite



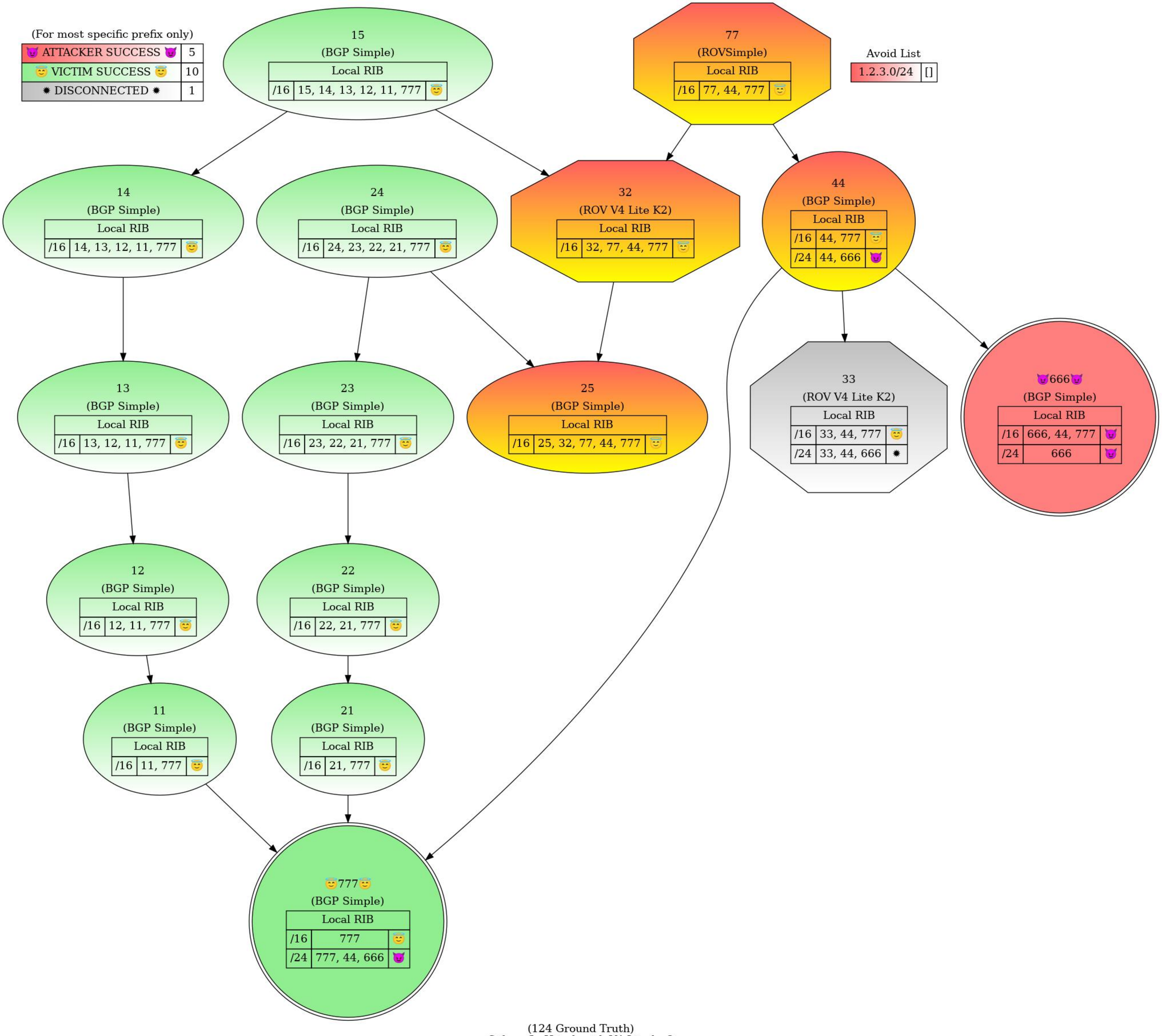

(122 Guess)
Subprefix Hijack with V4 Lite



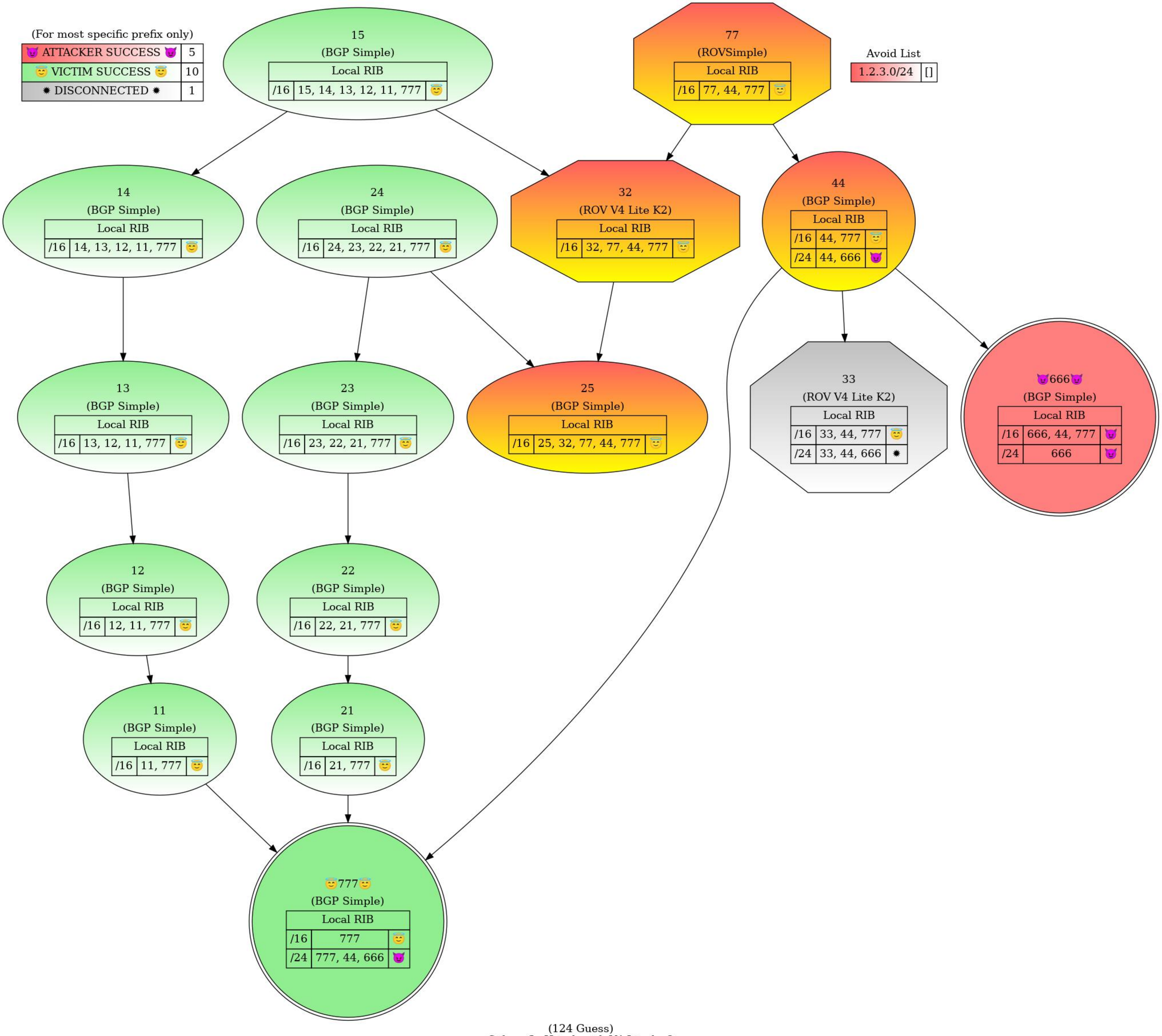

(123 Ground Truth)
Subprefix Hijack with V4 Lite k=1



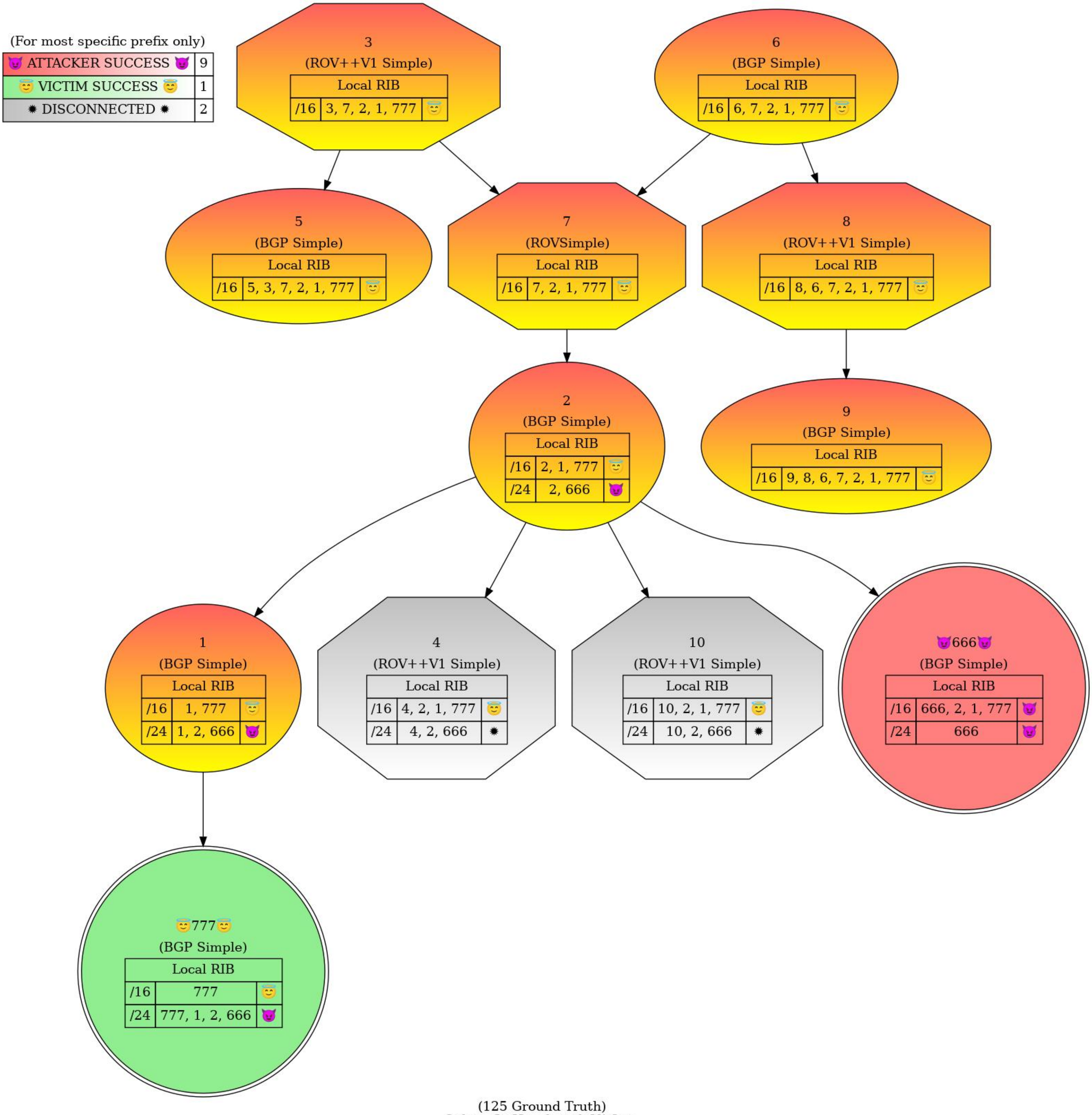

(123 Guess)
Subprefix Hijack with V4 Lite k=1



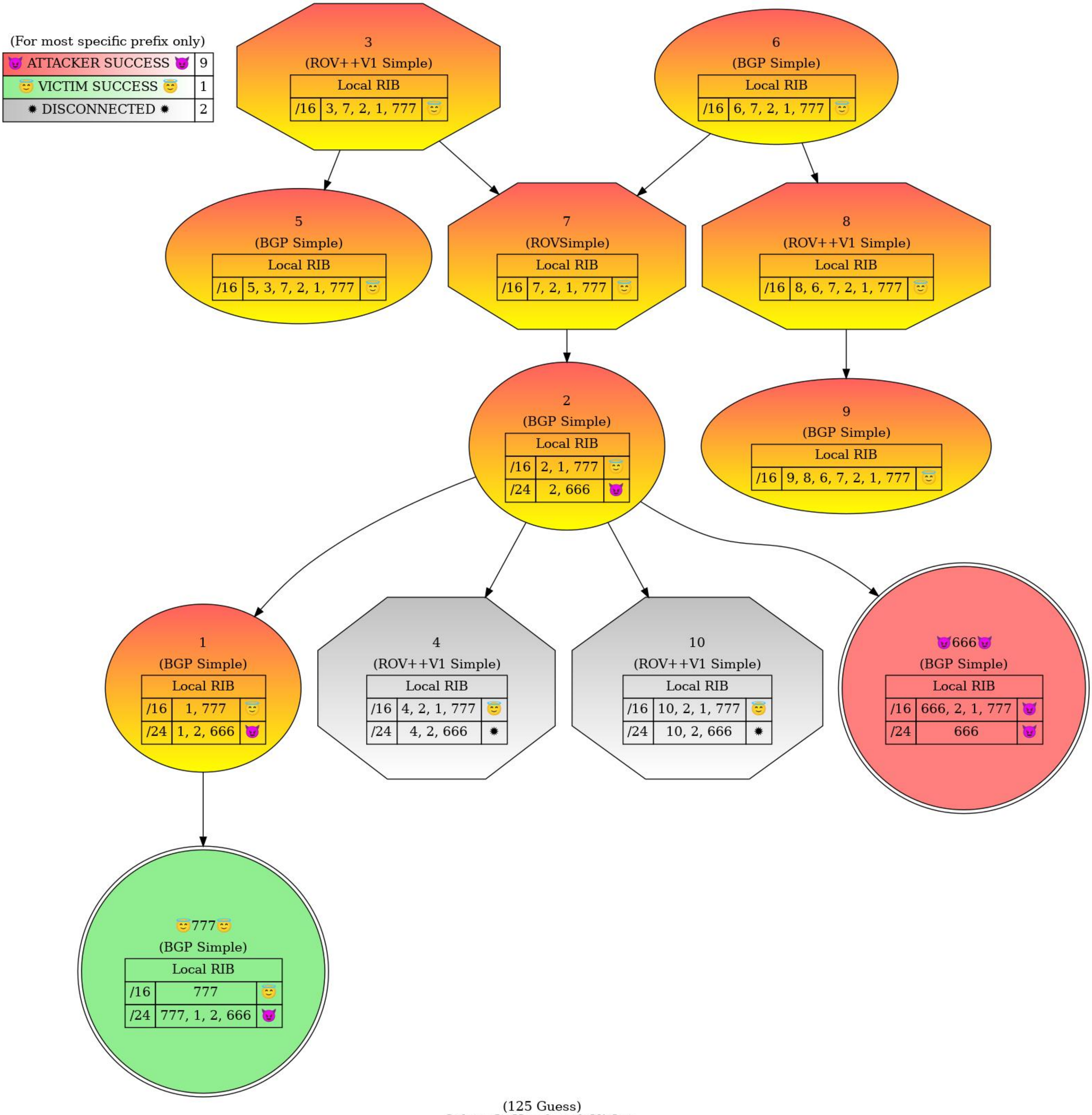

(124 Ground Truth)
Subprefix Hijack with V4 Lite k=2



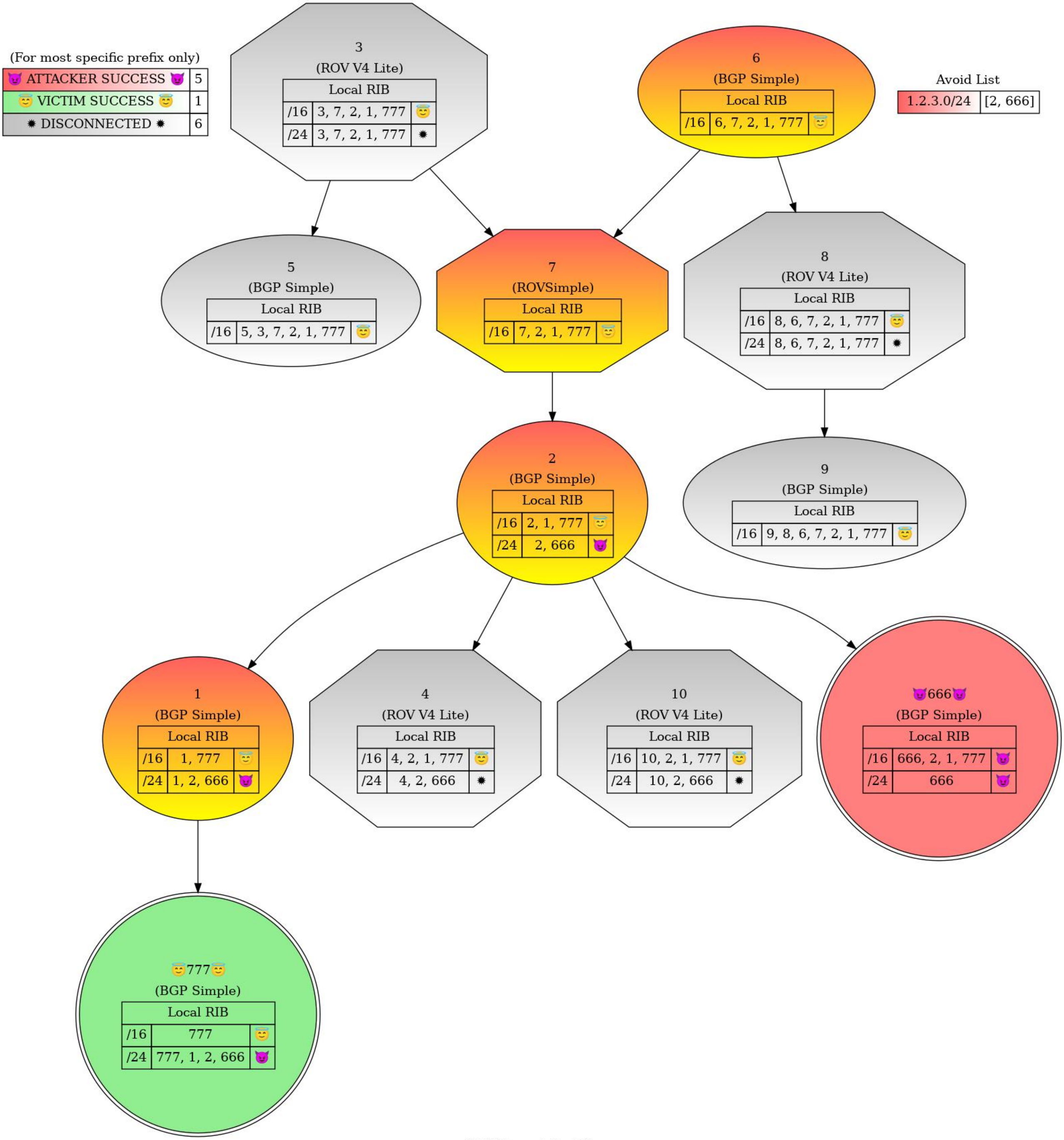

(124 Guess)
Subprefix Hijack with V4 Lite k=2



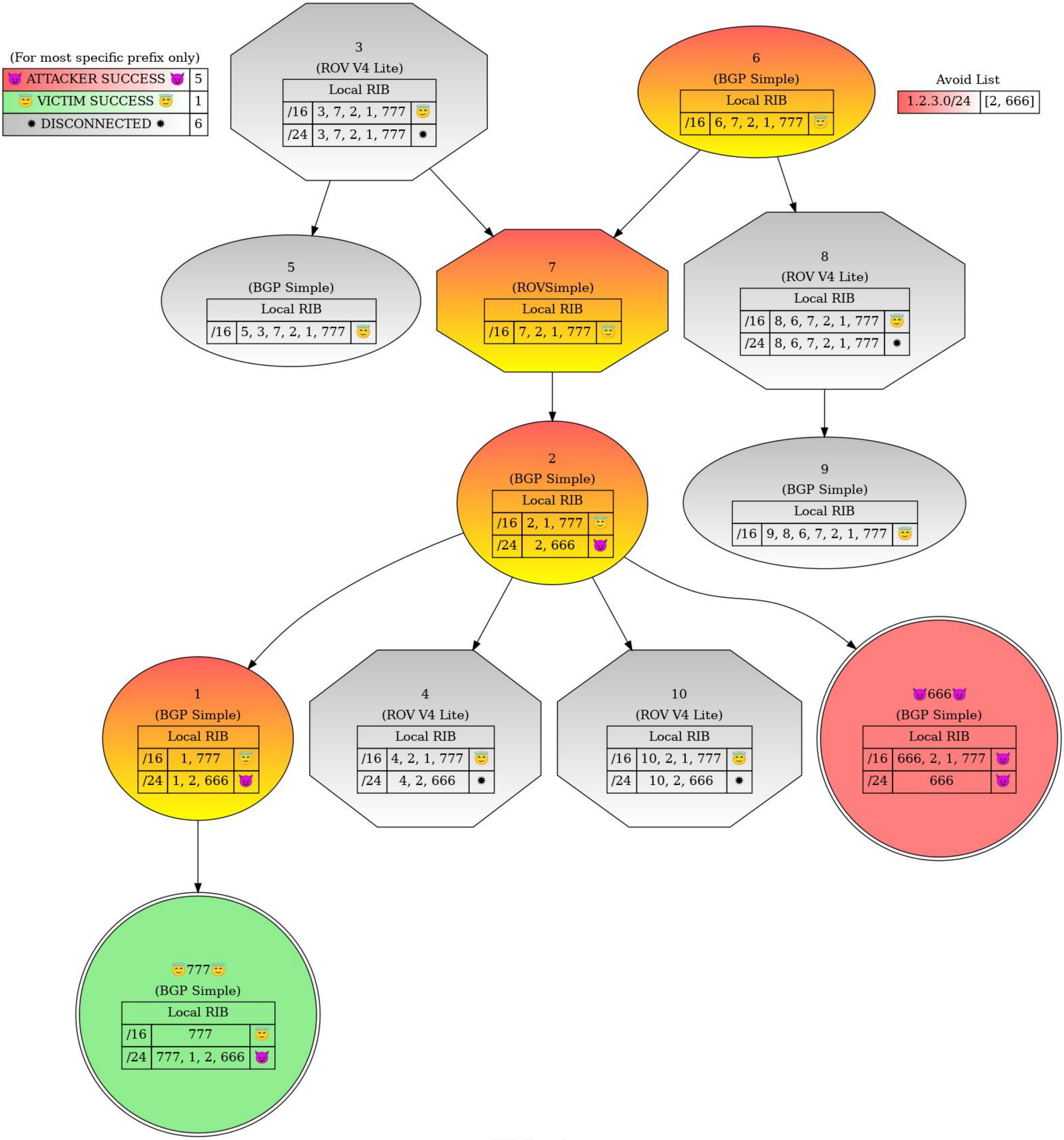

(125 Ground Truth)
Subprefix Hijack with V1 Lite



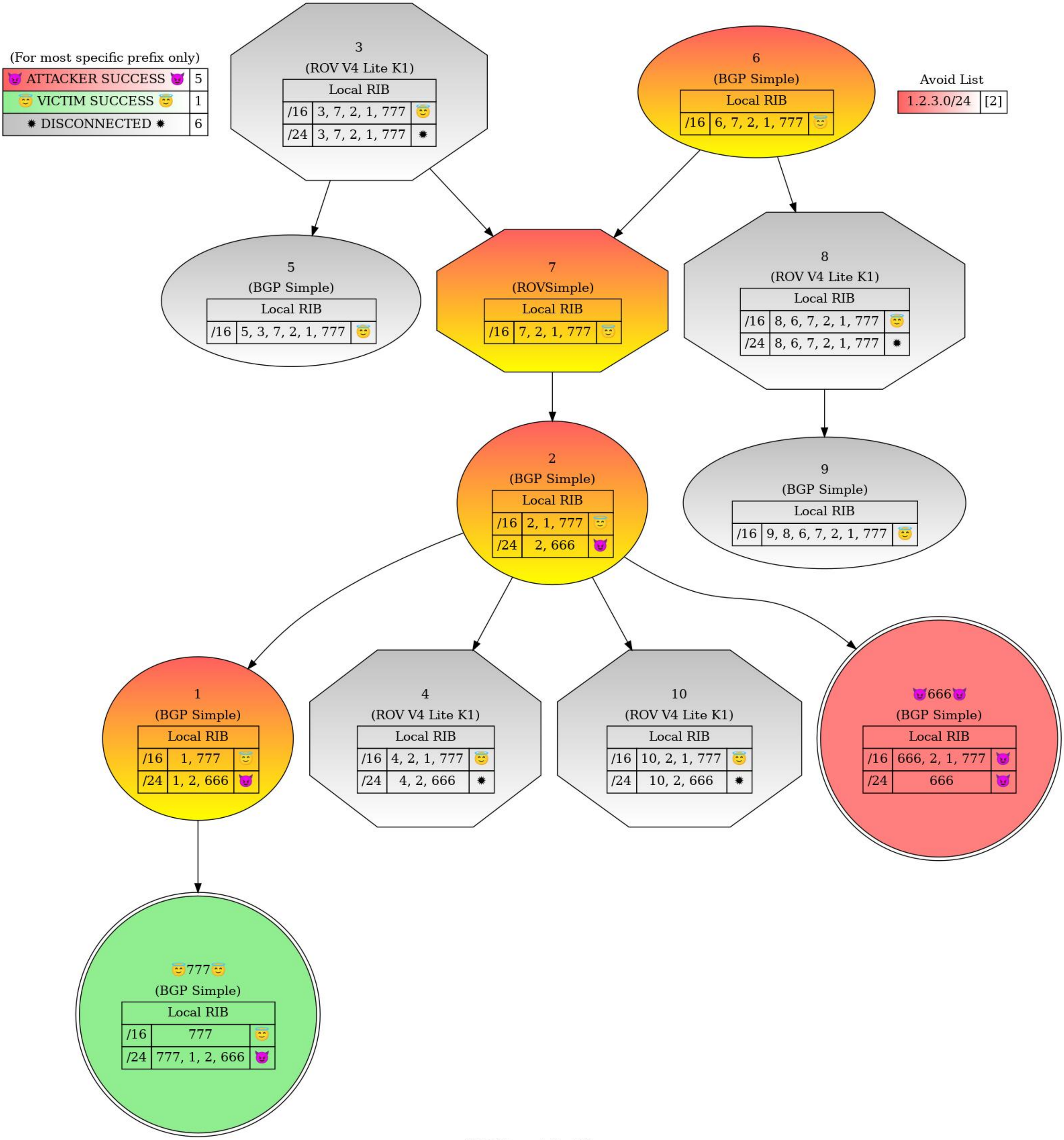

(125 Guess)
Subprefix Hijack with V1 Lite



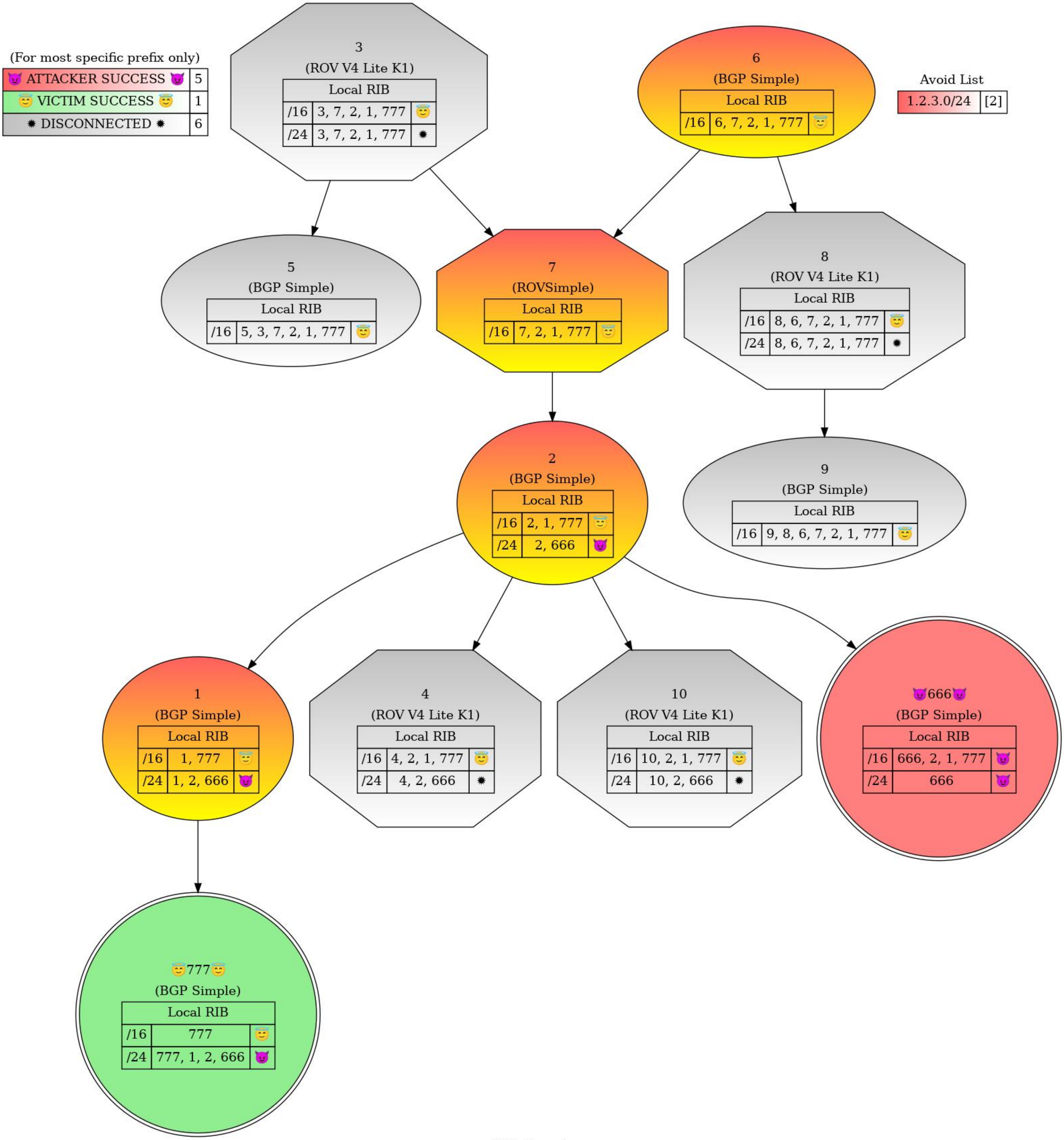

(126 Ground Truth)
Subprefix Hijack with V4 Lite



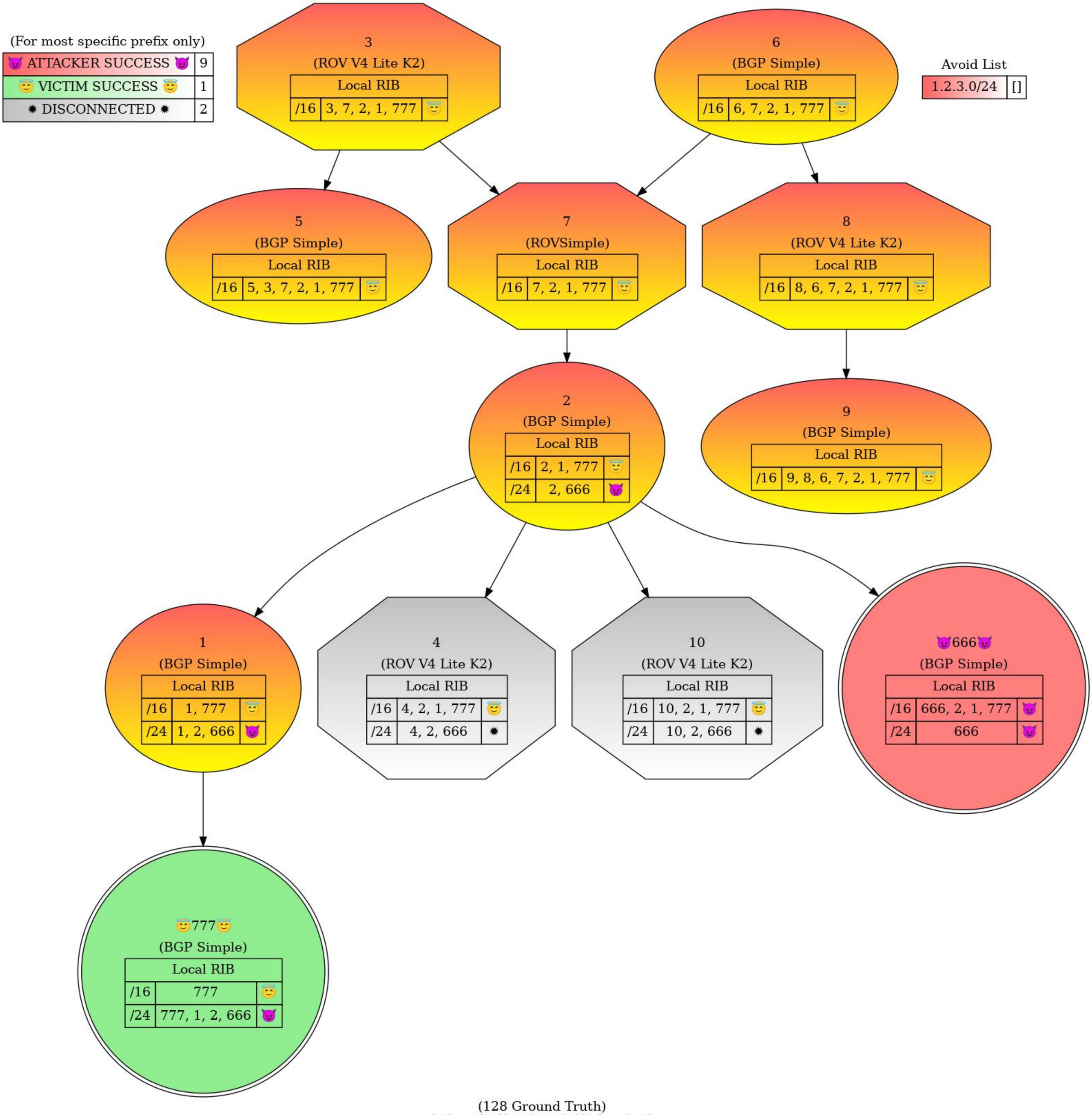

(126 Guess)
Subprefix Hijack with V4 Lite



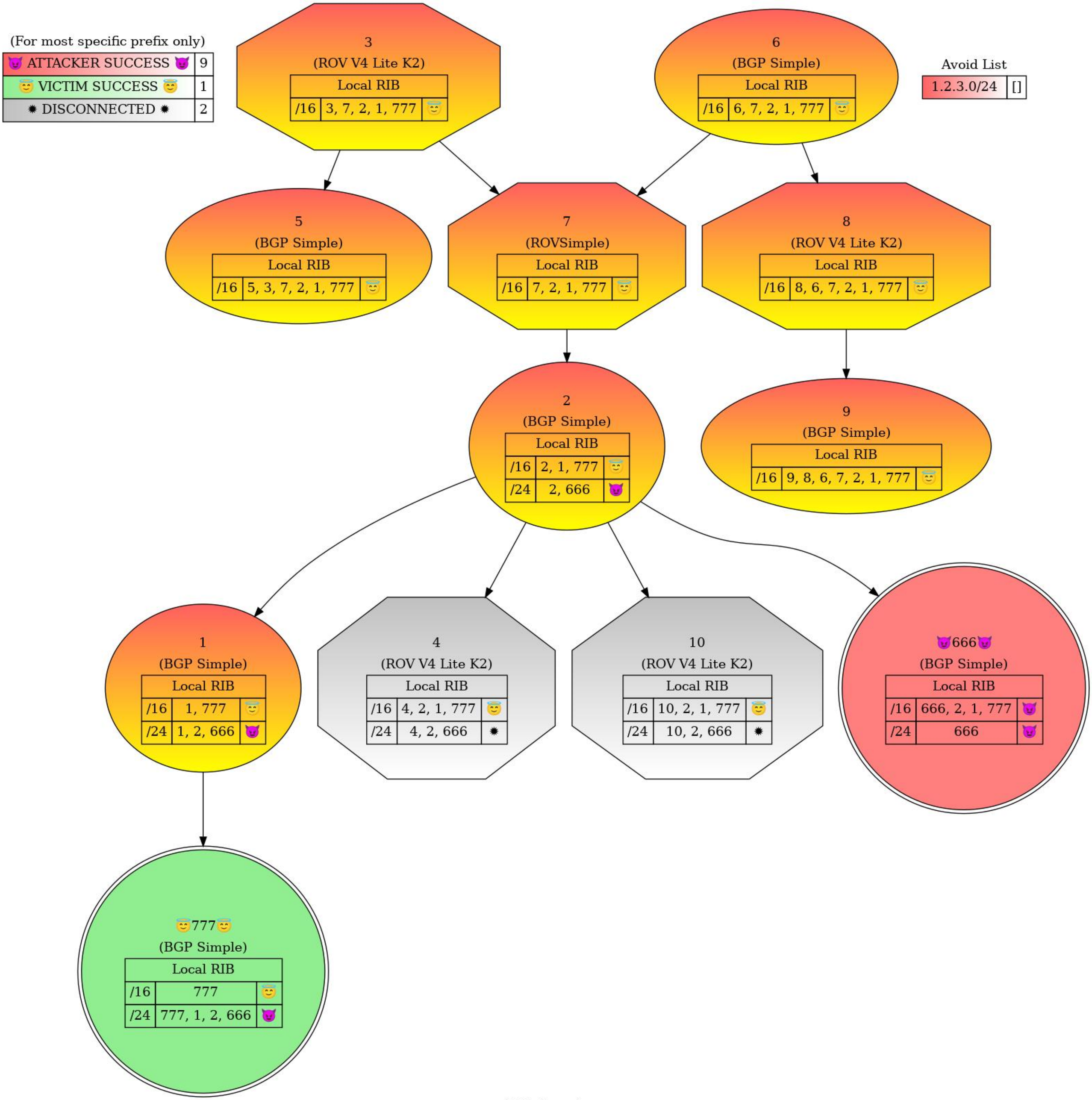

(127 Ground Truth)
Subprefix Hijack with V4 Lite k=1



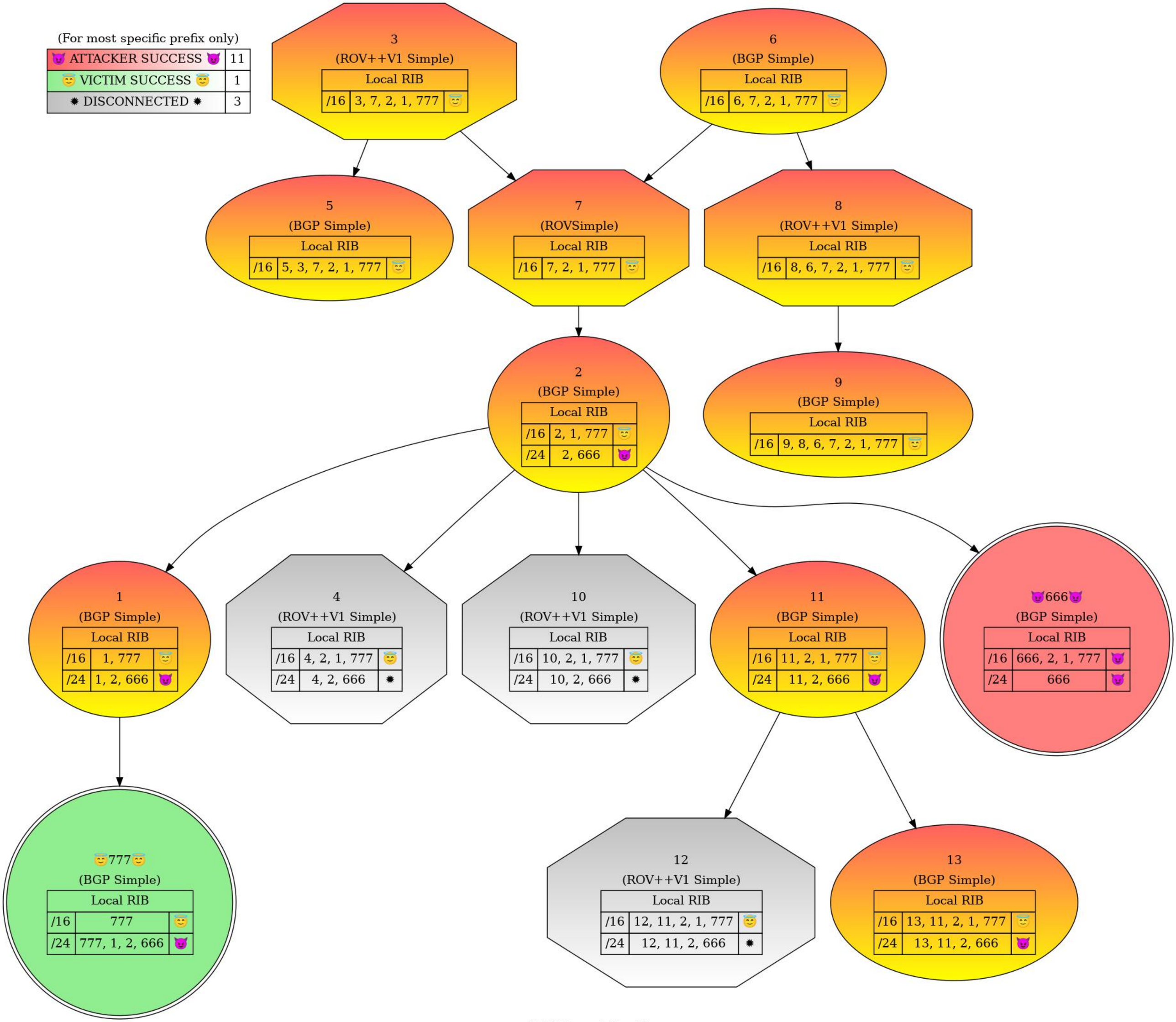

(127 Guess)
Subprefix Hijack with V4 Lite k=1



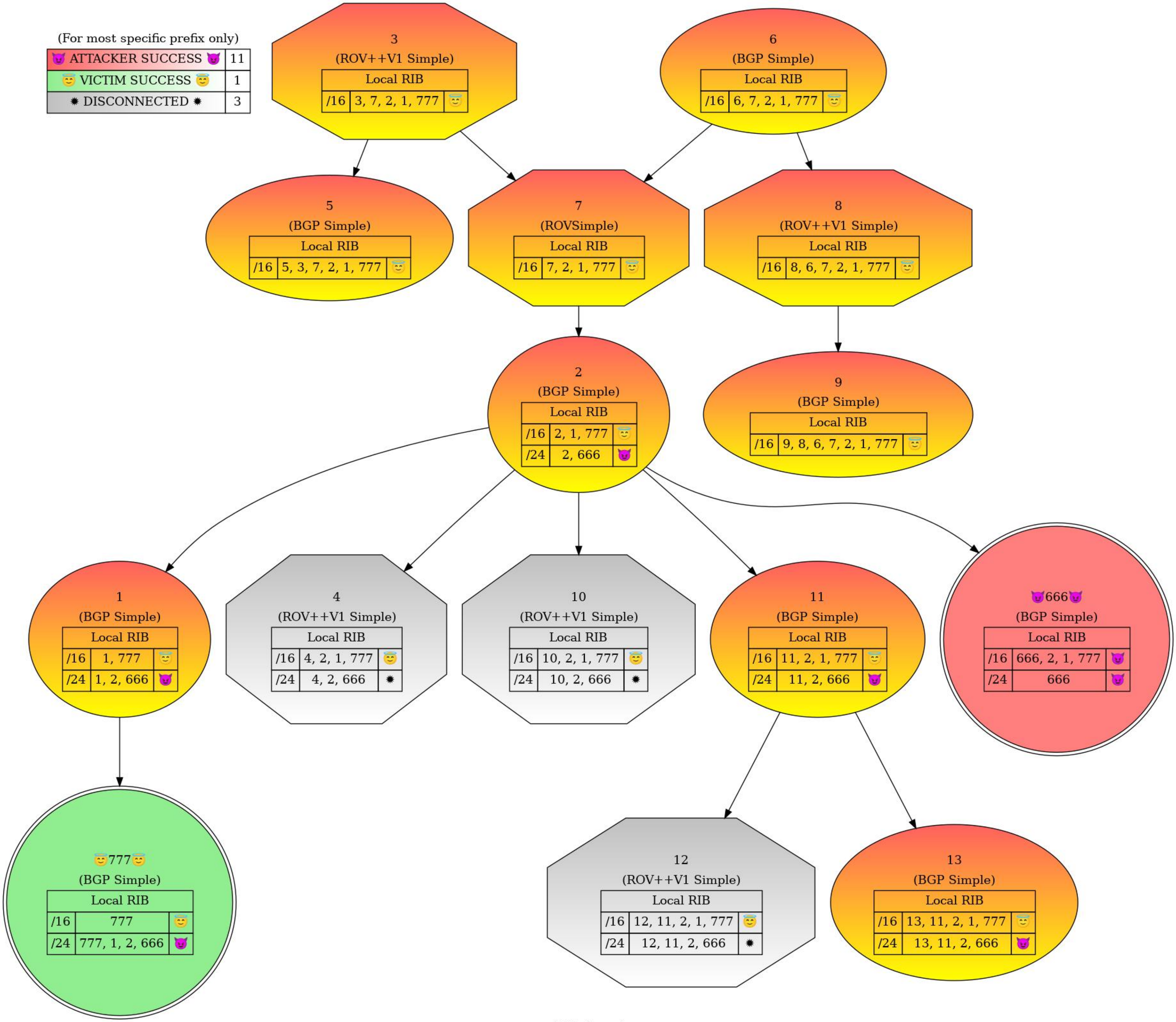

(128 Ground Truth)
Subprefix Hijack with V4 Lite k=2



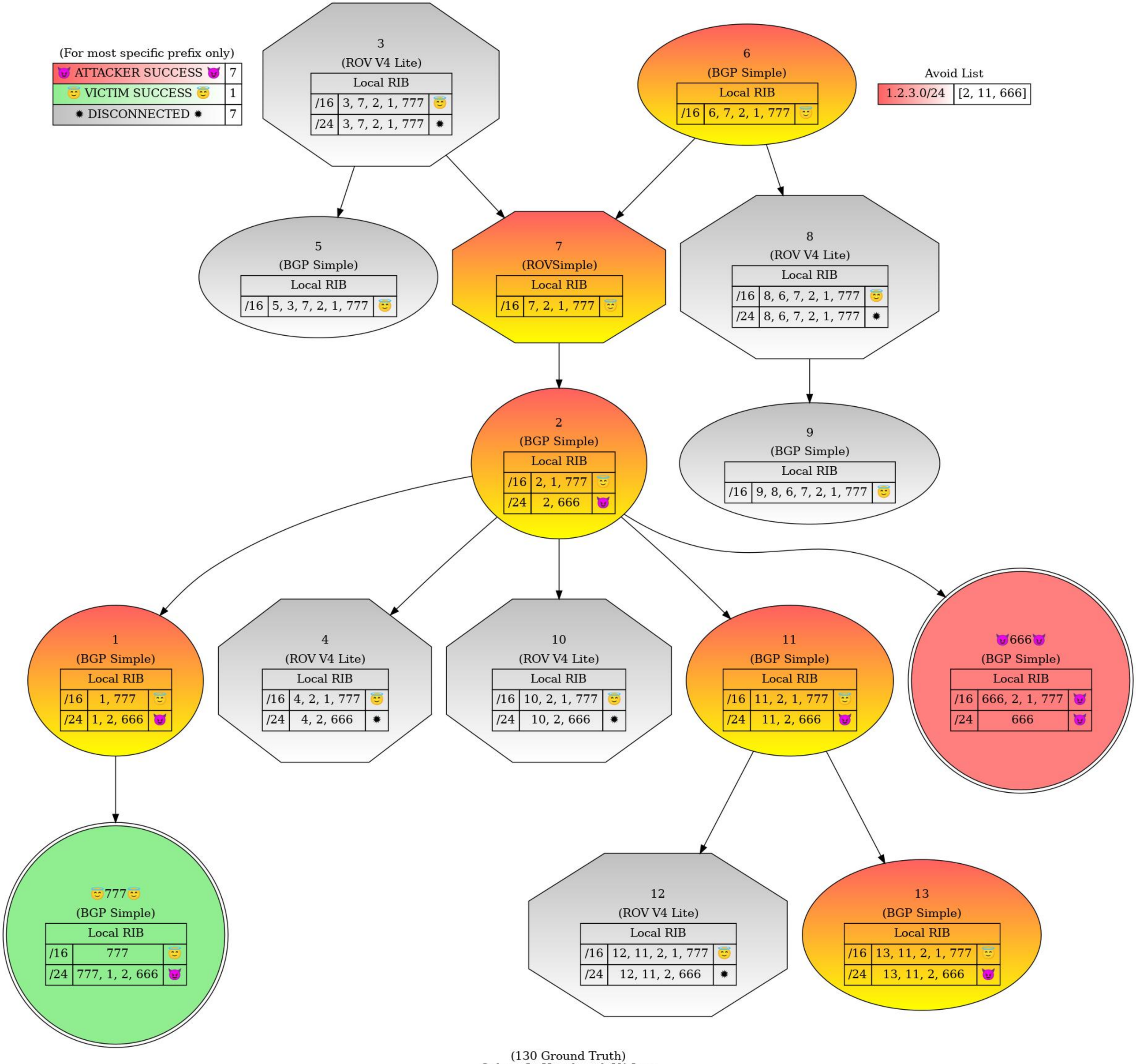

(128 Guess)
Subprefix Hijack with V4 Lite k=2



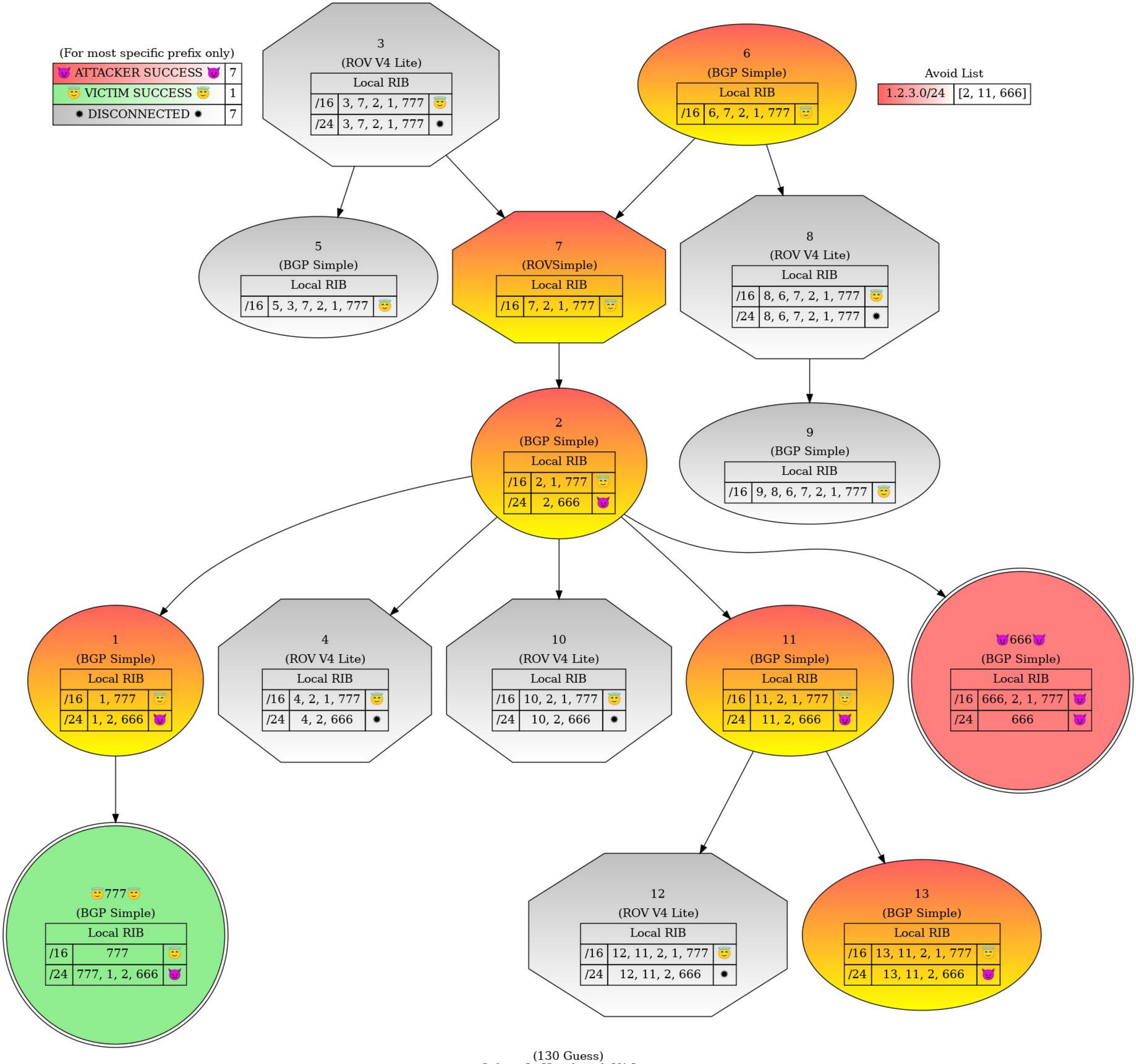

(129 Ground Truth)
Subprefix Hijack with V1 Lite



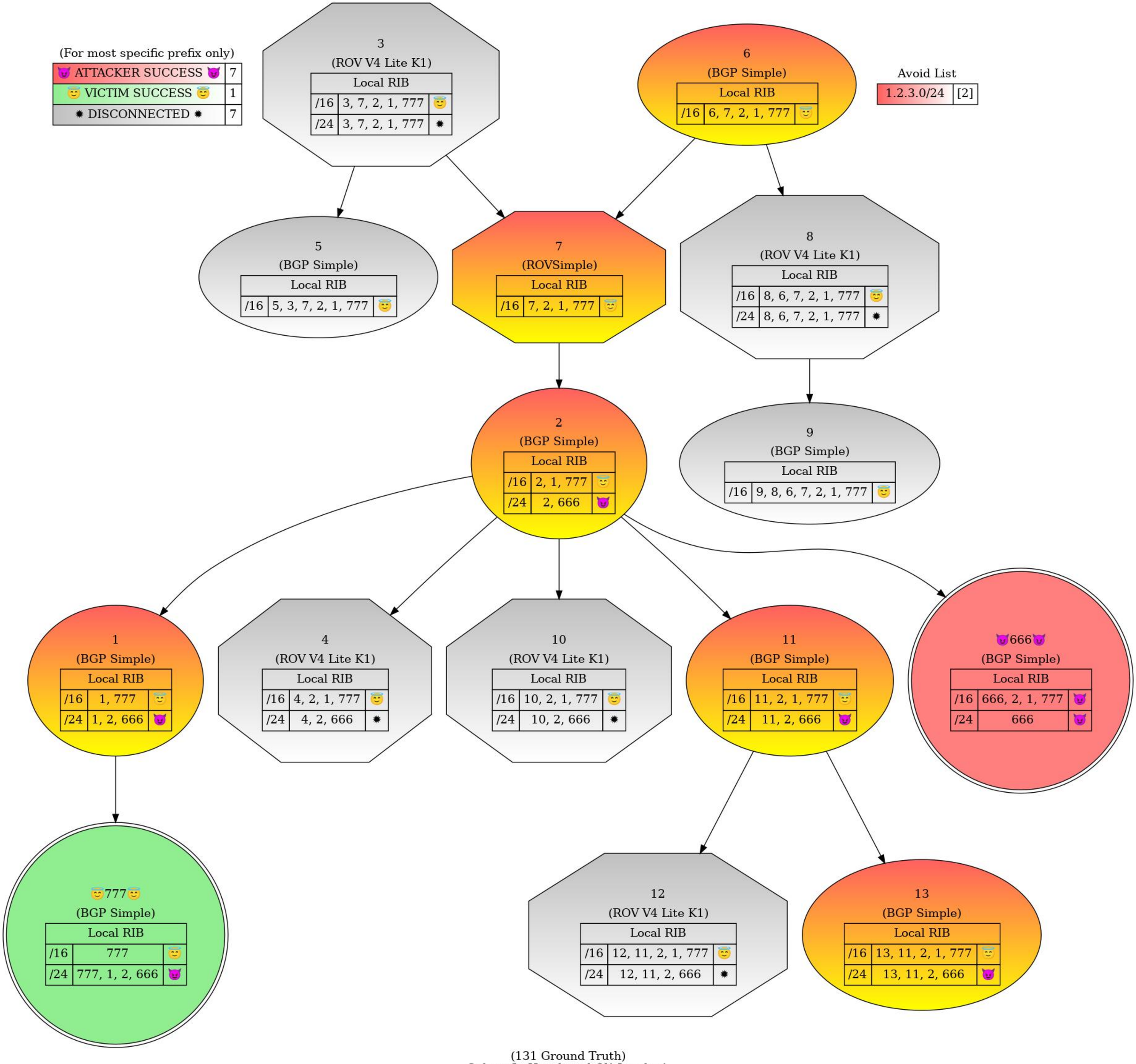

(129 Guess)
Subprefix Hijack with V1 Lite



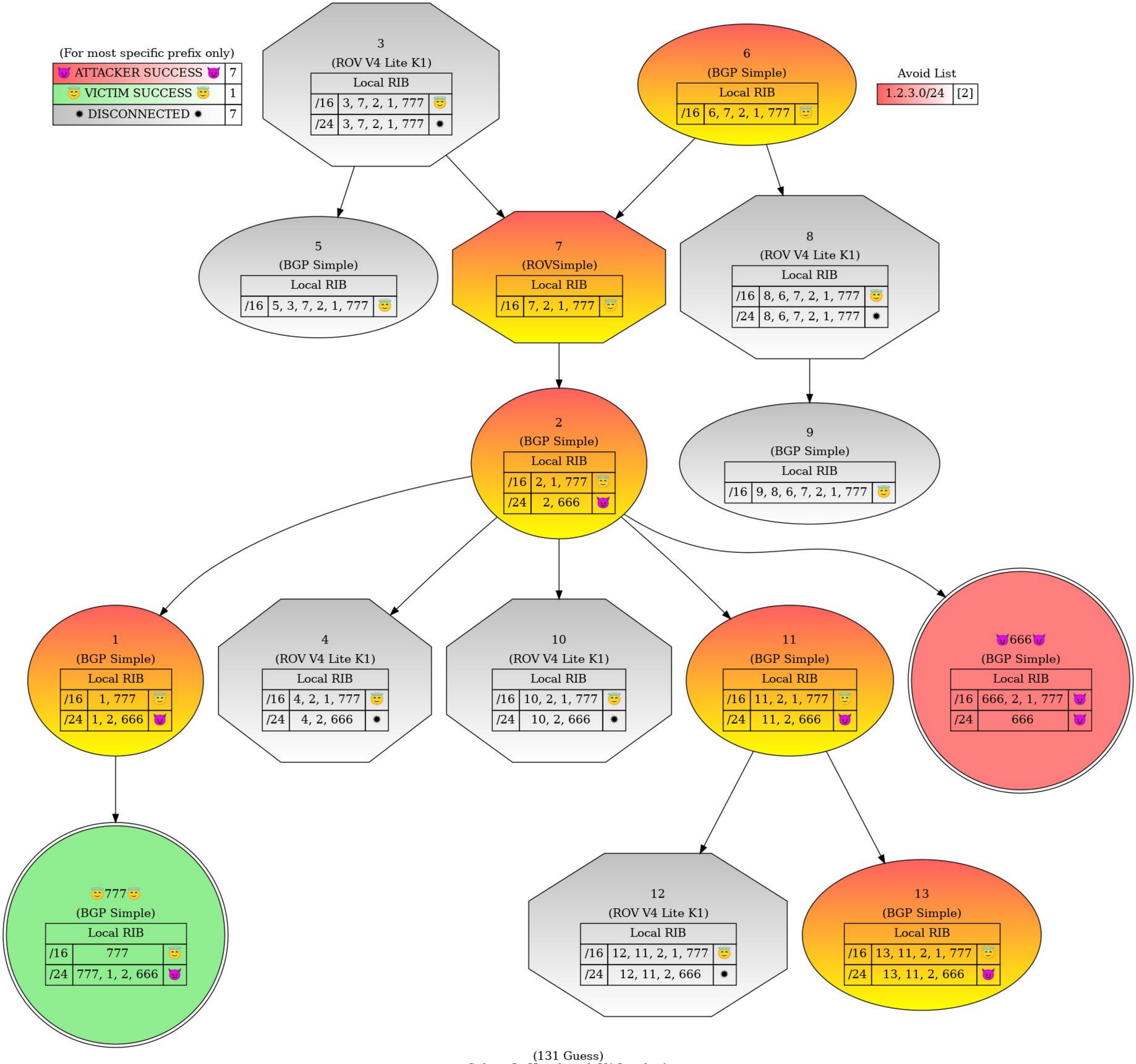

(130 Ground Truth)
Subprefix Hijack with V4 Lite



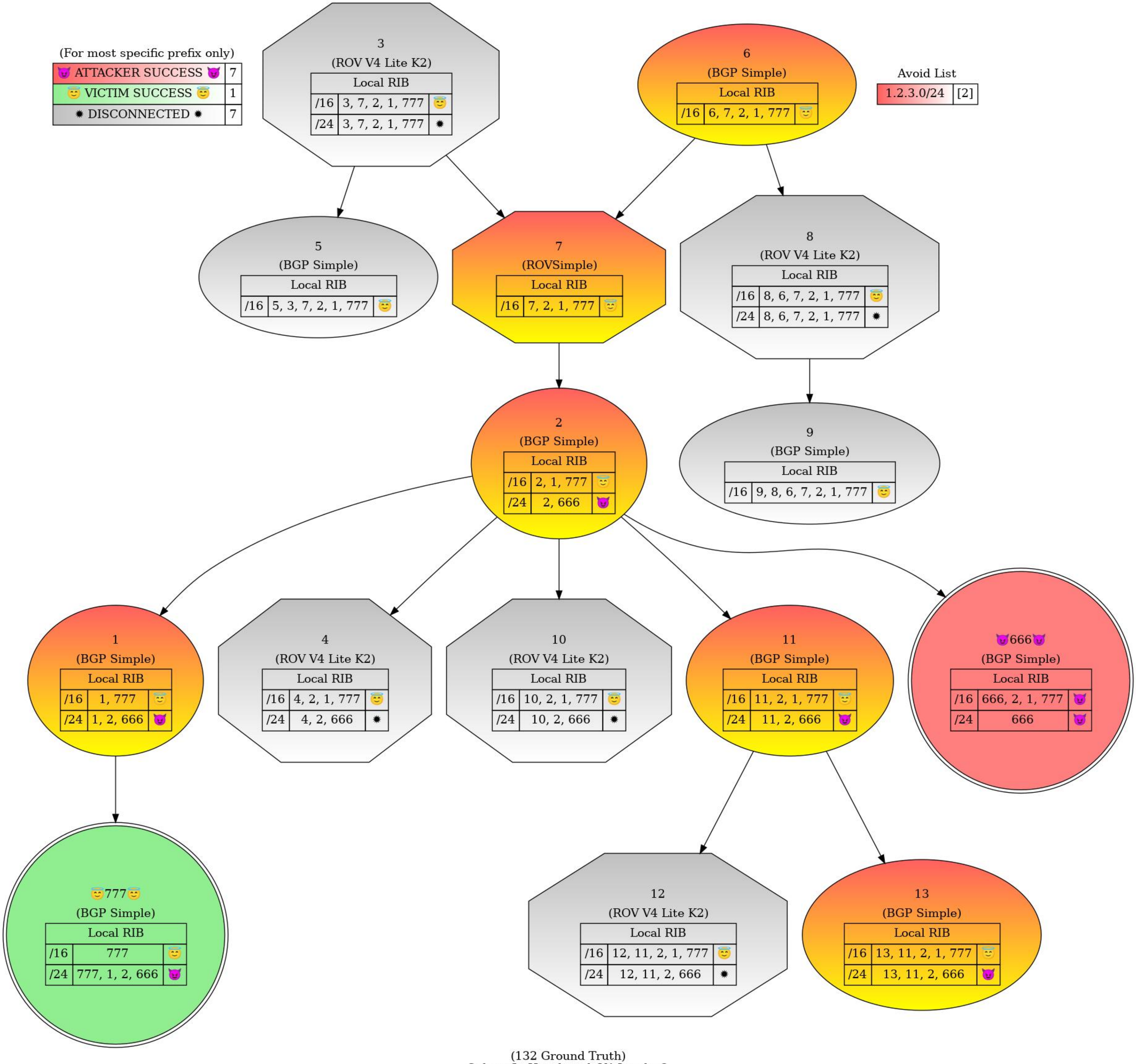

(130 Guess)
Subprefix Hijack with V4 Lite



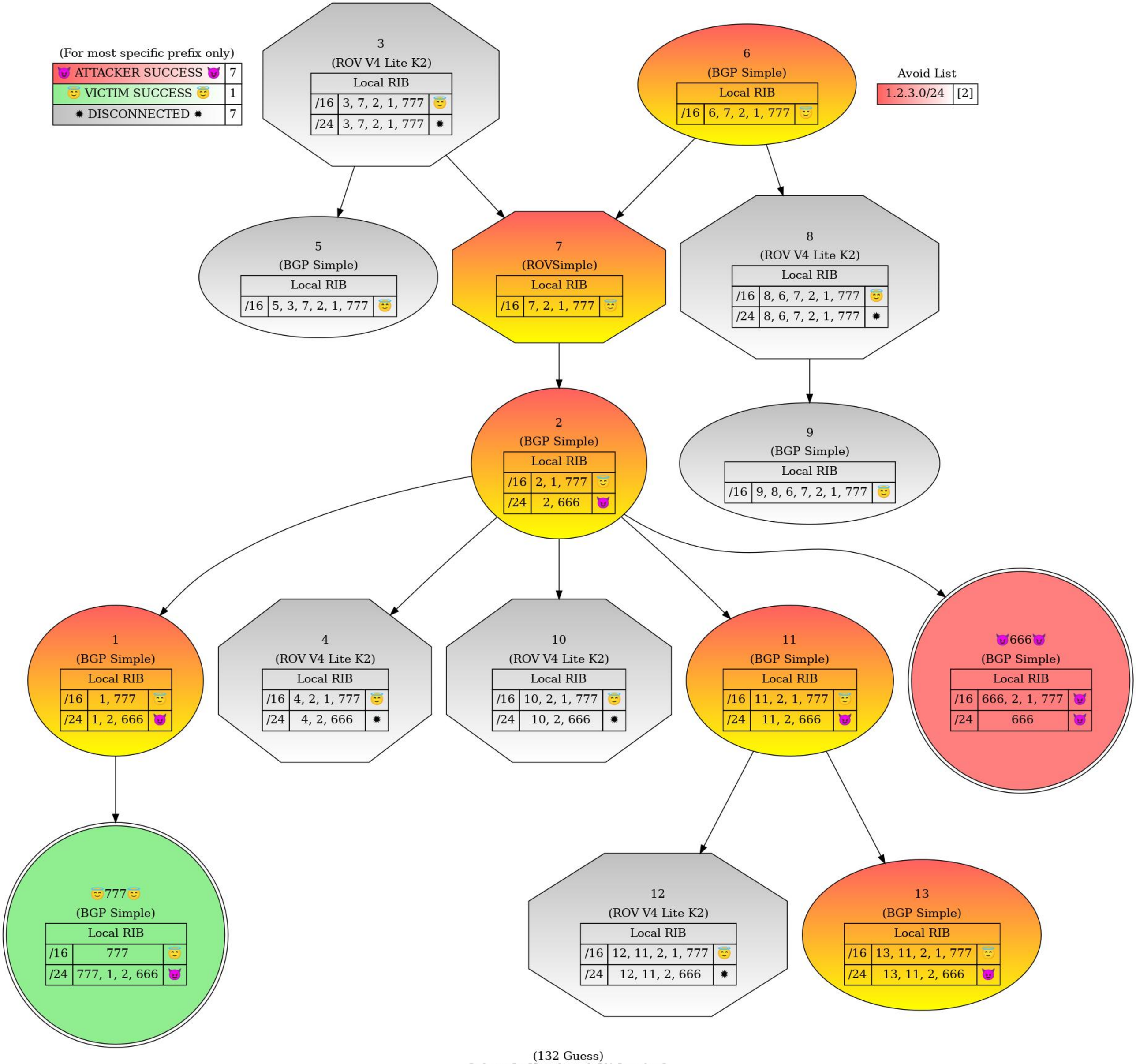

(131 Ground Truth)
Subprefix Hijack with V4 Lite k=1



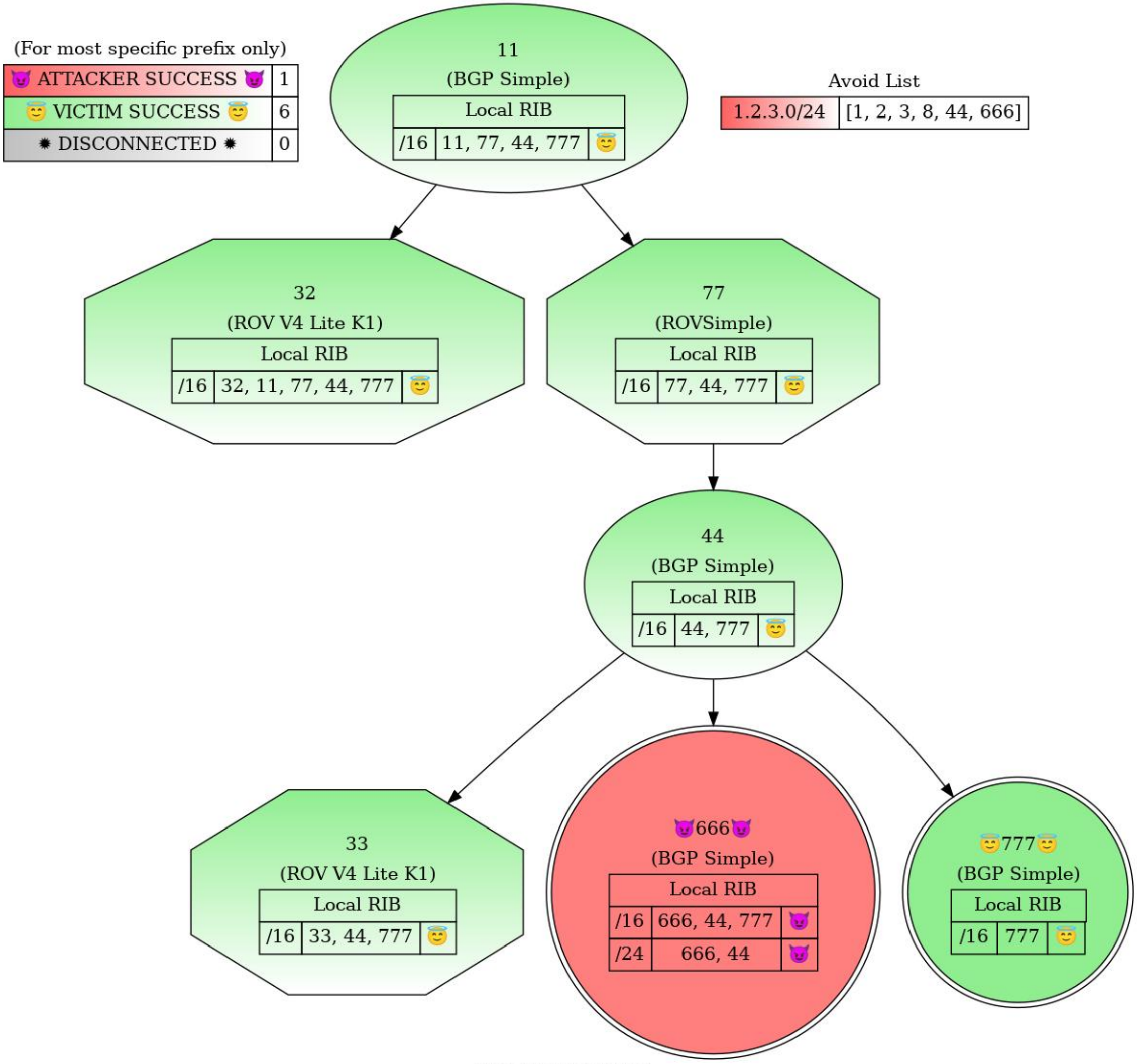

(131 Guess)
Subprefix Hijack with V4 Lite k=1



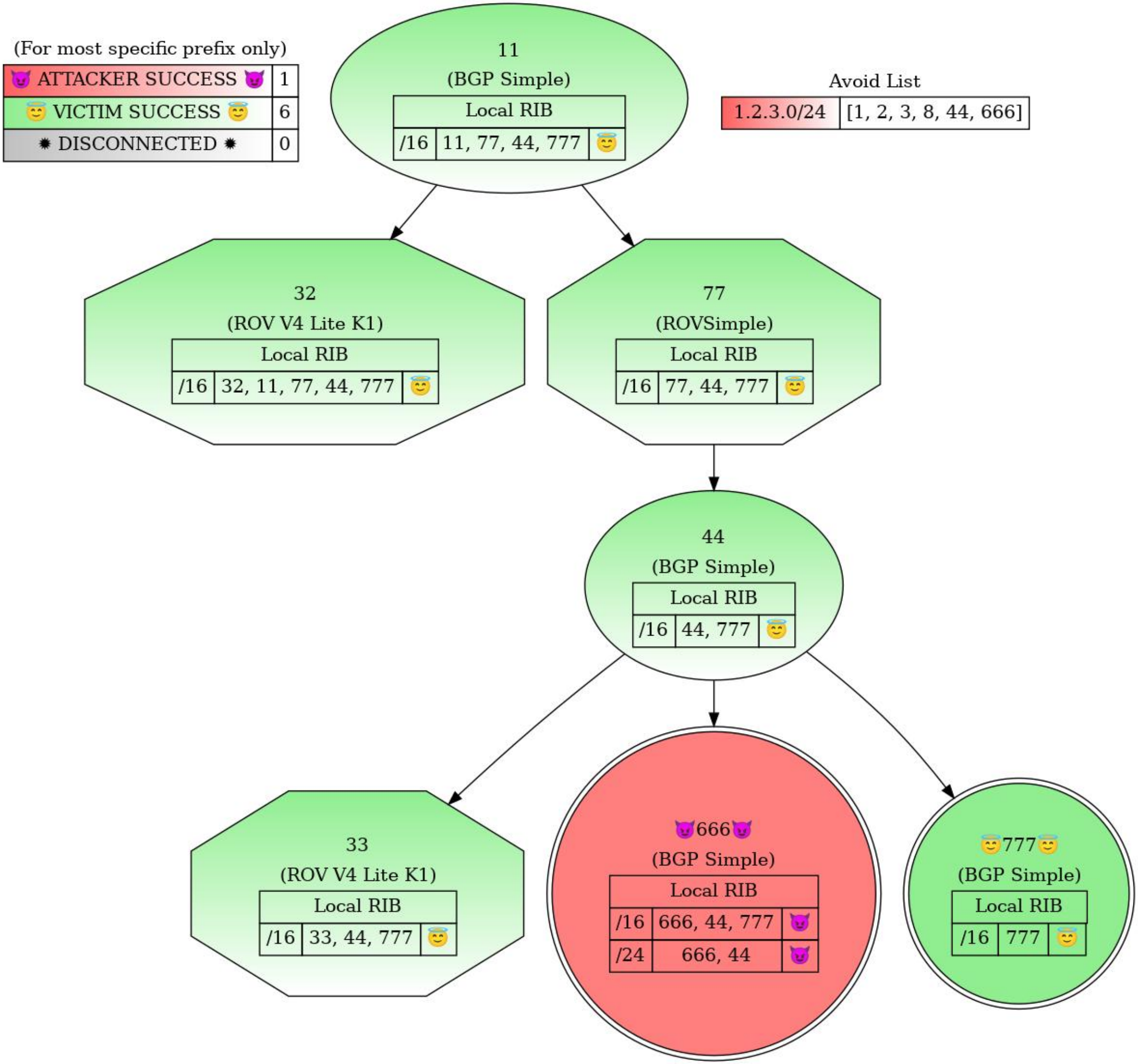

(132 Ground Truth)
Subprefix Hijack with V4 Lite k=2



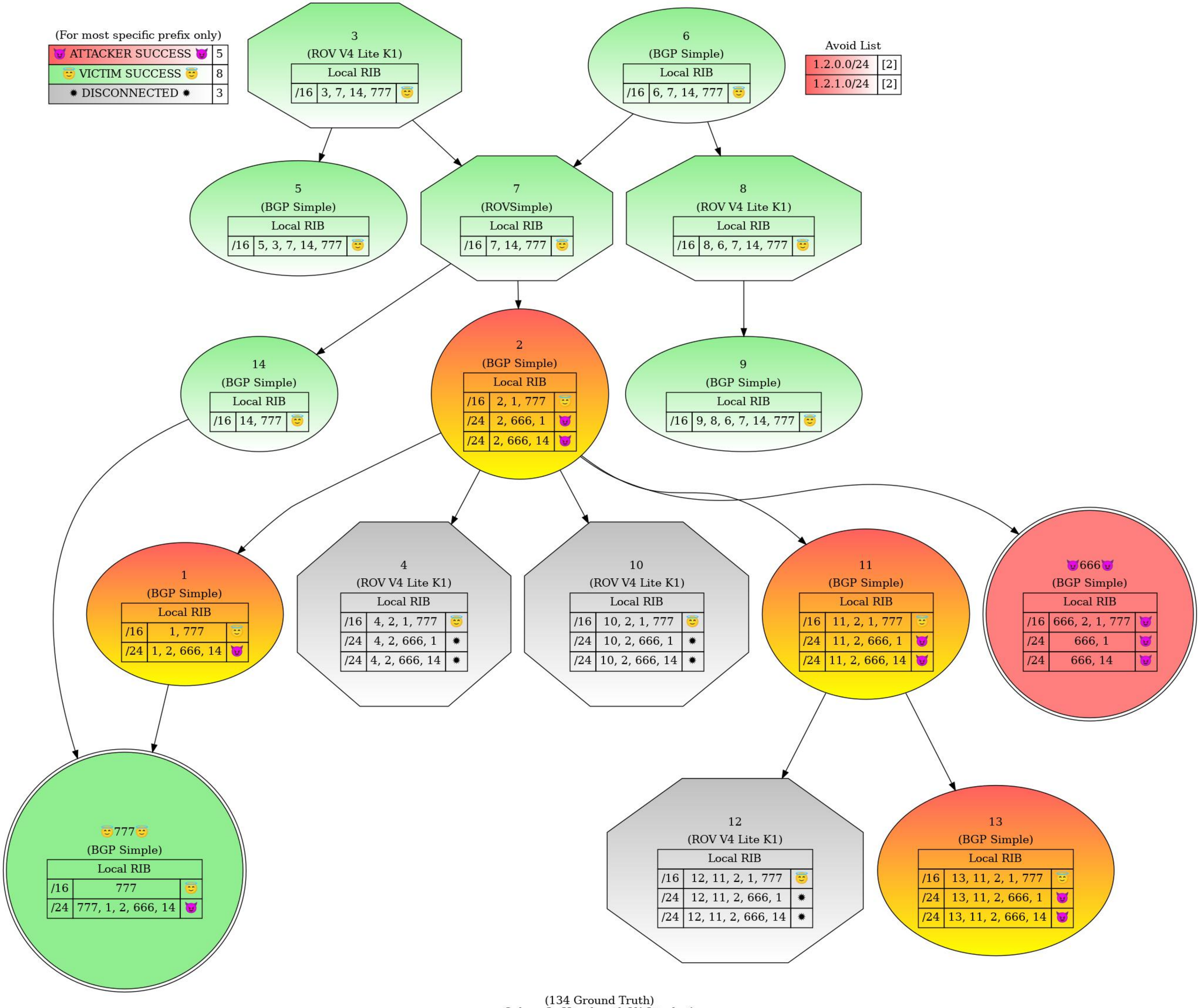

(132 Guess)
Subprefix Hijack with V4 Lite k=2



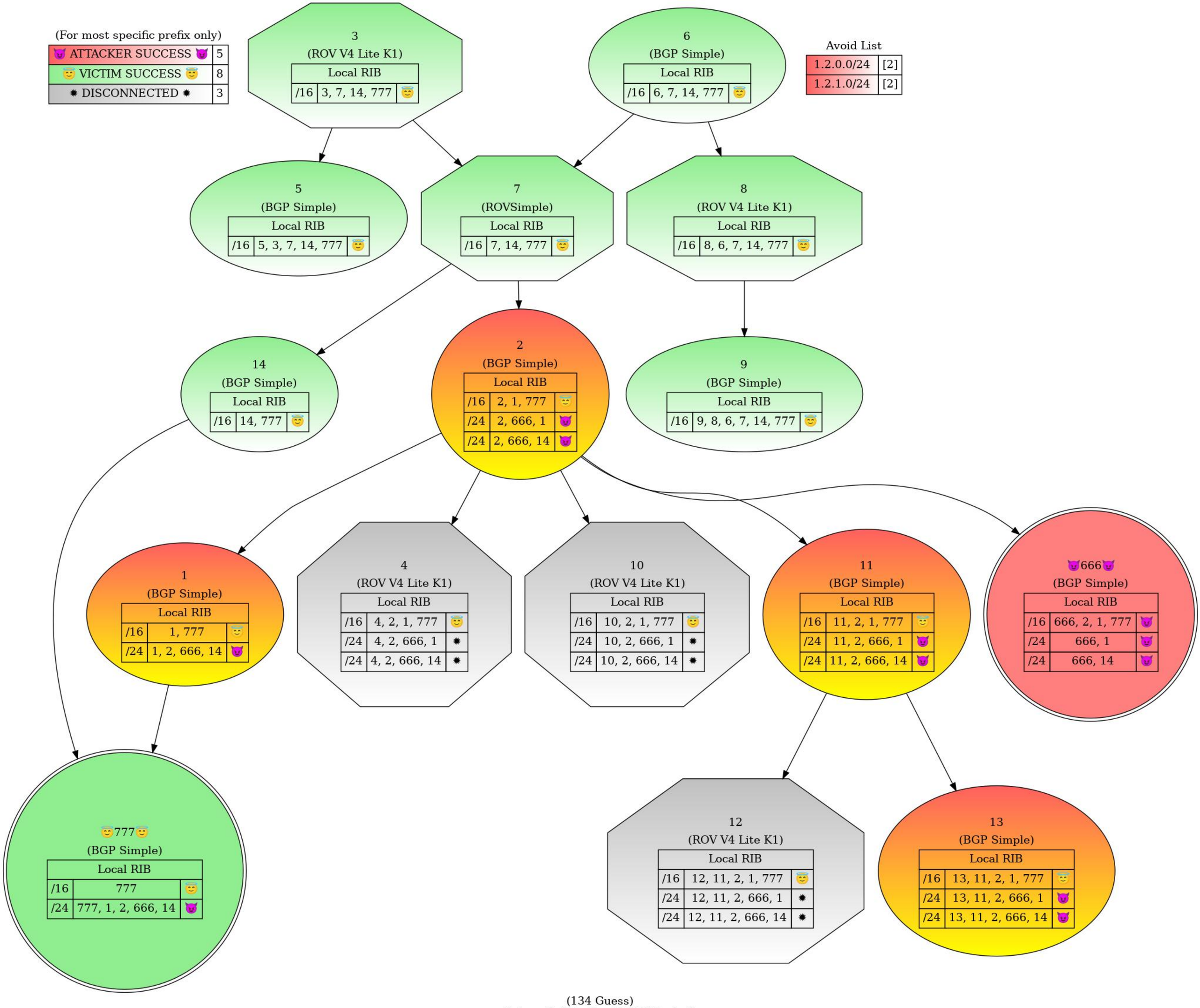

(133 Ground Truth)
Subprefix Hijack with V4 Lite k=1



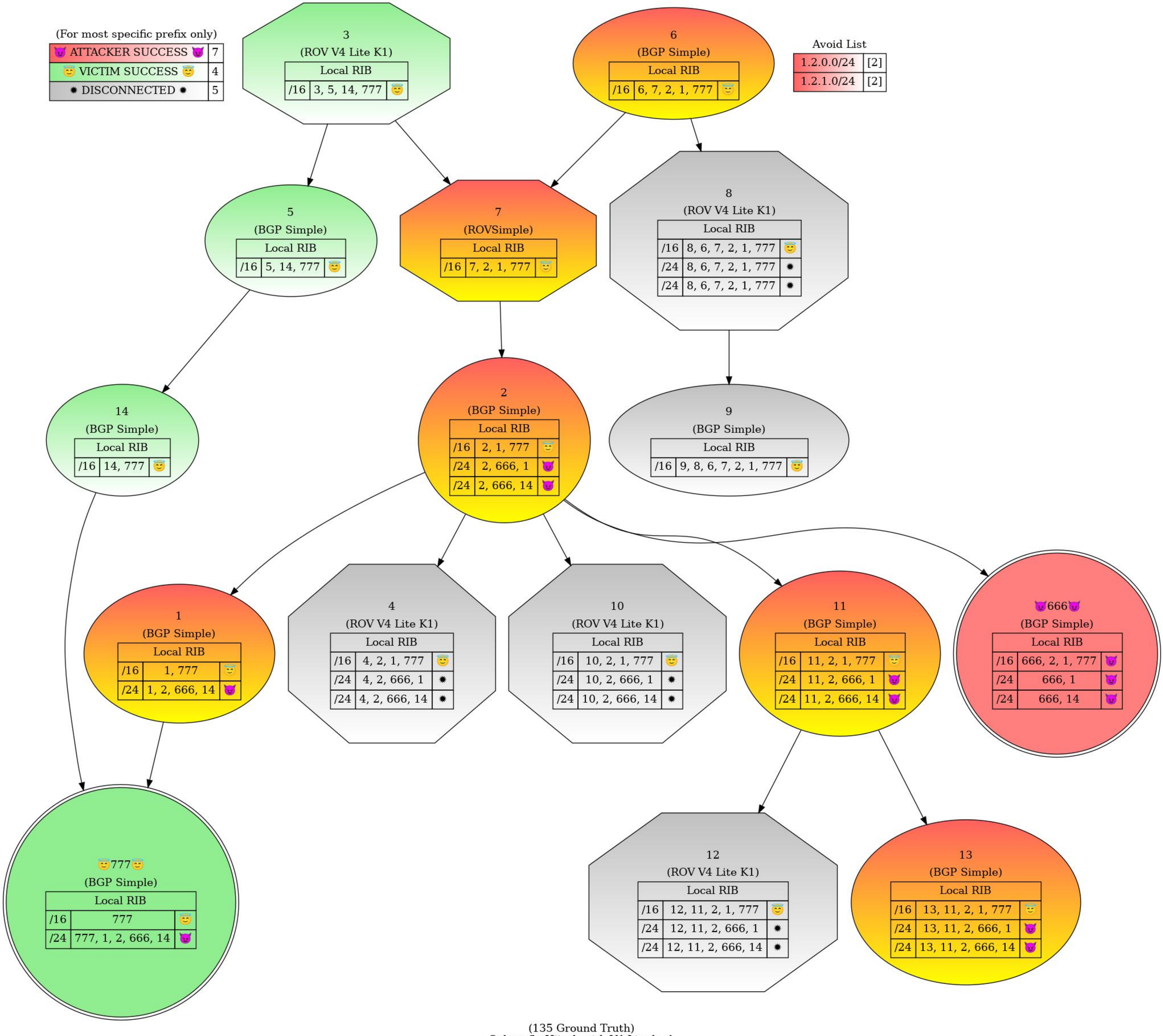

(133 Guess)
Subprefix Hijack with V4 Lite k=1



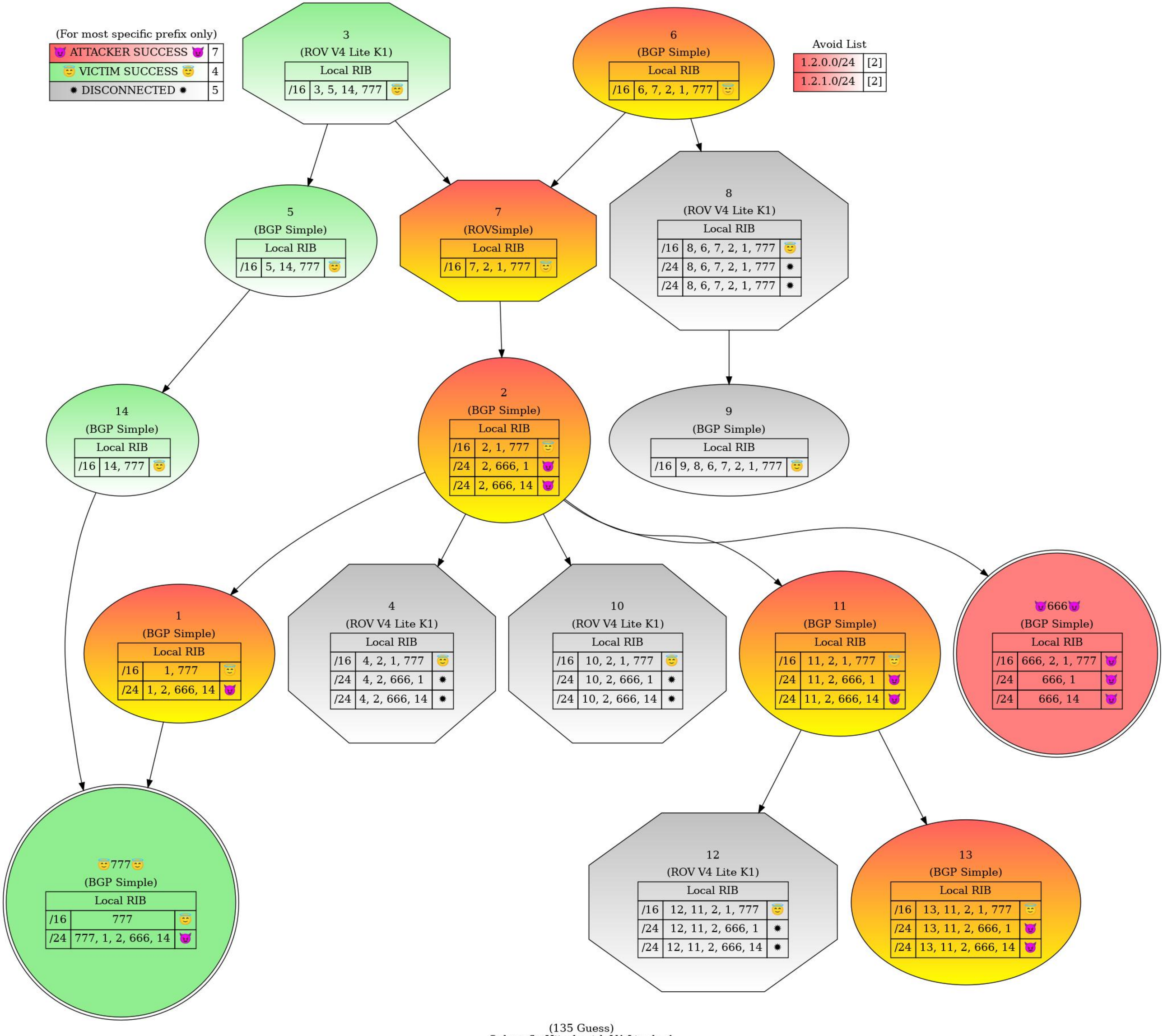

(134 Ground Truth)
Subprefix Hijack with V4 Lite k=1



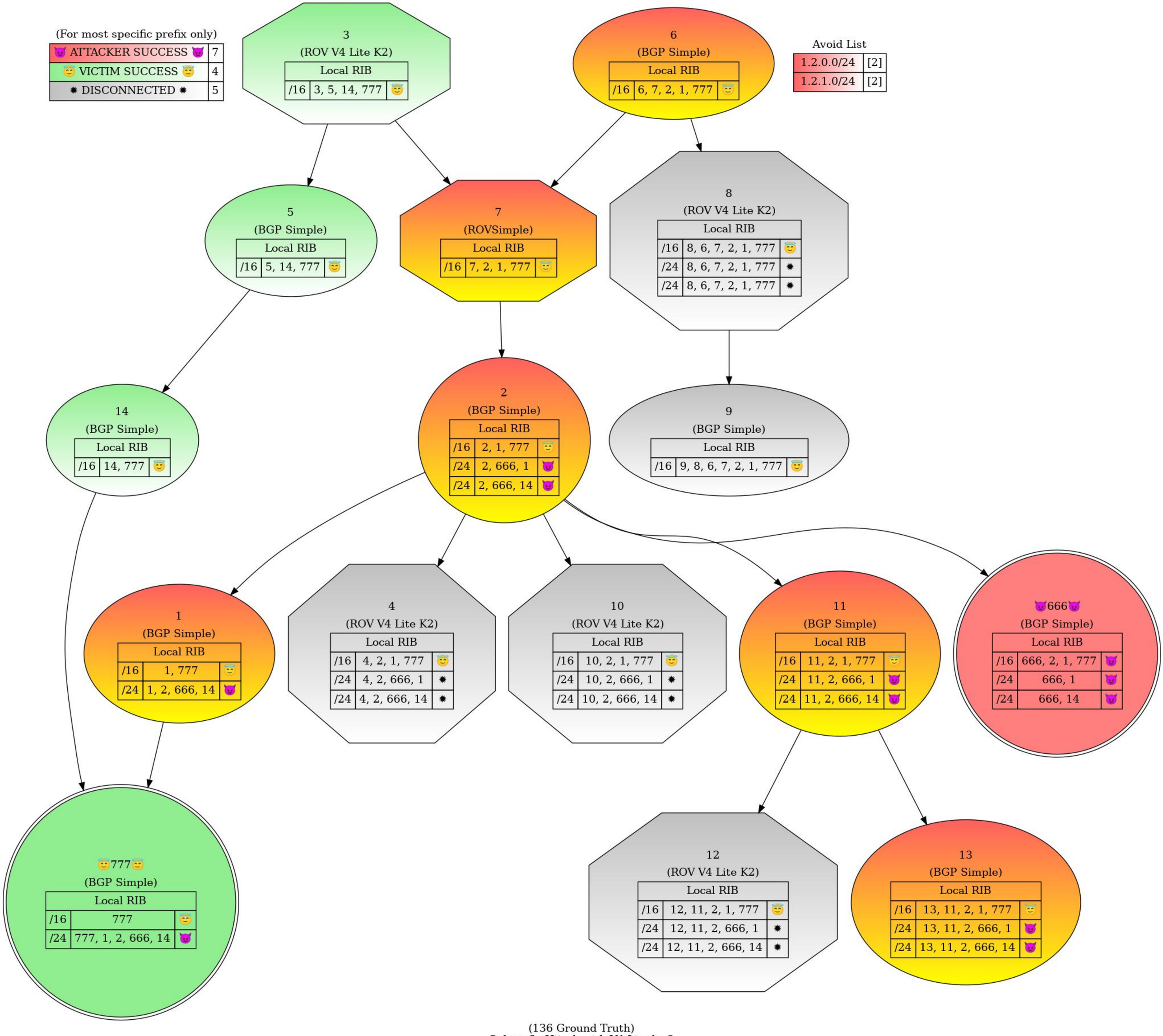

(134 Guess)
Subprefix Hijack with V4 Lite k=1



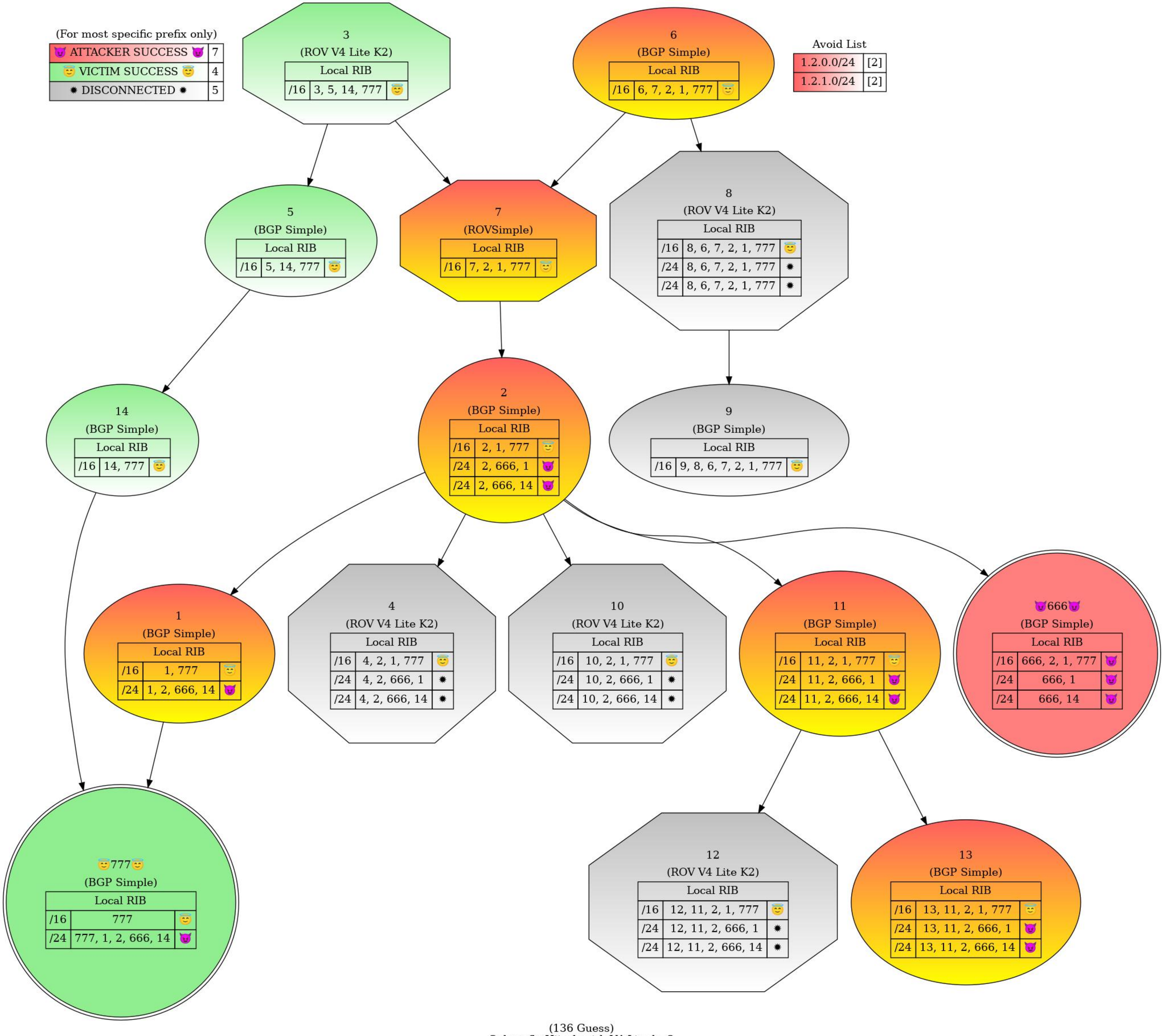

(135 Ground Truth)
Subprefix Hijack with V4 Lite k=1



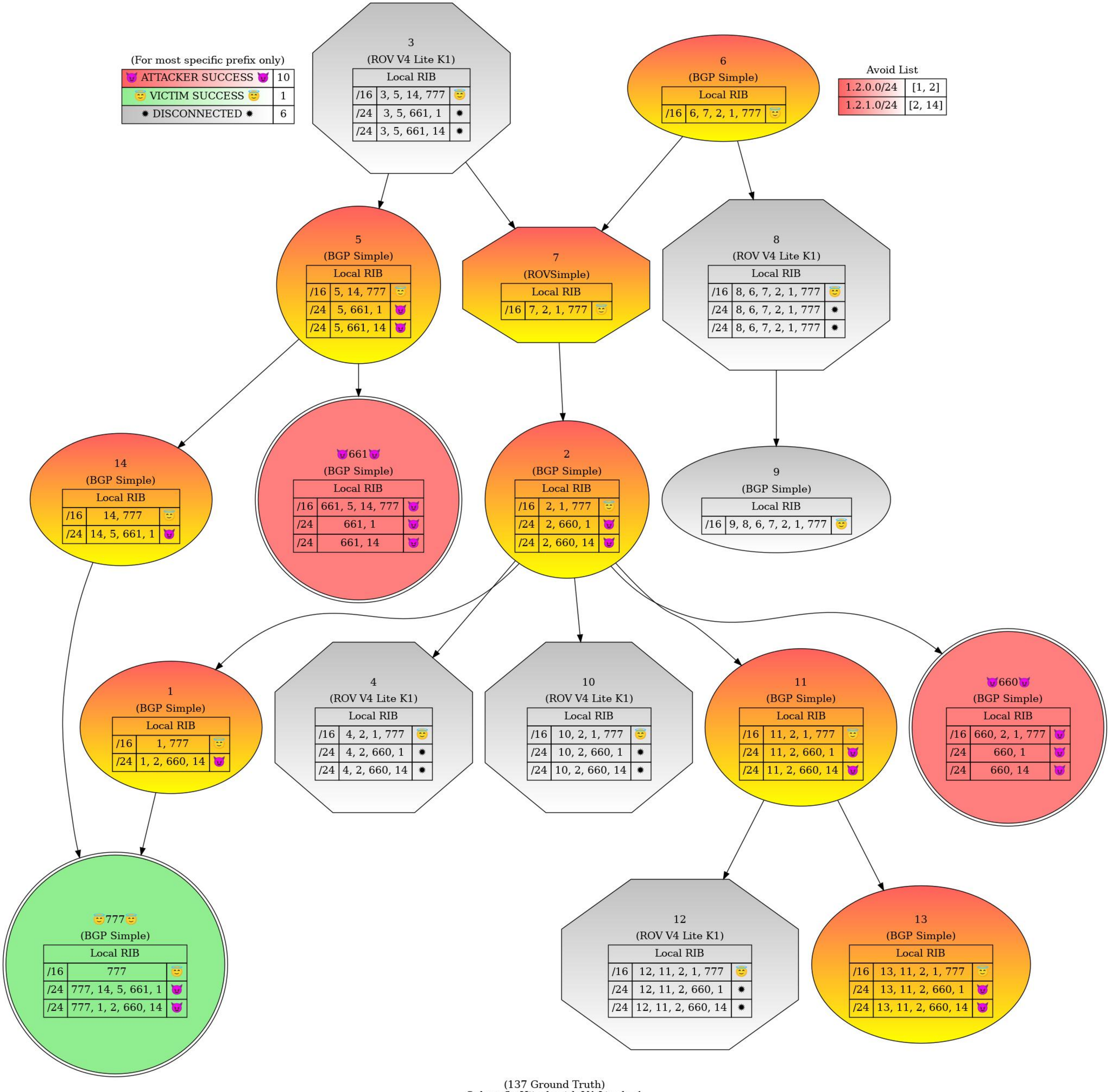

(135 Guess)
Subprefix Hijack with V4 Lite k=1



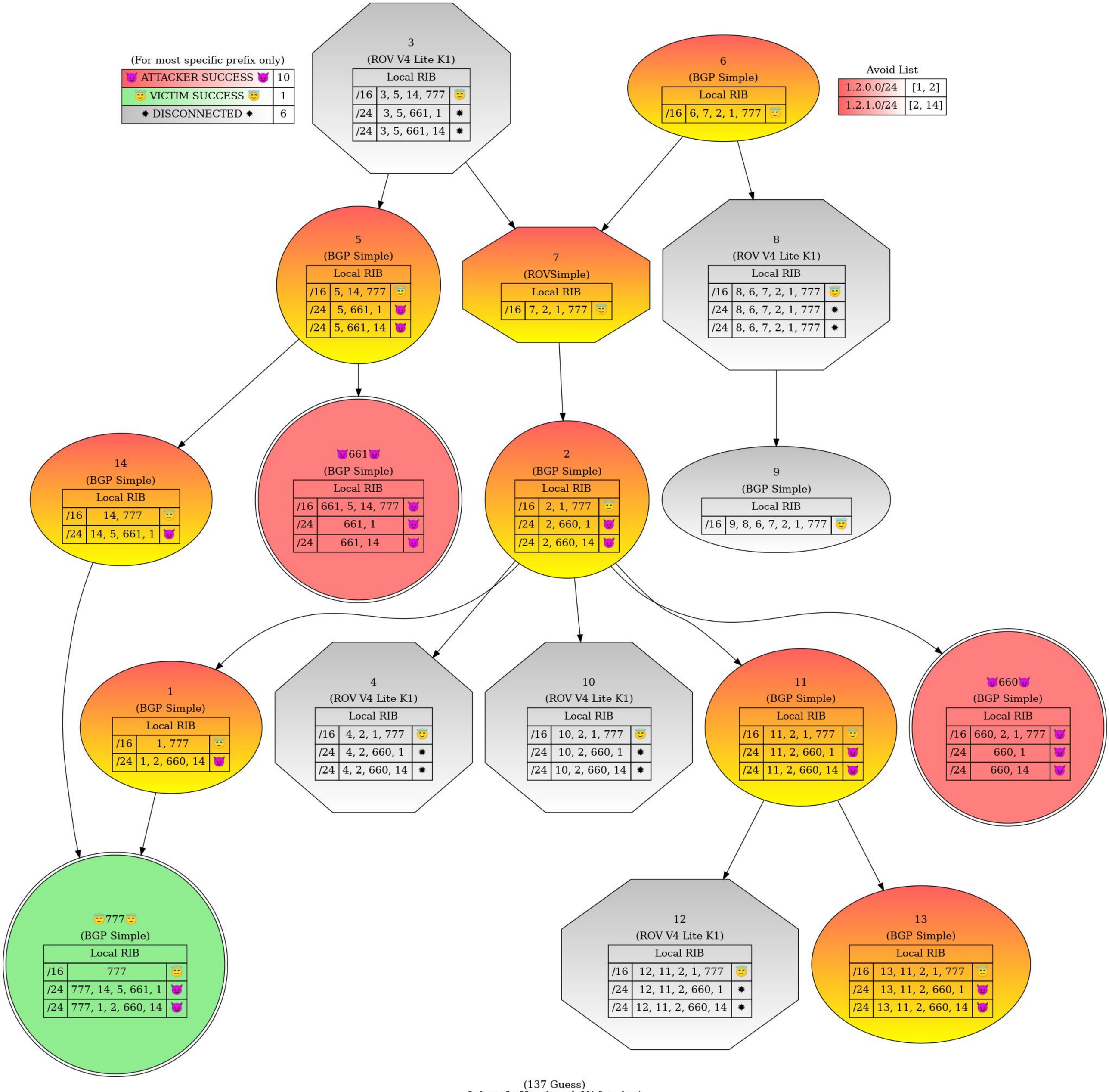

(136 Ground Truth)
Subprefix Hijack with V4 Lite k=2



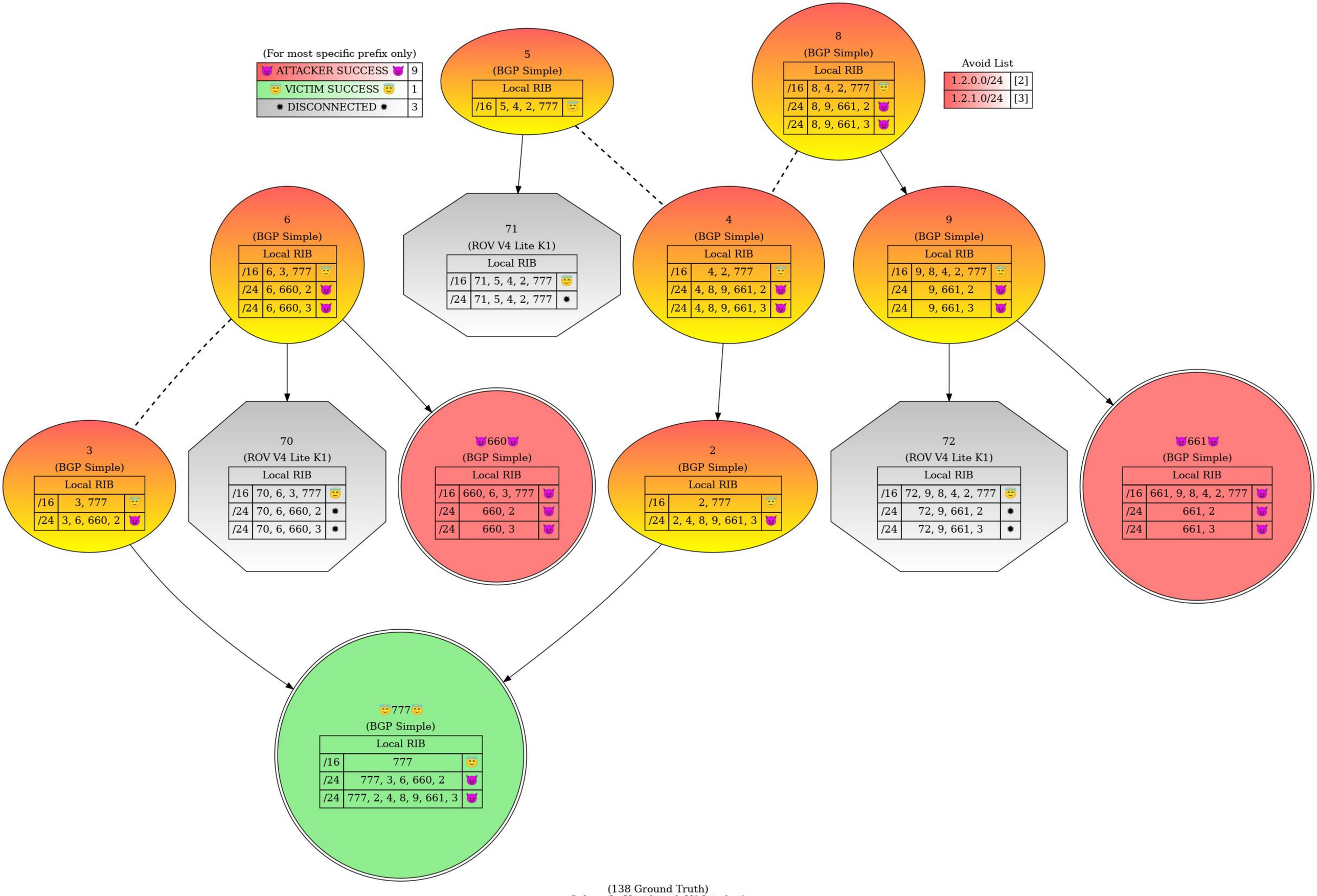

(136 Guess)
Subprefix Hijack with V4 Lite k=2



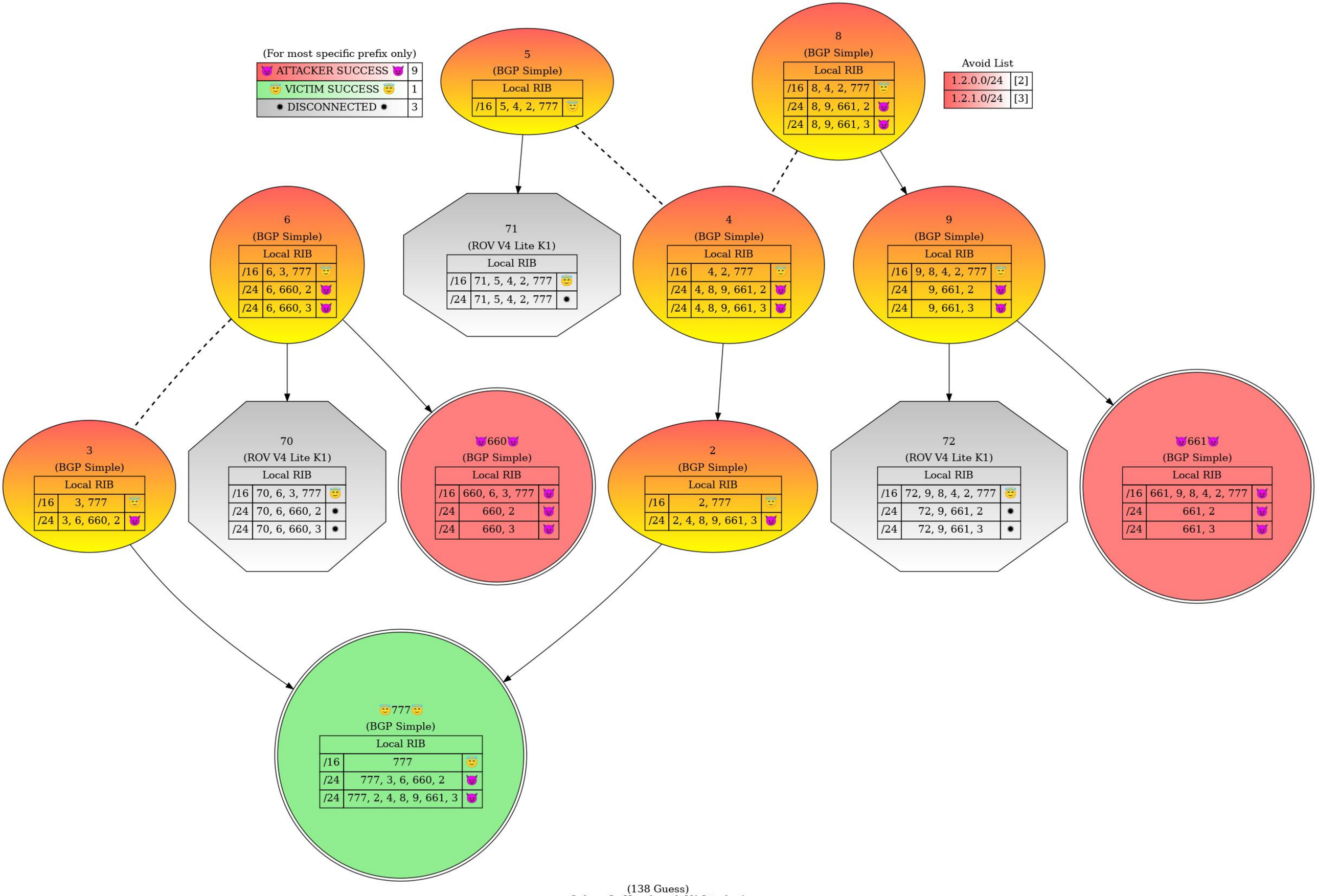

(137 Ground Truth)
Subprefix Hijack with V4 Lite k=1



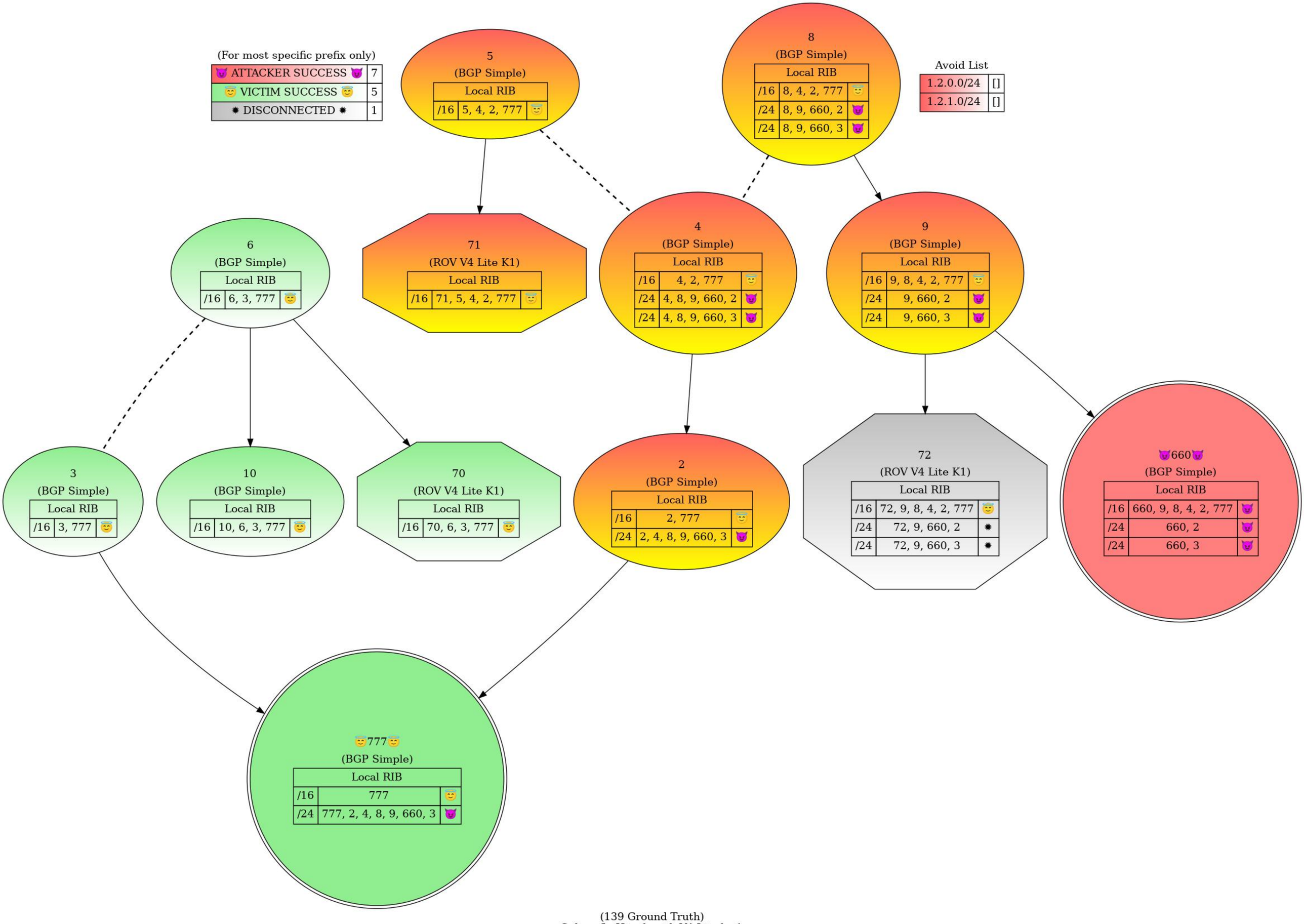

(137 Guess)
Subprefix Hijack with V4 Lite k=1



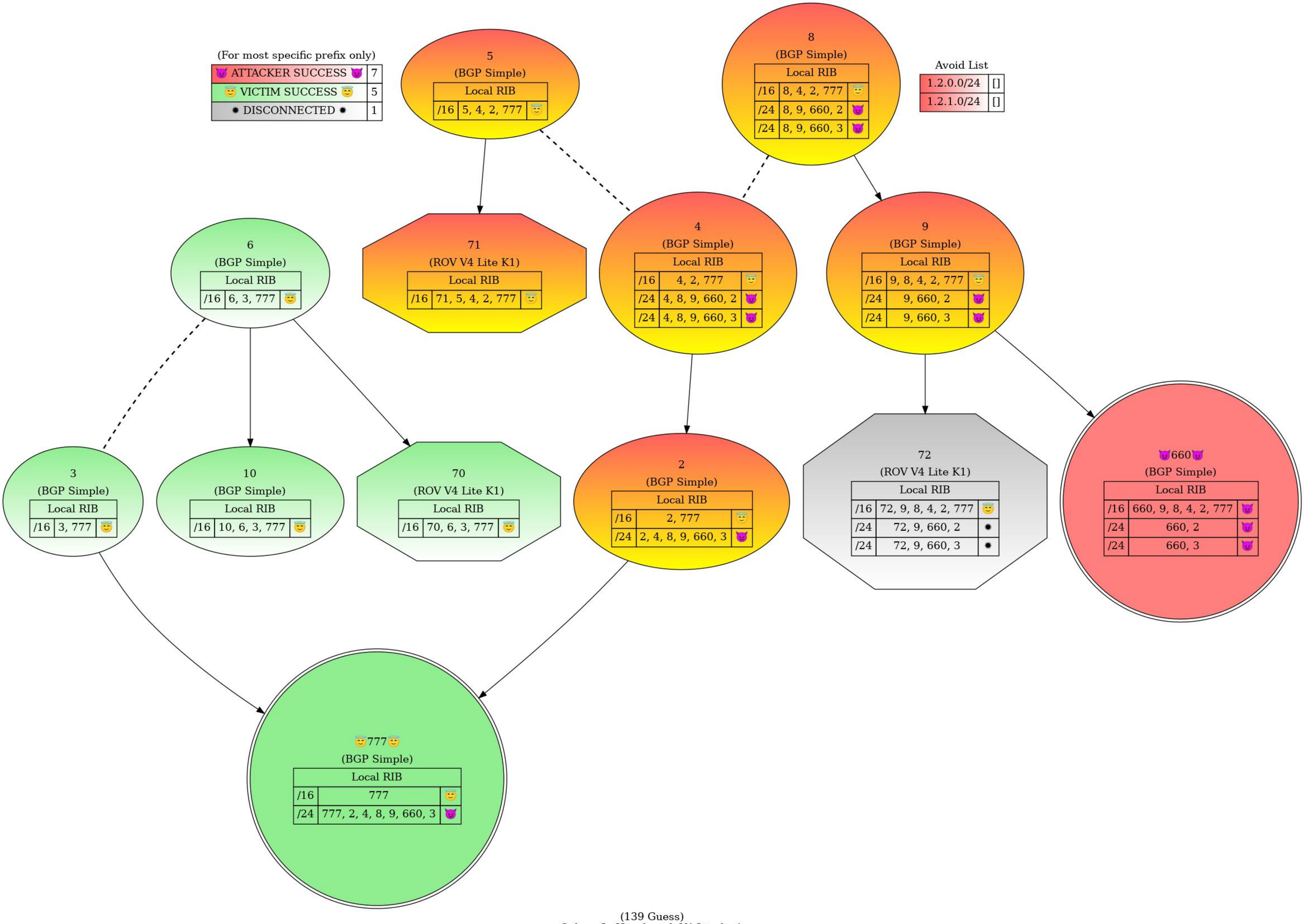

(138 Ground Truth)
Subprefix Hijack with V4 Lite k=1



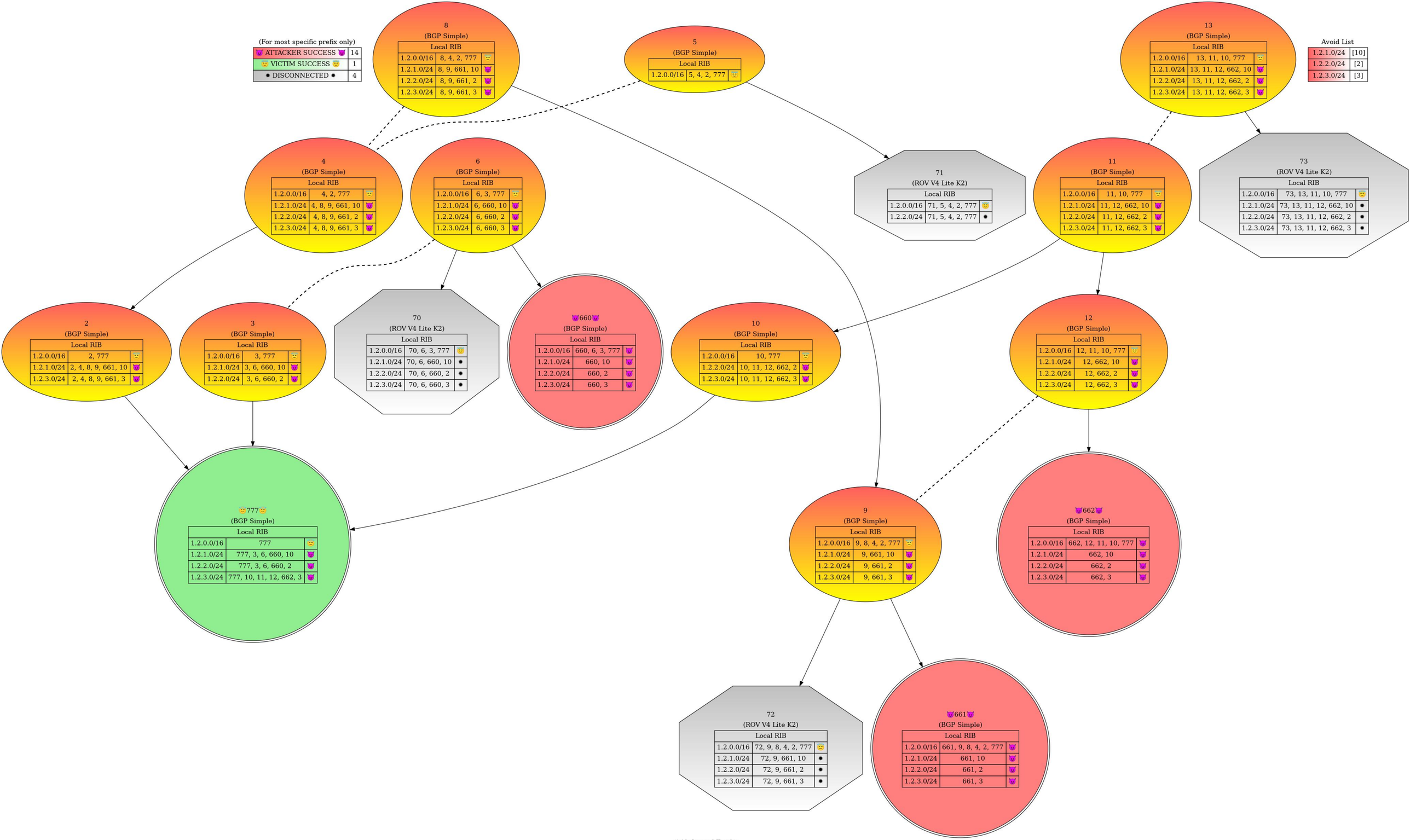

(138 Guess)
Subprefix Hijack with V4 Lite k=1




(139 Ground Truth)
Subprefix Hijack with V4 Lite k=1




(139 Guess)
Subprefix Hijack with V4 Lite k=1




(140 Ground Truth)
Subprefix Hijack with V4 Lite k=2

(For most specific prefix only)

| | |
|---|---|
| 😈 ATTACKER SUCCESS 😈 | 14 |
| 😊 VICTIM SUCCESS 😊 | 1 |
| ● DISCONNECTED ● | 4 |

Avoid List

| | |
|---|---|
| 1.2.1.0/24 | [10] |
| 1.2.2.0/24 | [2] |
| 1.2.3.0/24 | [3] |

8
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 8, 4, 2, 777 | 😊 |
| 1.2.1.0/24 | 8, 9, 661, 10 | 😈 |
| 1.2.2.0/24 | 8, 9, 661, 2 | 😈 |
| 1.2.3.0/24 | 8, 9, 661, 3 | 😈 |

5
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 5, 4, 2, 777 | 😊 |

13
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 13, 11, 10, 777 | 😊 |
| 1.2.1.0/24 | 13, 11, 12, 662, 10 | 😈 |
| 1.2.2.0/24 | 13, 11, 12, 662, 2 | 😈 |
| 1.2.3.0/24 | 13, 11, 12, 662, 3 | 😈 |

4
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 4, 2, 777 | 😊 |
| 1.2.1.0/24 | 4, 8, 9, 661, 10 | 😈 |
| 1.2.2.0/24 | 4, 8, 9, 661, 2 | 😈 |
| 1.2.3.0/24 | 4, 8, 9, 661, 3 | 😈 |

6
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 6, 3, 777 | 😊 |
| 1.2.1.0/24 | 6, 660, 10 | 😈 |
| 1.2.2.0/24 | 6, 660, 2 | 😈 |
| 1.2.3.0/24 | 6, 660, 3 | 😈 |

71
(ROV V4 Lite K2)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 71, 5, 4, 2, 777 | 😊 |
| 1.2.2.0/24 | 71, 5, 4, 2, 777 | ● |

11
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 11, 10, 777 | 😊 |
| 1.2.1.0/24 | 11, 12, 662, 10 | 😈 |
| 1.2.2.0/24 | 11, 12, 662, 2 | 😈 |
| 1.2.3.0/24 | 11, 12, 662, 3 | 😈 |

73
(ROV V4 Lite K2)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 73, 13, 11, 10, 777 | 😊 |
| 1.2.1.0/24 | 73, 13, 11, 12, 662, 10 | ● |
| 1.2.2.0/24 | 73, 13, 11, 12, 662, 2 | ● |
| 1.2.3.0/24 | 73, 13, 11, 12, 662, 3 | ● |

2
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 2, 777 | 😊 |
| 1.2.1.0/24 | 2, 4, 8, 9, 661, 10 | 😈 |
| 1.2.3.0/24 | 2, 4, 8, 9, 661, 3 | 😈 |

3
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 3, 777 | 😊 |
| 1.2.1.0/24 | 3, 6, 660, 10 | 😈 |
| 1.2.2.0/24 | 3, 6, 660, 2 | 😈 |

70
(ROV V4 Lite K2)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 70, 6, 3, 777 | 😊 |
| 1.2.1.0/24 | 70, 6, 660, 10 | ● |
| 1.2.2.0/24 | 70, 6, 660, 2 | ● |
| 1.2.3.0/24 | 70, 6, 660, 3 | ● |

😈660😈
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 660, 6, 3, 777 | 😈 |
| 1.2.1.0/24 | 660, 10 | 😈 |
| 1.2.2.0/24 | 660, 2 | 😈 |
| 1.2.3.0/24 | 660, 3 | 😈 |

10
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 10, 777 | 😊 |
| 1.2.2.0/24 | 10, 11, 12, 662, 2 | 😈 |
| 1.2.3.0/24 | 10, 11, 12, 662, 3 | 😈 |

12
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 12, 11, 10, 777 | 😊 |
| 1.2.1.0/24 | 12, 662, 10 | 😈 |
| 1.2.2.0/24 | 12, 662, 2 | 😈 |
| 1.2.3.0/24 | 12, 662, 3 | 😈 |

😊777😊
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 777 | 😊 |
| 1.2.1.0/24 | 777, 3, 6, 660, 10 | 😈 |
| 1.2.2.0/24 | 777, 3, 6, 660, 2 | 😈 |
| 1.2.3.0/24 | 777, 10, 11, 12, 662, 3 | 😈 |

9
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 9, 8, 4, 2, 777 | 😊 |
| 1.2.1.0/24 | 9, 661, 10 | 😈 |
| 1.2.2.0/24 | 9, 661, 2 | 😈 |
| 1.2.3.0/24 | 9, 661, 3 | 😈 |

😈662😈
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 662, 12, 11, 10, 777 | 😈 |
| 1.2.1.0/24 | 662, 10 | 😈 |
| 1.2.2.0/24 | 662, 2 | 😈 |
| 1.2.3.0/24 | 662, 3 | 😈 |

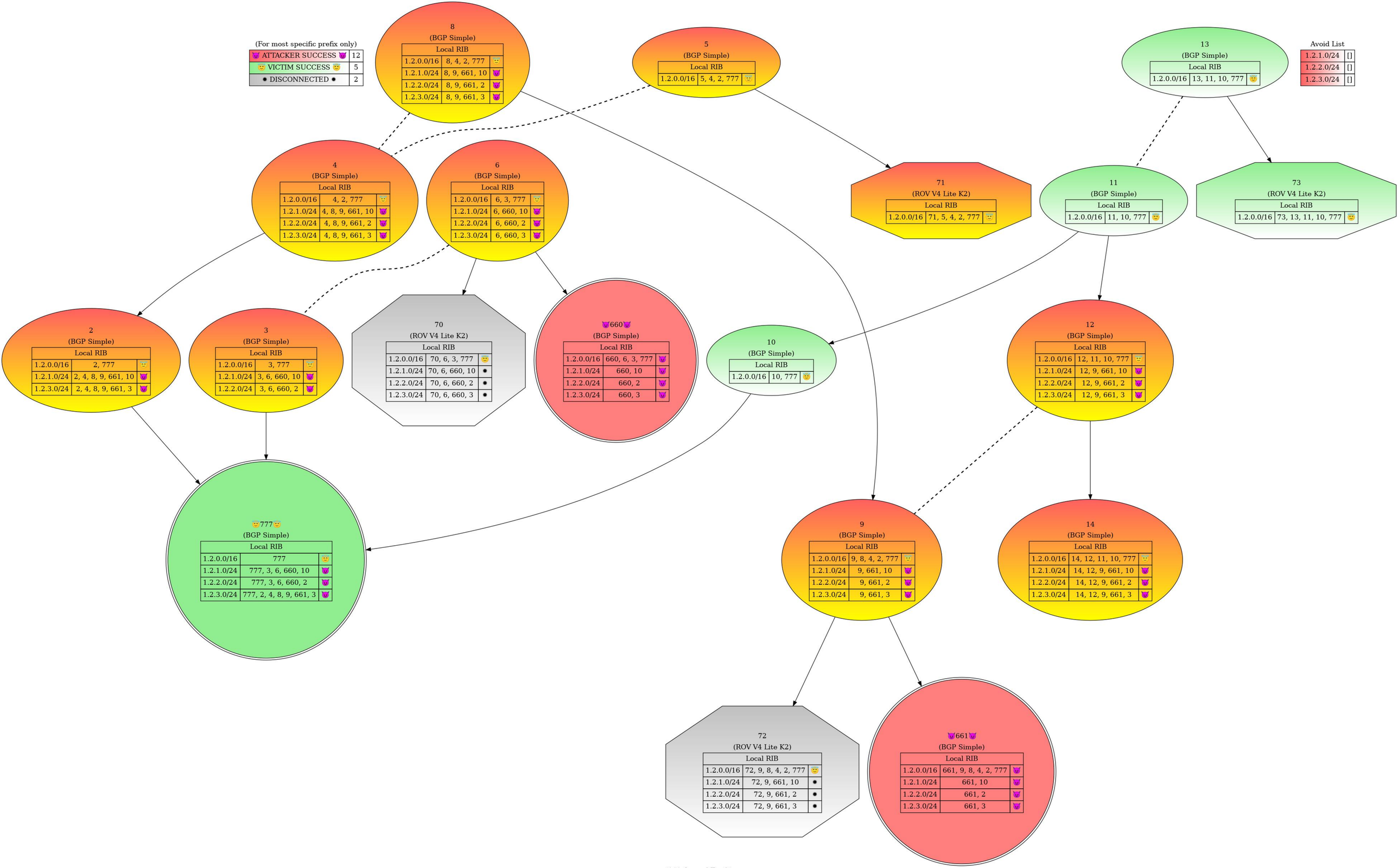
72
(ROV V4 Lite K2)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 72, 9, 8, 4, 2, 777 | 😊 |
| 1.2.1.0/24 | 72, 9, 661, 10 | ● |
| 1.2.2.0/24 | 72, 9, 661, 2 | ● |
| 1.2.3.0/24 | 72, 9, 661, 3 | ● |

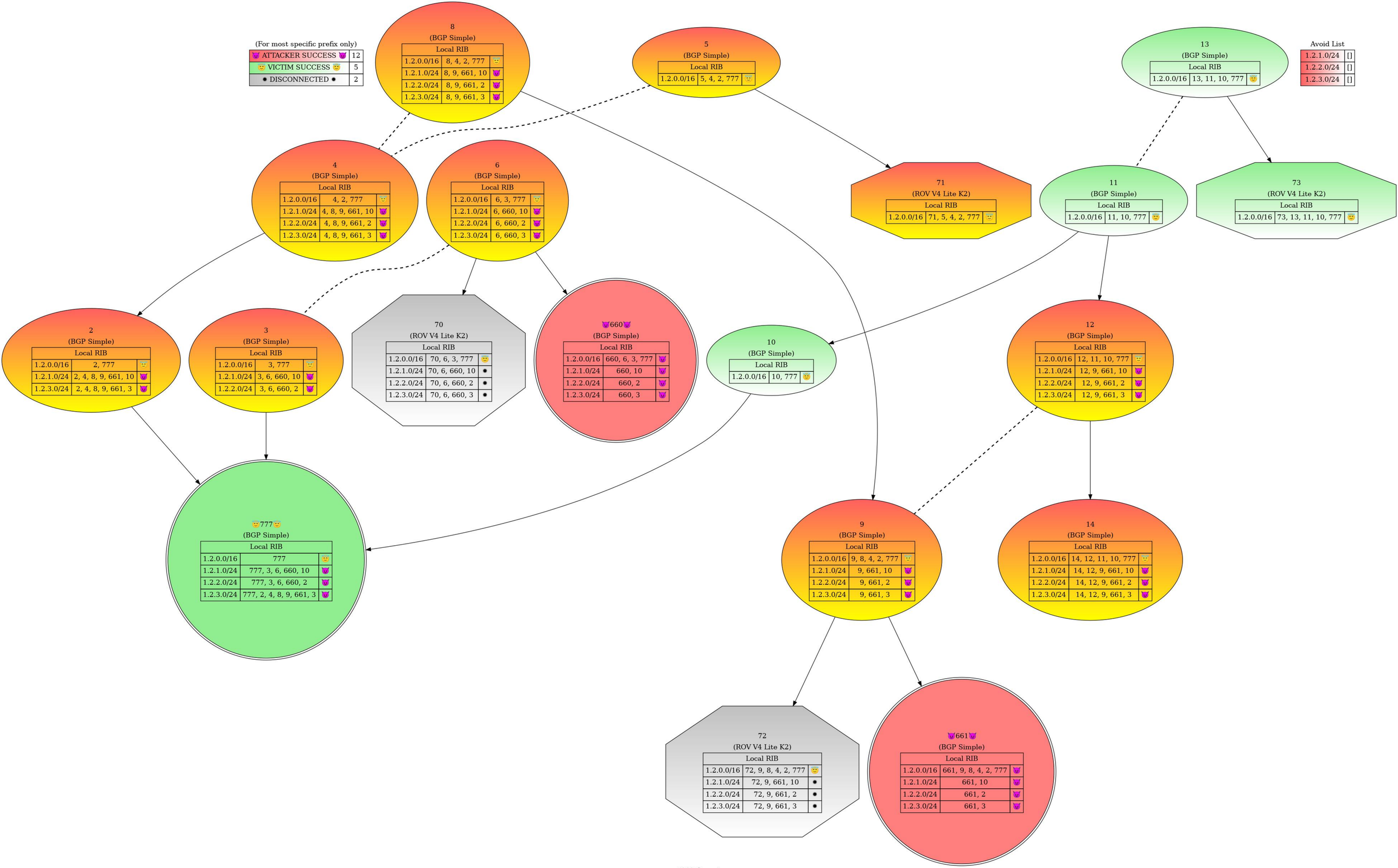
😈661😈
(BGP Simple)

| Local RIB | | |
|---|---|---|
| 1.2.0.0/16 | 661, 9, 8, 4, 2, 777 | 😈 |
| 1.2.1.0/24 | 661, 10 | 😈 |
| 1.2.2.0/24 | 661, 2 | 😈 |
| 1.2.3.0/24 | 661, 3 | 😈 |

(140 Guess)
Subprefix Hijack with V4 Lite k=2




(141 Ground Truth)
Subprefix Hijack with V4 Lite k=2




(141 Guess)
Subprefix Hijack with V4 Lite k=2