# BV & EC

|  |  |  |
| --- | --- | --- |
| Analysis | ID | Description |
| File Properties | EC\_IVF01 | input file not found |
| EC\_IVF02 | File is empty |
| EC\_IVF03 | File is not a JSON file |
| File Contents | EC\_V01 | Valid file & contents, temporal |
| EC\_V02 | Valid file & contents, final |
| EC\_IV01 | File Without Token Value |
| EC\_IV02 | File Without Type Of Revocation |
| EC\_IV03 | File Without Reason |
| EC\_IV04 | File with Empty Token Value |
| EC\_IV05 | File with Empty Type Of Revocation |
| EC\_IV06 | File with Empty Reason |
| EC\_IV07 | File with Invalid Token Value |
| EC\_IV08 | File with Invalid Type Of Revocation |
| EC\_IV09 | File Large Reason |
| EC\_IV10 | File with Wrong Token Value |
| EC\_IV11 | File with Wrong Type Of Revocation |
| EC\_IV12 | File with Wrong Reason |

|  |  |  |
| --- | --- | --- |
| Analysis | ID | Description |
| Output String | EC\_V01 | Valid output, temporal |
| Output is a String |
| Output is an email |
| EC\_V02 | Valid output, final |
| Output is a String |
| Output is an email |

# Syntax Analysis

Σ = {Σ T , Σ NT , S, P}

Σ T (Terminal Symbols) = {}

Σ NT (Non-Terminal Symbols) = {}

S: is the axiom \ start symbol.

P: is the set of productions.

P = {

FILE ::= START DATA END

START ::= **{**

END ::= **}**

DATA ::= VAR1 SEPARATOR VAR2 SEPARATOR VAR3

SEPARATOR ::= **,**

EQUAL ::= **:**

Q ::= **“**

P ::= **.**

ALPHABET ::= **a** | **b** | **c** | **d** | **e** | **f** | **g** | **h** | **i** | **j** | **k** | **l** | **m** | **n** | **o** | **p** | **q** |

**r** | **s** | **t** | **u** | **v** | **w** | **x** | **y** | **z**

NUMBERS ::= **0** | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** | **9**

VAR1 ::= LABEL1 EQUALS VALUE1

LABEL1 ::= Q NAME1 Q

NAME1 ::= **Token Value**

VALUE1 ::= Q HASH Q

HASH ::= ALPHABET | NUMBERS | **-** | **+** | **\**

VAR2 ::= LABEL2 EQUALS VALUE2

LABEL2 ::= Q NAME2 Q

NAME2 ::= **Type of revocation**

VALUE2 ::= Q TYPE Q

TYPE ::= TEMPORAL | FINAL

VAR3 ::= LABEL3 EQUALS VALUE3

LABEL3 ::= Q NAME3 Q

NAME3 ::= **Reason**

VALUE3 ::= Q X[100] Q (100X’s)

X ::= ALPHABET | NUMBERS

}

1FILE

2START

4END

3DATA

6VAR1

11}

10VAR3

5{

7SEPARATOR

8VAR2

9SEPARATOR

15,

40:

61“

59“

58“

57Reason

56“

55“

54Temporal| Final

53“

52“

50“

49“

47“

45Token Value

46“

44“

43Q

42X[100]

41Q

39Q

38NAME3

37Q

36Q

34Q

31NAME2

32Q

33:

30Q

29Q

28HASH

27Q

26:

25Q

24NAME1

23Q

22VALUE3

19,

60a|b|c|d|e|f|g|h|i|j|k|l|m|n|o|p|q|r|s|t|u|v|w|x|y|z|0|1|2|3|4|5|6|7|8|9

51Type of revocation

48a|b|c|d|e|f|g|h|i|j|k|l|m|n|o|p|q|r|s|t|u|v|w|x|y|z|0|1|2|3|4|5|6|7|8|9|-|+|\

21EQUAL

20LABEL3

17EQUAL

16LABEL2

18VALUE2

14VALUE1

13EQUAL

12LABEL1

35TYPE

|  |  |
| --- | --- |
| Non-Terminal Nodes | 1, 2, 3, 4, 6, 7, 8, 9, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 43 |
| Terminal Nodes | 5, 11, 15, 19, 26, 33, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61 |

Selection of test cases:

|  |  |  |
| --- | --- | --- |
| Test Case ID | Input Parameters | Covered Nodes |
| Syntax\_V01 | Result: File Exists  Detail: All terminal nodes covered with valid cases  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 5, 11, 15, 19, 26, 33, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61 |
| Syntax\_V02 | Result: File Exists  Detail: All terminal nodes covered with valid cases  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Final",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 5, 11, 15, 19, 26, 33, 40, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61 |
| Syntax\_IV01 | Detail: Non-Terminal 1 omission  Input: | All terminals +  non-terminals |
| Syntax\_IV02 | Detail: Non-Terminal 2 omission  Input:  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 2, 5 |
| Syntax\_IV03 | Detail: Non-Terminal 2 repetition  Input:  {{  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"} | 2, 5 |
| Syntax\_IV04 | Detail: Non-Terminal 3 omission  Input:  {  } | 6, 7, 8, 9, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 43, 45, 48, 51, 54, 57, 60 |
| Syntax\_IV05 | Detail: Non-Terminal 3 repetition  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 6, 7, 8, 9, 10, 12, 13, 14, 16, 17, 18, 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 41, 42, 43, 45, 48, 51, 54, 57, 60 |
| Syntax\_IV06 | Detail: Non-Terminal 6 omission  Input:  {  ,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 6, 12, 13, 14, 23, 24, 25, 26, 27, 28, 29, 44, 45, 46, 47, 48, 49 |
| Syntax\_IV07 | Detail: Non-Terminal 6 repetition  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=""Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 6, 12, 13, 14, 23, 24, 25, 26, 27, 28, 29, 44, 45, 46, 47, 48, 49 |
| Syntax\_IV08 | Detail: Non-Terminal 7 omission  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU="  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 7, 15 |
| Syntax\_IV09 | Detail: Non-Terminal 7 repetition  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 7, 15 |
| Syntax\_IV10 | Detail: Non-Terminal 12 omission  Input:  {  :"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 12, 23, 24, 25, 44, 45, 46 |
| Syntax\_IV11 | Detail: Non-Terminal 12 repetition  Input:  {  "Token Value""Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 12, 23, 24, 25, 44, 45, 46 |
| Syntax\_IV12 | Detail: Non-Terminal 13 omission  Input:  {  "Token Value""QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 13, 26 |
| Syntax\_IV13 | Detail: Non-Terminal 13 repetition  Input:  {  "Token Value"::"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 13, 26 |
| Syntax\_IV14 | Detail: Non-Terminal 14 omission  Input:  {  "Token Value":,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 14, 27, 28, 29, 47, 48, 49 |
| Syntax\_IV15 | Detail: Non-Terminal 14 repetition  Input:  {  "Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=""QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 14, 27, 28, 29, 47, 48, 49 |
| Syntax\_IV16 | Detail: Non-Terminal 23 omission  Input:  {  Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 23, 44 |
| Syntax\_IV17 | Detail: Non-Terminal 23 repetition  Input:  {  “”Token Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 23, 44 |
| Syntax\_IV18 | Detail: Non-Terminal 24 omission  Input:  {  “":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 24, 45 |
| Syntax\_IV19 | Detail: Non-Terminal 24 repetition  Input:  {  “Token ValueToken Value":"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 24, 45 |
| Syntax\_IV20 | Detail: Non-Terminal 25 omission  Input:  {  “Token Value:"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 25, 46 |
| Syntax\_IV21 | Detail: Non-Terminal 25 repetition  Input:  {  “Token Value””:"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 25, 46 |
| Syntax\_IV22 | Detail: Terminal 26 modification  Input:  {  “Token Value”/"QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 26 |
| Syntax\_IV23 | Detail: Non-Terminal 27 omission  Input:  {  “Token Value”:QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 27, 47 |
| Syntax\_IV24 | Detail: Non-Terminal 27 repetition  Input:  {  “Token Value”:””QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 27, 47 |
| Syntax\_IV25 | Detail: Non-Terminal 28 omission  Input:  {  “Token Value”:”",  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 28, 48 |
| Syntax\_IV26 | Detail: Non-Terminal 29 omission  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 29, 49 |
| Syntax\_IV27 | Detail: Non-Terminal 29 repetition  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU="”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 29, 49 |
| Syntax\_IV28 | Detail: Non-Terminal 35 omission  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 35, 54 |
| Syntax\_IV29 | Detail: Non-Terminal 35 repetition  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"TemporalTemporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 35, 54 |
| Syntax\_IV30 | Detail: Non-Terminal 42 omission  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":""  } | 42, 60 |
| Syntax\_IV31 | Detail: Non-Terminal 42 repetition  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890abcdefghijklmnopqrstuvwxyz01234567890abcdefghijklmnopqrstuvwxyz01234567890"  } | 42, 60 |
| Syntax\_IV32 | Detail: Terminal 5 modification  Input:  [  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 5 |
| Syntax\_IV33 | Detail: Terminal 11 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  ] | 11 |
| Syntax\_IV34 | Detail: Terminal 15 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”;  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 15 |
| Syntax\_IV35 | Detail: Terminal 44 modification  Input:  {  ‘Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 44 |
| Syntax\_IV36 | Detail: Terminal 45 modification  Input:  {  “Tokan Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 45 |
| Syntax\_IV37 | Detail: Terminal 46 modification  Input:  {  “Token Value’:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 46 |
| Syntax\_IV38 | Detail: Terminal 47 modification  Input:  {  “Token Value”:’QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 47 |
| Syntax\_IV39 | Detail: Terminal 48 modification  Input:  {  “Token Value”:”]WxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 48 |
| Syntax\_IV40 | Detail: Terminal 49 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=’,  "Type of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 49 |
| Syntax\_IV41 | Detail: Terminal 51 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Typa of revocation":"Temporal",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 51 |
| Syntax\_IV42 | Detail: Terminal 54 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporel",  "Reason":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 54 |
| Syntax\_IV43 | Detail: Terminal 57 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reasan":"abcdefghijklmnopqrstuvwxyz01234567890"  } | 57 |
| Syntax\_IV44 | Detail: Terminal 60 modification  Input:  {  “Token Value”:”QWxnPUhTMjU2XG4gVHlwPVBEU1xuRGV2PWY0ZDNmYmY0NDc4ZjJmNTZjNmU2Yzk4M2ZkOTQwYjRjXG4gaWF0PTE4LTAzLTIwMjAgMTc6MjI6MjBcbiBleHA9MTctMDQtMjAyMiAwMDo1NTo0MDExNTg3YzVmZWY3OGUzYzQ2MDYzOGEzYmNmNjI5YzQ3N2NmMjk0OGMxYmExZTgzM2U0ZGUxYTJlMjdhZjcwODU=”,  "Type of revocation":"Temporal",  "Reason":"+bcdefghijklmnopqrstuvwxyz01234567890"  } | 60 |

|  |  |  |
| --- | --- | --- |
| Output | Test case | |
| PASSED | V | 1, 2 |
| Error: JSON object cannot be created due to incorrect representation | IV | 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 26, 27, 32, 33, 34, 35, 37, 38, 40 |
| Error: invalid input data in JSON structure. | 43, 41, 36, 19, 18, 4 |
| Error: invalid Token value data in JSON structure. | 39, 25 |
| Error: invalid Type of revocation data in JSON structure. | 42, 29, 28 |
| Error: invalid Reason data in JSON structure. | 44 |
| Error: invalid String length for Reason. | 31, 30 |