## **SSN (Social Security Number)**

### **Format**: XXX-XX-XXXX (3-digit area number - 2-digit group number - 4-digit serial number)

### **Generation Rules**:

* **Valid SSN**:
  + **Area Number (first 3 digits)**: 1-899 (excluding 666).
    - If the generated area number is 666, it is automatically incremented by 1 to become 667.
  + **Group Number (middle 2 digits)**: 01-99 (cannot be 00).
  + **Serial Number (last 4 digits)**: 0001-9999 (cannot be 0000).
* **Invalid SSN** (must satisfy at least one of the following):
  + Area number starts with 000.
  + Area number is 666 or 900-999.
  + Group number is 00.
  + Serial number is 0000.
  + **Additional Constraint**: An invalid SSN must not be a valid ITIN (i.e., the area number cannot be 900-999, and the group number cannot be within the valid range for ITINs).

### Reference

<https://www.ssa.gov/kc/SSAFactSheet--IssuingSSNs.pdf>

## **ITIN (Individual Taxpayer Identification Number)**

### **Format**: 9XX-XX-XXXX (must start with 9)

### **Generation Rules**:

* **Area Number (first 3 digits)**: 900-999.
* **Group Number (middle 2 digits)**: 70-99, but excluding 89 and 93.
* **Serial Number (last 4 digits)**: 0000-9999.
* **Special Range Expansion**:
  + Allows 900-70-0000 to 999-88-9999, 900-90-0000 to 999-92-9999, 900-94-0000 to 999-99-9999.

### Reference

<https://www.irs.gov/individuals/international-taxpayers/general-itin-information>

## **EIN (Employer Identification Number)**

### **Format**: XX-XXXXXXX (2-digit prefix - 7-digit serial number)

### **Generation Rules**:

* **Prefix (first 2 digits)**: Must be one of the following specific values:
* 01, 02, 03, 04, 05, 06, 10, 11, 12, 13, 14, 15, 16,  
  20, 21, 22, 23, 24, 25, 26, 27, 30, 31, 32, 33, 34,  
  35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47,  
  48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61,  
  62, 63, 64, 65, 66, 67, 68, 71, 72, 73, 74, 75, 76,  
  77, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92,  
  93, 94, 95, 98, 99
* **Serial Number (last 7 digits)**: 0000000-9999999.

### Reference

<https://www.irs.gov/businesses/small-businesses-self-employed/employer-id-numbers>

## **Key Differences Summary**

| Type | Format | Prefix Rule | Special Restrictions |
| --- | --- | --- | --- |
| **SSN** | XXX-XX-XXXX | Area number 1-899 (not 666) | Group number not 00, serial not 0000 |
| **ITIN** | 9XX-XX-XXXX | Area number 900-999 | Group number 70-99 (excluding 89,93) |
| **EIN** | XX-XXXXXXX | Prefix is from a predefined list | No additional restrictions (prefix is fixed) |