

Text To Speech

SSML

Product Documentation



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SSML

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Speech Synthesis Markup Language (SSML) is based on XML to define the effects of synthetic speeches more accurately and specifically.

Note :

- Tencent TTS implements SSML based on [Speech Synthesis Markup Language \(SSML\) Version 1.1](#).
- Currently, the SSML feature is supported only for Chinese.

Directions

The tagged text is uploaded to TTS as the value of the `text` parameter. Below is the content of the request sent to TTS:

```
{
  "Action" : "TextToVoice",
  "AppId" : 12345,
  "Codec" : "mp3",
  "Expired" : 1603271036,
  "ModelType" : 1,
  "PrimaryLanguage" : 1,
  "ProjectId" : 0,
  "SampleRate" : 8000,
  "SecretId" : "AKID****",
  "SessionId" : "1234",
  "Speed" : 0,
  "Text" : "<say-as interpret-as='telephone'>4008110510</say-as>.</say-as>",
  "Timestamp" : 1603184636,
  "VoiceType" : 1002,
  "Volume" : 5
}
```

TTS supports SSML [tags](#). Here, text in undefined `<say-as>` tags will not be synthesized, and an incorrect XML format may interrupt synthesizing the text in `<say-as>` tags.

The SSML feature of TTS supports nesting multiple `<say-as>` tags in the text; for example:

```
<say-as interpret-as="name">Her name is <say-as interpret-as="telephone">+86-15188888888</say-as>.</say-as>.<say-as interpret-as="cardinal">22</say-as> years old.<say-as interpret-as="digits">5648234514237588</say-as>.<say-as interpret-as="address">304, Unit 3, No. 10,000, Shennan Boulevard</say-as>.</say-as>By the way,<say-as interpret-as="characters">b888_uqβy</say-as>.</say-as>
```

Tag

<say-as>

Description

The `<say-as>` tag is the root node of all SSML tags to be supported but doesn't support attributes. All text for which to call SSML tags must be enclosed in `<say-as>`.

Syntax

```
<say-as>Text for which to call SSML tags</say-as>
```

Tag relationships

The `<say-as>` tag can contain text and the following tags: `<break>`, `<phoneme>`, `<say-as>`, and `<sub>`.

Sample

```
<say-as>Text for which to call SSML tags.</say-as>
```

Output speech audio: [SSML-speak1.wav](#)

<sub>

Description

This tag uses an alias to replace the text in it.

Syntax

```
<sub alias="Alias">Text</sub>
```

Attributes

Attribute	Type	Value	Required	Description
alias	String	New content	Yes	It is used to replace the text in the tag.

Tag relationships

This tag can contain text only.

Sample

```
< speak>< sub alias="TTS">TTS</sub></ speak>
```

Output speech audio: [SSML-sub.wav](#)

<break>

Description

This optional tag is used to insert a pause in the text.

Syntax

```
< break time="string"/>
```

Attributes

Attribute	Type	Value	Required	Description
time	String	[number]s/[number]ms	Yes	You can set the pause duration in seconds or milliseconds, such as `2s` or `50ms`. [number]s: The unit is second, and the value of `[number]` must be an integer between 1 and 10. [number]ms: The unit is millisecond, and the value of `[number]` must be an integer between 50 and 10000.

Tag relationships

< break> is an empty tag and cannot contain any tags.

Sample

```
< speak>Close your eyes and take a rest< break time="500ms"/>OK. Now open your eyes.</ speak>
```

<phoneme>

Description

This optional tag is used to control the pronunciation of the text in it.

Syntax

```
<phoneme alphabet="py" ph="Pinyin string">Text</phoneme>
```

Attribute	Type	Value	Required	Description
alphabet	String	py	Yes	`py` indicates pinyin.
ph	String	Pinyin string of the text in the tag	Yes	Limits on the pinyin value: <ul style="list-style-type: none">- Pinyin syllables of different characters need to be separated with spaces, and the number of pinyin syllables must be the same as the number of Chinese characters.- Each pinyin syllable consists of the pronunciation and tone. The tone is an integer between 1 and 5, where 5 indicates a neutral tone.

Tag relationships

The `<phoneme>` tag can contain text only.

Sample

```
< speak>  
Currently, the economic levels of different areas are <phoneme alphabet="py" ph="cen1 ci1 bu4 qi2">uneven</phoneme>. We need to bridge the <phoneme alphabet="py" ph="cha1 ju4">gap</phoneme> between the richer and poorer areas. However, the <phoneme alphabet="py" ph="chai1 shi4">job</phoneme> is not easy.  
</ speak>
```

Output speech audio: [SSML-phoneme.wav](#)

<say-as>

Description

This tag is used to specify the information type of the text in it. The text will then be spoken in the default pronunciation method for the specified information type.

Syntax

```
<say-as interpret-as="string">Text</say-as>
```

Attribute	Type	Value	Required	Description
interpret-as	String	cardinal/digits/telephone/name/address/id/characters/punctuation/date/time/currency/measure	Yes	<p>Information type of the text in the tag:</p> <ul style="list-style-type: none"> • cardinal: Speak the text as an integral or decimal number. • digits: Speak the text as individual digits. • telephone: Speak the text in a common way of saying phone numbers. • name: Speak the text as a name. • address: Speak the text as an address. • id: Speak the text as an account name or nickname. • characters: Speak the text as individual characters. • punctuation: Speak the text as a punctuation mark. • date: Speak the text as a date. • time: Speak the text as a time. • currency: Speak the text as an amount of money. • measure: Speak the text as a number with a unit.

Values supported by each <say-as> type

- cardinal

Format	Example	Output	Description
Digit string	1487	One thousand four hundred	Integral value range: [-18446744073709551615,18446744073709551615].

		and eighty-seven	Decimal value range: The number of decimal places is unlimited but should be no more than 10 preferably.
Minus sign + digit string	-1487	Negative one thousand four hundred and eighty-seven	
Digit string where every three digits are separated with a comma	10,500	Ten thousand five hundred	
Minus sign + digit string where every three digits are separated with a comma	-10,500	Negative ten thousand five hundred	
Digit string + decimal point + two zeros	9.00	Nine	
Minus sign + digit string + decimal point + two zeros	-110.00	Negative one hundred and ten	
Digit string + decimal point + digit string	88.090	Eighty-eight point zero nine	
Minus sign + digit string + decimal point + digit string	-88.001	Negative eighty-eight point zero nine	

- digits

Format	Example	Output	Description
Digit string	356210985	Three five six two one zero nine eight five	The length of the digit string is unlimited. We recommend you use no more than 20 digits and insert a pause after each digit if the string contains more than 10 digits.

- telephone

Format	Example	Output	Description
Landline number	5605560	Five six oh five five six oh	7- and 8-digit landline numbers are supported. Different groups of digits can be separated with spaces or `.`. Here, a 7-digit landline number can be separated in the "3 digits-4 digits" format, and an 8-digit one can be separated in the "4 digits-4 digits" format.
	560 5560	Five six oh five five six oh	
	560-5560	Five six oh five five six oh	
	55605560	Five five six oh five five six oh	
	5560 5560	Five five six oh five five six oh	
	5560-5560	Five five six oh five five six oh	
Landline number + extension	55605560-105	Five five six oh five five six oh extension one oh five	The extension can contain 1–4 digits.
	55605560 ext. 105	Five five six oh five five six oh extension one oh five	
	55605560 extension 105	Five five six oh five five six oh extension one oh five	
	55605560 extension 105	Five five six oh five five six oh extension one oh five	
Area code + landline number	01055605560	Oh one oh five five six oh five five six oh	The following area codes are supported: 010, 02x, 03xx, 04xx, 05xx, 07xx, 08xx, and 09xx.
	010 55605560	Oh one oh five five six oh five five six oh	
	010-5560-5560	Oh one oh five five six oh five five six oh	
	(010)55605560	Oh one oh five five six	

		oh five five six oh	
	031955605560	Oh three one nine five five six oh five five six oh	
	0319-55605560	Oh three one nine five five six oh five five six oh	
Area code + landline number + extension	010 33878528-1054	Oh one oh three three eight seven eight five two eight extension one oh five four	None
	010-33878528- 1054	Oh one oh three three eight seven eight five two eight extension one oh five four	
	(010)33878528- 1054	Oh one oh three three eight seven eight five two eight extension one oh five four	
	(010)33878528 ext. 1054	Oh one oh three three eight seven eight five two eight extension one oh five four	
	(010)33878528 extension 1054	Oh one oh three three eight seven eight five two eight extension one oh five four	
	(010)33878528 extension 1054	Oh one oh three three eight seven eight five two eight extension one oh five four	
Country code + area code + landline number	86-010-33878528	Eight six oh one oh three three eight seven	Country codes in the following formats are supported: 86, (86), +86, (+86), and 0086, which are collectively spoken as "eight six".
	(86)10-33878528	Eight six one oh three three eight seven eight five two eight	

	+86-010-33878528	Eight six oh one oh three three eight seven eight five two eight	
	0086-10-33878528	Eight six one oh three three eight seven eight five two eight	
	(+86)-10-3387 8528	Eight six one oh three three eight seven eight five two eight	
Country code + area code + landline number + extension	(86)21-33878528-1054	Eight six two one three three eight seven eight five two eight extension one oh five four	None
	(86)021-3387-8528-1054	Eight six oh two one three three eight seven eight five two eight extension one oh five four	
	(86)021-33878528 ext. 1054	Eight six oh two one three three eight seven eight five two eight extension one oh five four	
	(86)21-3387-8528 extension 1054	Eight six two one three three eight seven eight five two eight extension one oh five four	
	+86-021-3387-8528 extension 1054	Eight six oh two one three three eight seven eight five two eight extension one oh five four	
Mobile number	151 8828 1075	One five one eight eight two eight one oh seven five	11-digit mobile numbers separated in "3-3-5" and "3-4-4" formats are supported.

	151-882-81075	One five one eight eight two eight one oh seven five	
	151-8828-1075	One five one eight eight two eight one oh seven five	
Country code + mobile number	+86-15188281075	Eight six one five one eight eight two eight one oh seven five	None
	(+86)-151-8828-1075	Eight six one five one eight eight two eight one oh seven five	
	+8615188281075	Eight six one five one eight eight two eight one oh seven five	
	0086-151 882 81075	Eight six one five one eight eight two eight one oh seven five	
Service number	110	Oh oh one	<ul style="list-style-type: none"> Common service numbers such as 110 are supported. 10-digit service numbers beginning with 400 and 800 and separated in "3-3-4" format are supported. 16-digit service numbers beginning with 12530, 17951, and 12593 are supported.
	95566	Nine five five six six	
	4008110280	Four oh oh eight one one oh two eight oh	
	800-810-8888	Eight oh oh eight one oh eight eight eight eight	
	1253013520638377	One two five three oh one three five two oh six three eight three seven seven	
Other	(86)(21)8832-80976-0907	Eight six two one eight eight three two eight oh nine seven six oh nine oh seven	Digit strings separated with left and right parentheses or hyphens are supported.

- address

--	--	--	--

Format	Example	Output	Description
Common address format	103-3, No. 1,000, Shennan Boulevard	One oh three dash three Number one oh oh oh Shennan Boulevard	Standard postal addresses in common formats are supported.
	No.1137-1128, Alley 377, Gaoxin Middle Avenue 4th Road	Number one one three seven dash one one two eight Alley three seven seven Gaoxin Middle Avenue Fourth Road	
	3-1-3805, Phase 6, Huaruncheng	Number three dash one dash three eight oh five Phase six Huaruncheng	
	Room 2106, Building 2, Dazu Yunfeng	Room two one oh six Building two Dazu Yunfeng	
	No.19, Alley 151, Gaoxin Middle Avenue 3rd Road	Number one nine Alley one five one Gaoxin Middle Avenue Third Road	

- id

Format	Example	Output	Description
String	dell3301	D E L L three three oh one	It can contain letters, digits, and underscores. Spaces between two characters in the output result indicate a pause. Characters separated with spaces are spoken one by one.
	tencent_1998	T E N C E N T underscore one nine nine eight	
	AiDemo	A I D E M O	

- characters

Format	Example	Output	Description
String	ISO 1-001-095498-1	I S O one dash oh oh one dash oh five four oh nine eight dash one	It can contain letters, digits, and certain full-width and half-width characters. Spaces between two characters in the output result indicate a pause. Characters separated with spaces are spoken one by one. If the text in the tag contains special XML symbols, they need to be escaped, commonly including: < > & "
	x10u2385_u	X one zero U two three eight five underscore U	

v1.1.1	V one dot one dot one	<p>'</p> <p>They represent `<`, `>`, `&`, `"` , and `` respectively.</p>
Version 2.0	Version two dot oh	
Yue B BA000	Yue B B A oh oh oh	
Airbus A330	Airbus A three three oh	
Models B01, B02, and B03	Models B oh one B oh two and B oh three	
αβγ	Alpha beta gamma	

- punctuation

Format	Example	Output	Description
Punctuation mark	...	Ellipsis	<p>It supports common punctuation marks. Spaces between two characters in the output result indicate a pause. Characters separated with spaces are spoken one by one.</p> <p>If the text in the tag contains special XML symbols, they need to be escaped, commonly including:</p> <p>< > & " ,</p> <p>They represent `<`, `>`, `&`, `"` , and `` respectively.</p>
	Ellipsis	
	!"#\$%&	Exclamation mark double quotation mark hash sign dollar sign percent sign and	
	'()*+	Single quotation mark left parenthesis right parenthesis asterisk plus sign	
	, - . / : ;	Comma hyphen dot slash colon semicolon	
	< = > ? @	Less-than sign equal sign greater-than sign question mark at	
	[] ^ _	Left square bracket backslash right	

		square bracket caret underscore	
--	--	------------------------------------	--

- date

Format	Example	Output	Description
xx year	71	Seventy-one	2- and 4-digit years are supported. <ul style="list-style-type: none"> 2-digit years 60–99, 00–09, and 10–19 are supported. 4-digit years 1000–1999 and 2000–2099 are supported.
	08	Oh eight	
	20	Twenty	
	2020	Twenty twenty	
	1998	Nineteen ninety-eight	
	2008	Two thousand and eight	
xx year xx month	5/08	May oh eight	For January to September, the input month number can start either with or without a "0", such as 4/1908 and 04/1908.
	04/2020	April twenty twenty	
	08/08	August oh eight	
	8/2020	August twenty twenty	
xx year xx month xx day	4/23/98	April twenty-third ninety-eight	For the first to ninth day, the input day number can start either with or without a "0", such as "4/8/1908" and "04/08/1908".
	08/23/2020	August twenty-third twenty twenty	
	8/8/2020	August eighth twenty	
	08/08/2020	August eighth twenty twenty	
xx month xx day	8/20	August twentieth	None

	08/08	August eighth	
Numeric date (year and month)	2020/08	August twenty twenty	You can use "/", "-", or "_" to separate the numeric year, month, and day.
	2020-08	August twenty twenty	
	2020.08	August twenty twenty	
Numeric date (year, month, and day)	2020/08/09	August ninth twenty twenty	
	2020-8-9	August ninth twenty eighteen	
	2020.08.09	August ninth twenty eighteen	
xx year xx month xx day~xx year xx month xx day	8/9~30/2020	August ninth to thirtieth twenty	You can use "~" and "-" to indicate a span of time.
	08/09/2020-09/09/2020	August ninth twenty twenty to September ninth twenty twenty	
xx month xx year~xx month xx year	04/20~04/21	April twenty to April twenty-one	
	04/2020~04/2021	April twenty twenty to April twenty twenty-one	
xx month xx day~xx month xx day	10/1~10/7	October first to October seventh	
	10/01~10/07	October first to October seventh	
xx month xx day~xx day	10/1~7	October first to seventh	

	10/01~07	October first to seventh	
Numeric date (year, month, and day)~numeric date (year, month, and day)	2020/03/03~2021/03/03	March third twenty twenty to March third twenty twenty-one	You can use "/" or "." to separate the numeric year, month, and day and use "~" or "-" to indicate a span of time.
	2020.9.9~2021.9.9	September ninth twenty twenty to September ninth twenty twenty-one	
Numeric date (month and day)~numeric date (month and day)	10/20~10/31	October twentieth to October thirty-first	
xx~xx month or xx month~xx month	1~10	January to October	
	1~10	January to October	
>Numeric date (month, day, and year)	10/25/2020	October twenty-fifth twenty twenty	Only 4-digit years in the "MM/DD/YYYY" format are supported, and only "/" can be used to separate the day, month, and year.

- time

Format	Example	Output	Description
Time	12:00	Twelve o'clock	Common time and time range formats are supported.
	12:00:00	Twelve o'clock	
	10:25	Ten twenty-five	
	10:25:30	Ten twenty-five thirty	
	09:25:14	Nine twenty-five	

		fourteen	
Time~time	11:00~12:00	Eleven to twelve o'clock	
	09:00-14:00	Nine o'clock to fourteen	
	11:00~11:30	Eleven o'clock to eleven thirty	
	11:00-15:18	Eleven o'clock to fifteen eighteen	
	10:30~11:00	Ten thirty to eleven o'clock	
	09:28-10:00	Nine twenty-eight to ten o'clock	
	10:20~11:20	Ten twenty to eleven twenty	
	06:00~08:00	Six to eight o'clock	
	10:20 am~1:30 pm	Ten twenty A M to one thirty P M	
Numeric time	5:00am	Five o'clock in the early morning	<p>If `am` is used, for 00:00–05:59, `am` is spoken as "in the early morning".</p> <p>If `am` is used, for 06:00–11:59, `am` is spoken as "in the morning".</p> <p>If `pm` is used, for 12:00–12:59, `pm` is spoken as "at noon".</p> <p>If `pm` is used, for 01:00–05:59, `pm` is spoken as "in the afternoon"; for 06:00–11:59, `pm` is spoken as "at night".</p>
	5:30am	Five thirty in the early morning	
	5:20:12am	Five thirty twelve in the early morning	
	7:00am	Seven o'clock in the morning	
	7:30AM	Seven thirty in the morning	
	7:20:25a.m.	Seven twenty twenty-five in the morning	

07:08:12A.M.	Seven eight twelve in the morning
5:00pm	Five o'clock in the afternoon
5:30PM	Five thirty in the afternoon
5:20:12p.m.	Five twenty twelve in the afternoon
05:09:12P.M	Five nine twelve in the afternoon
9:00pm	Nine o'clock at night
9:30pm	Nine thirty at night
9:20:12PM	Nine twenty twelve at night
9:02:12P.M.	Nine two twelve at night
12:00pm	Twelve o'clock at noon
12:30p.m.	Twelve thirty at noon
12:20:12PM	Twelve twenty twelve at noon

- currency

Format	Example	Output	Description
Number + currency	12.00USD	Twelve dollars	AUD (Australian dollar), CAD (Canadian dollar), HKD (Hong Kong dollar), JPY (Japanese yen), USD (US dollar), CHF (Swiss franc), NOK (Norwegian krone), SEK (Swedish krona), GBP (Pound
	12.50USD	Twelve dollars and fifty cents	
	15,000,000USD	Fifteen million	

		dollars	sterling), RMB (Renminbi), CNY (Chinese yuan), and EUR (euro) are supported. The number can be an integer or decimal and can be separated by commas according to international standards.
	15,000,000.00USD	Fifteen million dollars	
	12,000.35USD	Twelve thousand dollars and thirty-five cents	
Concurrency + number	\$12	Twelve dollars	\$ (US dollar), fr (French franc), kr (Danish krone), £ (Pound sterling), ¥ (Chinese yuan), and € (Euro) are supported. The number can be an integer or decimal and can be separated by commas according to international standards.
	\$12.00	Twelve dollars	
	\$12.12	Twelve dollars and twelve cents	
	\$12,000	Twelve thousand dollars	
	\$12,000.00	Twelve thousand dollars	
	\$12,000.99	Twelve thousand dollars and ninety-nine cents	
Other default pronunciations	1213	One thousand two hundred and thirteen	None
	1213KML	One thousand two hundred and thirteen K M L	
	1213.00KML	One thousand two hundred and thirteen K M L	
	1213.9KML	One hundred and twenty-one point three nine K M L	
	1,000KML	One thousand K M L	
	1,000.00KML	One thousand K M L	

	1,000.98KML	One thousand point nine eight K M L	
	12,000	Twelve thousand	

- measure

Format	Example	Output	Description
Number + Chinese unit	2 sheets	Two sheets	Common Chinese units and unit abbreviations are supported.
	120 hectares	One hundred twenty hectares	
	Over 100 milligrams	Over one hundred milligrams	
	Over 100 meters	Over one hundred meters	
	Over 100 people	Over one hundred people	
	1 centimeter 20 millimeters	One centimeter twenty millimeters	
	120.00 square kilometers	One hundred twenty square kilometers	
Number + unit abbreviation	120.56cm ²	One hundred and twenty point five six square centimeters	
	120m ² 56cm ²	One hundred and twenty square meters fifty-six square centimeters	
	100m12cm6mm	One hundred meters twelve centimeters six millimeters	
Range	10~15kg	Ten to fifteen kilograms	
	10.24~789.82 mu	Ten point two four to seven hundred and eighty-nine point eight two mu	
	10m~15m	Ten meters to fifteen meters	
	10.24cm~19.08cm	Ten point two four centimeters to nineteen point zero eight centimeters	
Number + unit + "/" + unit	10 dollars/kilogram	Ten dollars per kilogram	

	199~299 dollars/piece	One hundred and ninety-nine to two hundred and ninety-nine dollars per piece
	299.99 dollars/g~399.99 dollars/g	Two hundred and ninety-nine point nine nine dollars per gram to three hundred and ninety-nine point nine nine dollars per gram
Other default pronunciations	12 dozens	Twelve dozens
	30rm	Thirty R M
	400 million fellow citizens	Four hundred million fellow citizens
	12.897 micrograms	Twelve point eight nine seven micrograms

Pronunciations of common <say-as> special symbols

Special Symbol	Pronunciation
!	Exclamation mark
"	Double quotation mark
#	Hash sign
\$	Dollar
%	Percent sign
&	and
'	Single quotation mark
(Left parenthesis
)	Right parenthesis
*	Asterisk
+	Plus sign
,	Comma
-	Dash
.	Dot

Special Symbol	Pronunciation
/	Slash
:	Colon
;	Semicolon
<	Less-than sign
=	Equal sign
>	Greater-than sign
?	Quotation mark
@	at
[Left square bracket
\	Backslash
]	Right square bracket
^	Caret
_	Underscore
`	Backtick
{	Left curly bracket
}	Right curly bracket
~	Tilde
!	Exclamation mark
“	Left double quotation mark
”	Right double quotation mark
‘	Left single quotation mark
’	Right single quotation mark
(Left parenthesis

Special Symbol	Pronunciation
)	Right parenthesis
,	Comma
。	Period
—	Dash
:	Colon
;	Semicolon
?	Quotation mark
、	Enumeration comma
...	Ellipsis
.....	Ellipsis
《	Left title mark
》	Right title mark
¥	Chinese yuan sign
≥	Greater-than-or-equal-to sign
≤	Less-than-or-equal-to sign
≠	Not-equal sign
≈	Approximately-equal-to sign
±	Plus-minus sign
×	Multiplication sign
π	Pi
Α	Alpha
Β	Beta
Γ	Gamma
Δ	Delta

Special Symbol	Pronunciation
Ε	Epsilon
Ζ	Zeta
Η	Eta
Θ	Theta
Ι	Iota
Κ	Kappa
Λ	Lambda
Μ	Mu
Ν	Nu
Ξ	Xi
Ο	Omicron
Π	Pi
Ρ	Rho
Σ	Sigma
Τ	Tau
Υ	Upsilon
Φ	Phi
Χ	Chi
Ψ	Psi
Ω	Omega
α	Alpha
β	Beta
γ	Gamma
δ	Delta

Special Symbol	Pronunciation
ε	Epsilon
ζ	Zeta
η	Eta
θ	Theta
ι	Iota
κ	Kappa
λ	Lambda
μ	Mu
ν	Nu
ξ	Xi
ο	Omicron
π	Pi
ρ	Rho
σ	Sigma
τ	Tau
υ	Upsilon
φ	Phi
χ	Chi
ψ	Psi
ω	Omega

Common <say-as> units

Format	Type	Example
Abbreviation	Length	nm (nanometer), μm (micrometer), mm (millimeter), cm (centimeter), m (meter), km (kilometer), ft (foot), in (inch)

	Area	cm ² (square centimeter), m ² (square meter), km ² (square kilometer), SqFt (square foot)
	Volume	cm ³ (cubic centimeter), m ³ (cubic meter), km ³ (cubic kilometer), mL (milliliter), L (liter), gal (gallon)
	Mass	μg (microgram), mg (milligram), g (gram), kg (kilogram)
	Time	min (minute), sec (second), ms (millisecond)
	Electromagnetism	μA (microampere), mA (milliampere), Ω (ohm), Hz (hertz), KHz (kilohertz), MHz (megahertz), GHz (gigahertz), V (volt), kV (kilovolt), kWh (kilowatt-hour)
	Sound	dB (decibel)
	Atmospheric pressure	Pa (pascal), kPa (kilopascal), Mpa (megapascal)
	Chinese unit	This type includes without limitation the Chinese units of the aforementioned units, such as "meter", "second", "dollar", and "milliliter per bottle".

Tag relationships

The `<say-as>` tag can contain text only.

Sample

- cardinal

```
<say-as interpret-as="cardinal">12345</say-as>
```

Output speech audio: [say-as-cardinal.wav](#)

- digits

```
<say-as interpret-as="digits">12345</say-as>
```

Output speech audio: [say-as-digits.wav](#)

- telephone

```
<say-as interpret-as="telephone">12345</say-as>
</speak>
```

Output speech audio: [say-as-telephone.wav](#)

- name

```
<say-as interpret-as="name">Zeng Xiaofan</say-as>.
Her former name is <say-as interpret-as="name">Zeng Xiaofan</say-as>.
```

Output speech audio: [say-as-name.wav](#)

- address

```
<say-as interpret-as="address">304, Unit 3, Building 1, No. 10,000, Shennan Boulevard</say-as>
</speak>
```

Output speech audio: [say-as-address.wav](#)

- id

```
<say-as interpret-as="id">tencent_8858</say-as>
My username is <say-as interpret-as="id">tencent_8858</say-as>
```

Output speech audio: [say-as-id.wav](#)

- characters

```
<say-as interpret-as="characters">aß</say-as>
Greek letters <say-as interpret-as="characters">aß</say-as>
```

Output speech audio: [say-as-characters.wav](#)

- punctuation

```
<say-as interpret-as="punctuation">The punctuation mark that I use the most frequently is </say-as>
</say-as>
```

Output speech audio: [say-as-punctuation.wav](#)

- date

```
<say-as interpret-as="date">2020-10-10</say-as>
</say-as>
```

Output speech audio: [say-as-date.wav](#)

- time

```
<say-as interpret-as="time">5:30am</say-as>
</say-as>
```

Output speech audio: [SSML-say-as_time.mp3](#)

- currency

```
<say-as interpret-as="currency">15,000.00RMB</say-as>
</say-as>
```

Output speech audio: [say-as-currency.wav](#)

- measure

```
<say-as interpret-as="measure">100m215cm2</say-as>
</say-as>
```

Output speech audio: [say-as-measure.wav](#)