Number

Plugin Name:	number
Display Name:	Number
Class Name:	com.audium.sayitsmart.plug-ins.AudiumSayItSmartNumber

Description

This Say It Smart type handles the reading of any number. The number can be negative or positive, contain a decimal, and can even contain an exponent. The whole part of the number is read normally and the decimal part of the number is read digit-by-digit. This plug-in can handle numbers up to 999 trillion.

The number can be read back in a way that sounds somewhat robotic, though it uses a minimum number of audio files. The number can also be read back in a manner that sounds better to the caller but will require more files to do so. These differences are encapsulated in the Number type's two filesets: `standard` and `enhanced`. All Unified CVP Say It Smart plug-ins that have numerical components use the Number plug-in to convert their numbers so those plug-ins will list these two filesets as well.

Input Formats

Name **(Display Name)**	**Description**
standard (Standard)	This represents any number, negative or positive, with or without a decimal, and optionally containing an exponent. No commas are allowed.

Output Formats

Name (Display Name)	Input Format Depends On	Description
standard (Standard Number)	standard	The whole part of the number is read normally and the decimal is read digit-by-digit.
no_trailing_0s (Read w/ no Trailing 0s)	standard	The whole part of the number is read normally, the decimal is read digit-by-digit, omitting trailing zeros.

Filesets

Name (Display Name)	Output Format Depends On	Description
standard (Standard)	standard no_trailing_0s	This fileset involves fewer audio files to render the number but at the cost of sounding a bit robotic.
enhanced (Enhanced)	standard no_trailing_0s	This fileset involves more audio files to render a better sounding number.

Audio Files

Standard Fileset

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	30	40	50	60	70	80	90		
negative	point	hundred	thousand	million	billion	trillion			

Enhanced Fileset

0	1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18	19
20	21	22	23	24	25	26	27	28	29
30	31	32	33	34	35	36	37	38	39

40	41	42	43	44	45	46	47	48	49
50	51	52	53	54	55	56	57	58	59
60	61	62	63	64	65	66	67	68	69
70	71	72	73	74	75	76	77	78	79
80	81	82	83	84	85	86	87	88	89
90	91	92	93	94	95	96	97	98	99
100	200	300	400	500	600	700	800	900	
1000	2000	3000	4000	5000	6000	7000	8000	9000	
negative	point	thousand	million	billion	trillion				

Examples

Example #1

Data:	4836945.160
Input Format:	standard
Output Format:	standard
Fileset	enhanced
Playback:	“4” “million” “800” “36” “thousand” “900” “45” “point” “1” “6” “0”

Example #2

Data:	3.10
Input Format:	standard
Output Format:	no_trailing_0s
Fileset	standard
Playback:	“3” “point” “1”

Example #3

Data:	36.1234E2
Input Format:	standard
Output Format:	standard
Fileset	standard

Playback:	“3” “thousand” “6” “hundred” “12” “point” “3” “4”

Example #4

Data:	-3E-2
Input Format:	standard
Output Format:	standard
Fileset	standard
Playback:	“negative” “0” “point” “0” “0” “3”