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July 23, 2018



Plugin Diagram for DokuWiki



Basic features

Plugin extends syntax of [DokuWiki](#) and allows to construct diagrams.

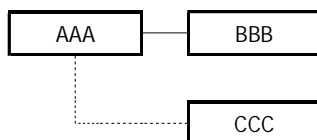
Diagrams must be used within a special tag. It's because their syntax is similar to table syntax. To insert diagram into a code you should write the following:

```
<diagram>
Diagram specification
</diagram>
```

Diagram specification is a multiline expression. Each line consists of control characters, that define links between blocks, and letter sequences, that define blocks. These entities are separated by the special character `|'. For example, the following specification

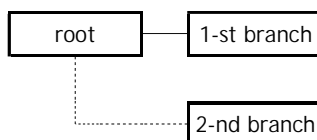
```
<diagram>
| AAA |-| BBB | | | |
| |:| | | | |
| |L|~|~| CCC |
</diagram>
```

defines this diagram:



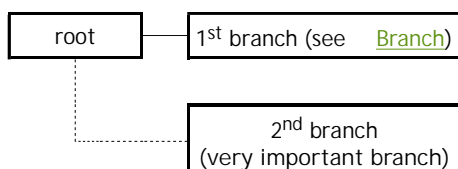
You can write any text instead of letter sequences for block description except the case of special characters.

```
<diagram>
| root |-| 1-st branch | | | |
| |:| | | | |
| |L|~|~| 2-nd branch |
</diagram>
```



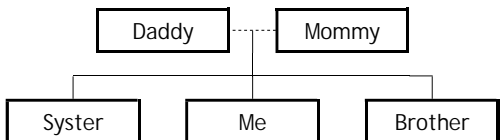
Unfortunately, this method breaks down text representation of diagram (for large diagram this leads to difficulty in changing wiki-code) and also doesn't allow to use wiki-syntax within a block. To overcome this you should consider sequences of letters, digits and underscore as abbreviations and decode them at the end of a line using the equal sign and `|' symbol as a separator. For example:

```
<diagram>
| AAA |-| BBB |AAA=root|BBB=1<sup>st</sup> branch (see [[wp>Branch]])
| |:| | | | |
| |L|~|~| CCC |CCC=2<sup>nd</sup> branch\ \ ** (very important branch) **
</diagram>
```



You can describe family trees using such diagrams.

```
<diagram>
| | | Dad |y| Mom | | | Dad=Daddy |Mom=Mommy
| |,|-|-|-|+|-|-|-|. |
| Sys | | Me | | Bro |Sys=Syster |Bro=Brother
</diagram>
```



All types of connections are shown in the following table:

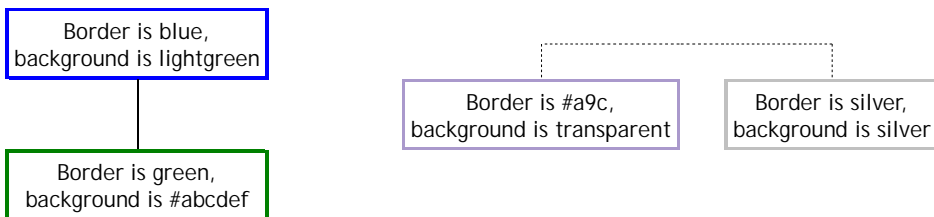
,	.	`	'	^	v	()	-	!	+
F	7	L	J	A	V	C	D	~	:	%
y	h	}	{	p	b]	[*	#	

We'll refer to these elements as connection tiles.

Style of diagram elements

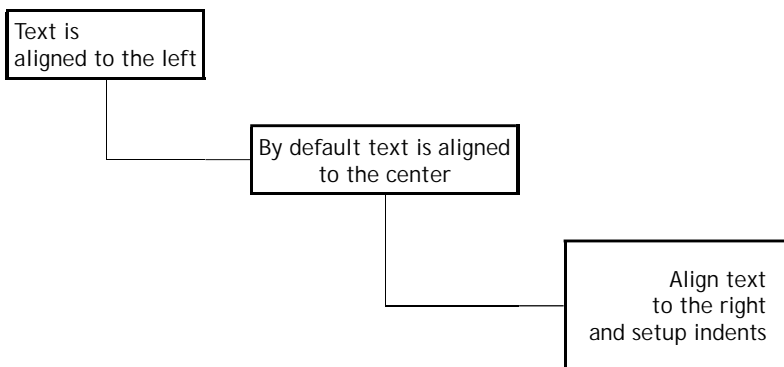
You can change border color and background color of a block. It's done by specifying block parameters in abbreviation description right before equal sign and within curly brackets. Parameters should be formatted as key:value and separated by semicolon. There are two keys supported in the current version of plugin: `border-color` for a color of border and `background-color` for a color of background. Color values should be specified [in CSS2 format](#) including [SVG color keywords](#).

```
<diagram>
| AAA | | | | |F|~|~|7| |AAA{border-color:blue;background-color:lightgreen}=Border is blue
| |!| | | | CCC | | DDD |CCC{border-color:#a9c}=Border is #a9c,\ background is transparent
| BBB | | | | | | | |BBB{border-color:rgb(0%,50%,0%);background-color:#abcdef}=Border
</diagram>
```



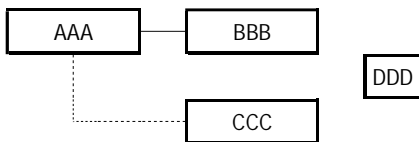
There is also possible to setup text alignment and internal indent using `text-align` and `padding` properties:

```
<diagram>
|Left| |Left{text-align:left;}=Text is\ aligned to the left
| |!| | | |Center| |Center=By default text is aligned\ to the center
| | | | | |!|
| | | | | |'|-|-|Right|Right{text-align:right;padding:1em}=Align text\ to the right\ and
</diagram>
```



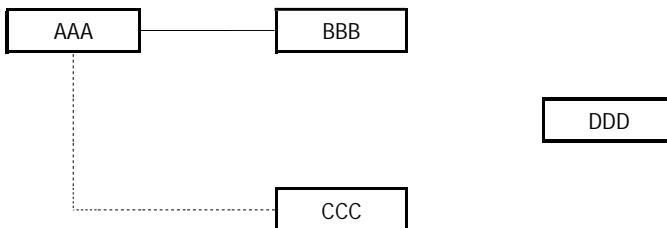
You can note here that it's allowed to skip empty sections in the end of a row as in the last example. But you should be aware of some difficulties in further editing of diagram and influence on block width. Besides you can change spacing between blocks by introducing more columns and rows (this works because of minimal height and width of each empty block). Compare

```
<diagram>
| AAA | - | BBB | | | | |
| |: | | | | | DDD |
| |L|~|~| CCC |
</diagram>
```



with

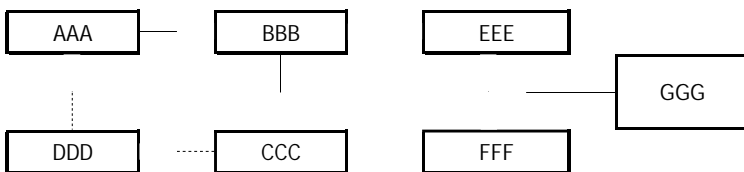
```
<diagram>
| AAA | -|-|-| BBB | | | | |
| |: |
| |: | | | | | | | DDD |
| |: |
| |L|~|~|~| CCC |
</diagram>
```



Arrows

You can use arrows in diagrams. For example,

```
<diagram>
| AAA | -@2 | BBB | -@a | EEE | | | | |
| |:@1 | | !@4 | | }@72 | -|-| GGG |
| DDD | ~@8 | CCC | | FFF |
</diagram>
```



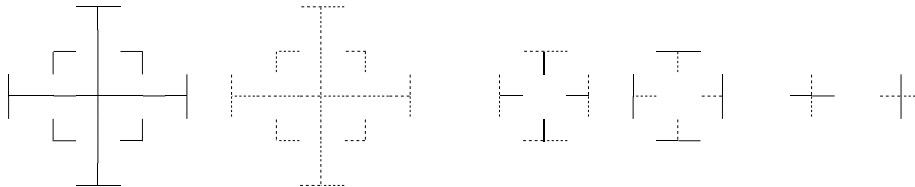
To insert an arrow you should put '@' and one or two symbols as direction settings after a control character. The first symbol sets arrows that are pointed out of the center of connection tile. It's a [hexadecimal](#) number that has 4 bits for each of 4 directions: Up, Right, Down, Left. Each bit sets the presence of an arrow in the corresponding direction. If you're not familiar with hexadecimal representation then use the following algorithm. Calculate a sum of direction numbers using this table:

[Rendered tree](#)

Additional tests

Using all connection types:

```
<diagram>
| | |v| | | | |v| | | | | | | | | | | | | |
| | , |!| . | | |F| : |7| | | |y| | |p| |
| ) | - | + | - | ( | D | ~ | % | ~ | C | | } | | { | ] | | [ | | * | | # |
| | ^ | |!| ' | | |L| : |J| | | |h| | |b| |
| | |^| | | | |A| | |
</diagram>
```

Using all arrow types: [on the separate page](#).

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Download and install

Stable version: [Plugin Diagram 20130128](#), compatible with DokuWiki-20121013.

Copy this link to plugin manager or download archive and unpack it into `lib/plugins` directory of your DokuWiki installation. Probably, you'll need to clear a browser cache or even a wiki cache to let diagrams render properly. To clear a wiki cache visit the following page: `<wiki-path>/lib/exe/css.php?purge=true`.

Discussion

You can ask questions and suggest ideas [in the corresponding topic](#) of the blog or by sending [emails](#) directly.

Change log

[version 20130128](#)

- fix: IE7+ support (thanks to Volker Leonhardt)

[version 20121223](#)

- fix: style issues regarding to a new default template of DokuWiki-20121013

[version 20111114](#)

- experimental branch is stabilized
- fix: printing issues
- new: support for digits and underscore in abbreviations

[version 20100207e](#), experimental branch

- new: arrows support
- new: reworked processing engine and new layout for decreasing amount of XHTML code

[version 20100205](#)

- new: commands 'p' and 'b' for connection lines

[version 20100111](#)

- fix: PHP 5.3 and DokuWiki-20091225 compatibility

[version 20091111](#)

- fix: support for XHTML 1.0 Strict standard (thanks to [Anika Henke](#))

[version 20090811](#)

- new: support for new style options for block (`text-align`, `padding` properties)

[version 20090724](#)

- new: colored block support (`border-color`, `background-color` properties)

[version 20090407](#)

initial public release

c@0	c@1	c@2	c@3	c@4	c@5	c@6	c@7
c@8	c@9	c@a	c@b	c@c	c@d	c@e	c@f

c@00	c@10	c@20	c@30	c@40	c@50	c@60	c@70
c@80	c@90	c@a0	c@b0	c@c0	c@d0	c@e0	c@f0

c@01	c@11	c@21	c@31	c@41	c@51	c@61	c@71
c@81	c@91	c@a1	c@b1	c@c1	c@d1	c@e1	c@f1

c@02	c@12	c@22	c@32	c@42	c@52	c@62	c@72
c@82	c@92	c@a2	c@b2	c@c2	c@d2	c@e2	c@f2

c@03	c@13	c@23	c@33	c@43	c@53	c@63	c@73
c@83	c@93	c@a3	c@b3	c@c3	c@d3	c@e3	c@f3

c@04	c@14	c@24	c@34	c@44	c@54	c@64	c@74
+	T	+	└	┐	—	└	—
c@84	c@94	c@a4	c@b4	c@c4	c@d4	c@e4	c@f4
┌	┐	┌	┐	┌	—	┌	—

c@05	c@15	c@25	c@35	c@45	c@55	c@65	c@75
+	T	+	└	┐	—	└	—
c@85	c@95	c@a5	c@b5	c@c5	c@d5	c@e5	c@f5
┌	┐	┌	┐	┌	—	┌	—

c@06	c@16	c@26	c@36	c@46	c@56	c@66	c@76
+	T	+	└	┐	—	└	—
c@86	c@96	c@a6	c@b6	c@c6	c@d6	c@e6	c@f6
┌	┐	┌	┐	┌	—	┌	—

c@07	c@17	c@27	c@37	c@47	c@57	c@67	c@77
+	T	+	└	┐	—	└	—
c@87	c@97	c@a7	c@b7	c@c7	c@d7	c@e7	c@f7
┌	┐	┌	┐	┌	—	┌	—

c@08	c@18	c@28	c@38	c@48	c@58	c@68	c@78
+	T	+	└	┐	—	└	—
c@88	c@98	c@a8	c@b8	c@c8	c@d8	c@e8	c@f8
┌	┐	┌	┐	┌	—	┌	—

--	--	--	--	--	--	--	--

c@09	c@19	c@29	c@39	c@49	c@59	c@69	c@79
c@89	c@99	c@a9	c@b9	c@c9	c@d9	c@e9	c@f9

c@0a	c@1a	c@2a	c@3a	c@4a	c@5a	c@6a	c@7a
c@8a	c@9a	c@aa	c@ba	c@ca	c@da	c@ea	c@fa

c@0b	c@1b	c@2b	c@3b	c@4b	c@5b	c@6b	c@7b
c@8b	c@9b	c@ab	c@bb	c@cb	c@db	c@eb	c@fb

c@0c	c@1c	c@2c	c@3c	c@4c	c@5c	c@6c	c@7c
c@8c	c@9c	c@ac	c@bc	c@cc	c@dc	c@ec	c@fc

c@0d	c@1d	c@2d	c@3d	c@4d	c@5d	c@6d	c@7d

c@8d	c@9d	c@ad	c@bd	c@cd	c@dd	c@ed	c@fd

c@0e	c@1e	c@2e	c@3e	c@4e	c@5e	c@6e	c@7e
c@8e	c@9e	c@ae	c@be	c@ce	c@de	c@ee	c@fe

c@0f	c@1f	c@2f	c@3f	c@4f	c@5f	c@6f	c@7f
c@8f	c@9f	c@af	c@bf	c@cf	c@df	c@ef	c@ff

```
<diagram>
|,-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|.
|!| c@0 |!| c@1 |!| c@2 |!| c@3 |!| c@4 |!| c@5 |!| c@6 |!| c@7 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@0 |!| +@1 |!| +@2 |!| +@3 |!| +@4 |!| +@5 |!| +@6 |!| +@7 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| c@8 |!| c@9 |!| c@a |!| c@b |!| c@c |!| c@d |!| c@e |!| c@f |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@8 |!| +@9 |!| +@a |!| +@b |!| +@c |!| +@d |!| +@e |!| +@f |!|
|^-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-|

|,-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|.
|!| c@00 |!| c@10 |!| c@20 |!| c@30 |!| c@40 |!| c@50 |!| c@60 |!| c@70 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@00 |!| +@10 |!| +@20 |!| +@30 |!| +@40 |!| +@50 |!| +@60 |!| +@70 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| c@80 |!| c@90 |!| c@a0 |!| c@b0 |!| c@c0 |!| c@d0 |!| c@e0 |!| c@f0 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@80 |!| +@90 |!| +@a0 |!| +@b0 |!| +@c0 |!| +@d0 |!| +@e0 |!| +@f0 |!|
|^-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-|

|,-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|.
|!| c@01 |!| c@11 |!| c@21 |!| c@31 |!| c@41 |!| c@51 |!| c@61 |!| c@71 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@01 |!| +@11 |!| +@21 |!| +@31 |!| +@41 |!| +@51 |!| +@61 |!| +@71 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| c@81 |!| c@91 |!| c@a1 |!| c@b1 |!| c@c1 |!| c@d1 |!| c@e1 |!| c@f1 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@81 |!| +@91 |!| +@a1 |!| +@b1 |!| +@c1 |!| +@d1 |!| +@e1 |!| +@f1 |!|
|^-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-|

|,-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|v|-| - |-|.
|!| c@02 |!| c@12 |!| c@22 |!| c@32 |!| c@42 |!| c@52 |!| c@62 |!| c@72 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@02 |!| +@12 |!| +@22 |!| +@32 |!| +@42 |!| +@52 |!| +@62 |!| +@72 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| c@82 |!| c@92 |!| c@a2 |!| c@b2 |!| c@c2 |!| c@d2 |!| c@e2 |!| c@f2 |!|
)|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-| - |-|+|-|
|!| +@82 |!| +@92 |!| +@a2 |!| +@b2 |!| +@c2 |!| +@d2 |!| +@e2 |!| +@f2 |!|
|^-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-| - |-|^|-|
</diagram>
```



```

)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| c@8b |!| c@9b |!| c@ab |!| c@bb |!| c@cb |!| c@db |!| c@eb |!| c@fb |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@8b |!| +@9b |!| +@ab |!| +@bb |!| +@cb |!| +@db |!| +@eb |!| +@fb |!|
)`-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-|
,|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-|
|!| c@0c |!| c@1c |!| c@2c |!| c@3c |!| c@4c |!| c@5c |!| c@6c |!| c@7c |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@0c |!| +@1c |!| +@2c |!| +@3c |!| +@4c |!| +@5c |!| +@6c |!| +@7c |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| c@8c |!| c@9c |!| c@ac |!| c@bc |!| c@cc |!| c@dc |!| c@ec |!| c@fc |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@8c |!| +@9c |!| +@ac |!| +@bc |!| +@cc |!| +@dc |!| +@ec |!| +@fc |!|
)`-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-|
,|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-|
|!| c@0d |!| c@1d |!| c@2d |!| c@3d |!| c@4d |!| c@5d |!| c@6d |!| c@7d |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@0d |!| +@1d |!| +@2d |!| +@3d |!| +@4d |!| +@5d |!| +@6d |!| +@7d |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| c@8d |!| c@9d |!| c@ad |!| c@bd |!| c@cd |!| c@dd |!| c@ed |!| c@fd |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@8d |!| +@9d |!| +@ad |!| +@bd |!| +@cd |!| +@dd |!| +@ed |!| +@fd |!|
)`-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-|
,|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-|
|!| c@0e |!| c@1e |!| c@2e |!| c@3e |!| c@4e |!| c@5e |!| c@6e |!| c@7e |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@0e |!| +@1e |!| +@2e |!| +@3e |!| +@4e |!| +@5e |!| +@6e |!| +@7e |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| c@8e |!| c@9e |!| c@ae |!| c@be |!| c@ce |!| c@de |!| c@ee |!| c@fe |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@8e |!| +@9e |!| +@ae |!| +@be |!| +@ce |!| +@de |!| +@ee |!| +@fe |!|
)`-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-|
,|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-| -|v|-|
|!| c@0f |!| c@1f |!| c@2f |!| c@3f |!| c@4f |!| c@5f |!| c@6f |!| c@7f |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@0f |!| +@1f |!| +@2f |!| +@3f |!| +@4f |!| +@5f |!| +@6f |!| +@7f |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| c@8f |!| c@9f |!| c@af |!| c@bf |!| c@cf |!| c@df |!| c@ef |!| c@ff |!|
)|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-| -|+|-|
|!| +@8f |!| +@9f |!| +@af |!| +@bf |!| +@cf |!| +@df |!| +@ef |!| +@ff |!|
)`-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-| -|^-|-|
</diagram>

```