# The dndicons package

A set of high quality icons made with TikZ for use in notes for tabletop role-playing games

Jasper Habicht\*

Version 1.3.0, released on 21 November 2023

## 1 Introduction

The dndicons package provides a set of high quality icons made with TikZ for use in notes for tabletop role-playing games. The icons are meant to be used in the body text, but they can also be used in other contexts such as graphics or diagrams.

Since the commands to typeset the icons typeset tikzpicture environments, these commands should not be used inside another tikzpicture. However, because the package defines the icons as TikZ shapes, it is possible to use the icons in tikzpicture environments directly. Apart from that, as of version 1.1.0, the package provides a way to define custom commands to typeset the icons as boxed material which is safe to use in a tikzpicture context.

# 2 Loading the package

The dndicons package is loaded by calling \usepackage{dndicons} in the preamble of the document. The package loads the tikz package. The package does not provide any options.

# 3 Usage

Once loaded, the package provides a set of commands that can be used to print icons inline. The package also defines a set of node shapes that can be used inside a tikzpicture environment.

### 3.1 Global settings

dnd icons All icons share the TikZ style dnd icons that has no options per default but can be used to style all icons at once. For example, if the setting \tikzset{dnd icons/.append style={draw=red}} is placed at the beginning

<sup>\*</sup>E-mail: mail@jasperhabicht.de

of the document, all icons will be drawn in red. Per default, the icons are drawn in the color of the surrounding text.

Note that it may be necessary to add the TikZ option transform shape when applying transformations to the icons, because the icons are realised as TikZ nodes which are not affected by some transformations per default.

dnd icons/background color In most cases, the icons are made of drawn paths. However, some icons can be used with a negative color scheme where the icon is drawn negatively inside a filled shape. Per default, the icons are drawn in white in such cases, but it might be desirable that the icons are in the same color as the background. To this end, the color can be changed using the TikZ option dnd icons/background color in the following way:



```
\colorbox{blue!50}{%
    \ability[negative]{charisma}
        [scale=2, transform shape]%
\tikzset{
   dnd icons/background color={blue!50}
\colorbox{blue!50}{%
    \ability[negative]{charisma}
        [scale=2, transform shape]%
```

This feature can, of course, also be used to change the color of the icon independently from the color of the background.

dnd icons/before sep The TikZ optins dnd icons/before sep and dnd icons/after sep are used to dnd icons/after sep define the width of the space that is added before and after the icons respectively. The default value of both lengths is 0.05 em. For example, setting the space before icons to 1 cm can be achieved as follows:

```
Roll\die{eightside}{}a die!
Roll
        dnd icons/before sep={1cm}
                          Roll\die{eightside}{}a die!
```

#### 3.2 Icons

Because the package defines the icons as TikZ shapes, every command can actually be used together with every shape. However, the combinations of shapes and commands as described in the following subsections are preferable.

#### 3.2.1 Icon \die

\die The command  $\die[\langle style \rangle] \{\langle shape \rangle\} [\langle options \rangle] \{\langle integer \rangle\}$  prints an icon to depict a die with a certain number of sides. Two special icons exist for a two-sided die (which would be equivalent to a coin) and for a hundred-sided die (which typically comes in the shape of a sphere). There is also a special icon for a fudge die

For the six-sided die, nine additional shapes exists representing the values one to nine as pips. Also, additional shapes exist representing the plus or minus side of a fudge die.

The command takes two mandatory commands, the first of which describes the shape (see previous subsection) and the second can take an integer that is placed in front of the shape. Thus, \die{eightside}{2} results in 2 \hforall (meaning 2 eight-sided dice are rolled).

The command also takes two optional arguments, the second of which can take arbitrary TikZ options to style the icon. The options affect the shape, not the integer when it is printed before the icon. As an example,  $die\{eightside\}[blue, thick]\{2\}$  results in  $2 \diamondsuit$ .

The first optional argument can take the value normal or large, normal being the default value. With large given as argument, the icon is drawn larger and the additional integer is printed inside of the shape instead of before it. As an example, \die[large]{eightside}{2} results in (2). Note that the integer will always be printed on top of the shape, even if the shape does not have an open center as in the case of the fudge shapes or the shapes featuring pips.

Command	Icon	Shape
${ \langle \text{die}[\langle style \rangle] \{\langle shape \rangle\} [\langle options \rangle] }$	$\{\langle integer \rangle \}$	
		twoside
	$\triangle$	fourside
		sixside
		eightside
	♦	tenside
		twelveside
	$\bigotimes$	twentyside
	$\bigcirc$	hundredside
	<u>±</u>	fudge
		sixside one
	••	sixside two
	·.	sixside three
		sixside four
	::	sixside five
	<b>::</b>	sixside six
	<b>::</b>	sixside seven
	<b>:::</b>	sixside eight
	<b>:::</b>	sixside nine
	+	fudge plus
	_	fudge minus

#### 3.2.2 Icons \ability and \saving

\ability The command \ability[ $\langle style \rangle$ ] { $\langle shape \rangle$ } [ $\langle options \rangle$ ] prints icons depicting an ability of a character. The abilities are represented by animal-like shapes. The

relevant shape should be given as mandatory argument to the command. The second optional argument can take arbitrary  ${\rm Ti}k{\rm Z}$  options to style the icon.

The first optional argument can take the value positive or negative, positive being the default value. With negative given as argument, the icon is drawn negative inside a circle. As an example, \ability[negative]{charisma} results in .

\saving The command \saving[ $\langle style \rangle$ ]{ $\langle shape \rangle$ }[ $\langle options \rangle$ ] prints the icons that can be typeset using the \ability command inside a small shield. It can take the same values for the mandatory argument as the \ability command. The optional argument can take arbitrary TikZ options to style the icon.

The first optional argument can take the value normal or empty, normal being the default value. With empty given as argument, the icon inside the shield is not printed. In this case, the mandatory argument can be left empty. As an example, \saving[empty]{} results in \( \subseteq \).

Command	Icon	Shape
${\texttt{\ \ ability}[\langle style \rangle]\{\langle shape \rangle\}[\langle options \rangle]}$		
	ij	strength
	(F)	dexterity
		dexterity alt
		constitution
	£73	intelligence
	(v)	wisdom
	S	charisma
	3	luck
	蛩	armor
	\$ <del>`</del>	proficiency
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		
	(iii)	strength
		dexterity
		dexterity alt
	<b>\\ \</b>	constitution
	(#)	intelligence
	(A)	wisdom
		charisma
	<b>9</b>	luck
	<b>*</b>	armor
	*	proficiency

### 3.2.3 Icon \spell

\spell The command \spell{ $\langle shape \rangle$ }[ $\langle options \rangle$ ] prints icons depicting the effect of a spell or how it is to be effected. The optional argument can take arbitrary TikZ options to style the icon.

Command	Icon	Shape
${\left( shape \right) \left[ \left( options \right) \right]}$		
	-	linear
	$\triangleleft$	conic
	$\cdot$	quadratic
		cubic
	<b>③</b>	spheric
	$\odot$	cylindric
	$\wp$	verbal
	<b>\$</b>	somatic
	$\Diamond$	material
	$\oplus$	focus

### 3.2.4 Icon \spellschool

\spellschool The command \spellschool [ $\langle style \rangle$ ] { $\langle shape \rangle$ } [ $\langle options \rangle$ ] prints icons that represent the school a spell belongs to. The second optional argument can take arbitrary TikZ options to style the icon.

> The first optional argument can take the value negative or positive, negative being the default value. Per default the icon is drawn in white inside a filled escutcheon. With positive given as argument, the icon as well as the escutcheon are drawn in the currently selected color. As an example, \spellschool[positive] {evocation} results in .

Command	Icon	Shape
$\label{eq:spellschool} $$ \operatorname{spellschool}[\langle style \rangle] {\langle shape \rangle} [\langle option \rangle] $$$	$as\rangle$ ]	
	¥	abjuration
	$\forall$	conjuration
	F	divination
	₩	enchantment
	#	evocation
	<b>P</b>	illusion
	<b>₽</b>	necromancy
	P	transmutation

#### Icons \damage, \attack, and \condition 3.2.5

\damage The command \damage{ $\langle shape \rangle$ }[ $\langle options \rangle$ ] prints icons depicting the damage of an attack. The icon is printed inside a circle. The optional argument can take arbitrary TikZ options to style the icon.

 $\hat{shape}$  (shape) [(options)] prints icons depicting the kind of an attack. The optional argument can take arbitrary TikZ options to style the icon.

\condition The command \condition $\{\langle shape \rangle\}$  [ $\langle options \rangle$ ] prints icons depicting a condition of a character. The optional argument can take arbitrary TikZ options to style the icon.

Command	Icon	Shape
$\label{eq:damage} $$\operatorname{damage}(\langle shape \rangle) [\langle options \rangle]$$$		
	<b>(a)</b>	acid
	$\otimes$	bludgeoning
	*	cold
	<b>(a)</b>	fire
	*	force
	4	lightning
	<b>(f)</b>	necrotic
		piercing
	<u> </u>	poison
	6	psychic
	( <u>©</u> )	radiant
	<b>(%)</b>	slashing
	<u></u>	thunder
	* * * * * * * * * * * * * * * * * * *	healing
$\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $		
(accack (\shape/) [\operons/]	×	melee
	<i>∞</i>	ranged
	Øs A.	magic
	•	singlehanded
	E E E	doublehanded
	<i>19</i>	doubtenanded
$\condition{\langle shape \rangle}[\langle options \rangle]$	п	
	& ~	buff
	Ø	blinded
	8	charmed
	Ŋ	deafened
	8	exhausted
	8	frightened
	<b>\$</b> \$	grappled
	•	incapacitated
	$\bigcirc$	invisible
	**	paralyzed
	<b>(5)</b>	petrified
	<b></b>	poisoned
	⊃ઁ	prone
		restrained
	**	stunned
	چ	unconscious
	9	hearing
	<b>o</b>	seeing

## 3.3 Direct use of shapes

Because the icons are defined as  $\mathrm{Ti}k\mathrm{Z}$  shapes, they can directly be applied to  $\mathrm{Ti}k\mathrm{Z}$  nodes. However, the shapes don't have a shape border and no anchors except for the center anchor that sits exactly in the center of the shape. Therefore, if nodes with these shapes are connected using edges, the center anchor will be used to

connect the nodes. If nodes with these shapes are being positioned, only the center anchor is available. Text content of these nodes is simply printed on top of the center of the node. Compare the following example.



```
\begin{tikzpicture}
    \node[eightside, blue, thick]
        at (0,0) (A) {A};
    \node[charisma] at (2,0) (B) {B};
    \draw[red] (A) -- (B);
\end{tikzpicture}
```

#### Boxing of icons 3.4

Because the icons cannot simply be used inside tikzpicture environments, the package provides a workaround to place icons inside of boxes for later use. Icons that are boxed this way can safely used inside tikzpicture environments. This might be necessary, if an icon should be used in inline text that sits inside a node.

 $\verb|\provideprotecteddndicon| \{\langle command \rangle\} [\langle style \rangle] \{\langle shape \rangle\} [\langle operation | for example of the command o$ tions  $\}$   $\{\langle box\ name \rangle\}$  creates a box containing the icon that would be created using one of the regular commands this package provides. For example, the command \provideprotecteddndicon{die}[large]{eightside}[blue, thick]{mybox} stores the icon of an eight-sided die with the relevant style and TikZ options in a new box named mybox. Note that no integer can be added to the \die command in this context.

\useprotecteddndicon Using the command \useprotecteddndicon $\{\langle box\ name \rangle\}$ , the previously defined box can be used to place the relevant icon. With the above definition,

\useprotecteddndicon{mybox} would result in /



Having created a boxed icon, it is safe to use it, for example, inside a TikZnode:



```
\begin{tikzpicture}
    \node[circle, draw, align=center] {
        \useprotecteddndicon{mybox} \\
        Roll a die!
   };
\end{tikzpicture}
```