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Before researchers receive their research results, we need to check if the results contain any confidential information.

It's the researchers duty to show that their results are not confidential.

This is where `sdcLog` comes into play.

A tiny bit of theory

Two simple rules:

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1. Each result must be based on at least 5 different entities.

2. The largest two entities must account for less than 85% of a result (dominance).

An example

```
head(DT)
#>    id sector year     val_1    val_2
#> 1:  A     S1 2019        NA 9.477642
#> 2:  A     S1 2020 94.174449 5.856641
#> 3:  B     S1 2019  4.349115 3.697140
#> 4:  B     S1 2020  2.589011 6.796527
#> 5:  C     S1 2019  6.155680 7.213390
#> 6:  C     S1 2020  7.183206 5.948330
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```
# results wanted
DT[, .(mean = mean(val_1, na.rm = TRUE)), by = "sector"]
#>    sector     mean
#> 1:     S1 15.42511
#> 2:     S2 24.43726
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#>    sector     mean
#> 1:     S1 15.42511
#> 2:     S2 24.43726
```

```
# show that this result is fine
sdc_descriptives(DT, id_var = "id", val_var = "val_1", by = "sector")
#> [ OPTIONS:  sdc.n_ids: 5 | sdc.n_ids_dominance: 2 | sdc.share_dominance: 0.85 ]
#> [ SETTINGS: id_var: id | val_var: val_1 | by: sector | zero_as_NA: FALSE ]
#> Output complies to RDC rules.
```

Another example

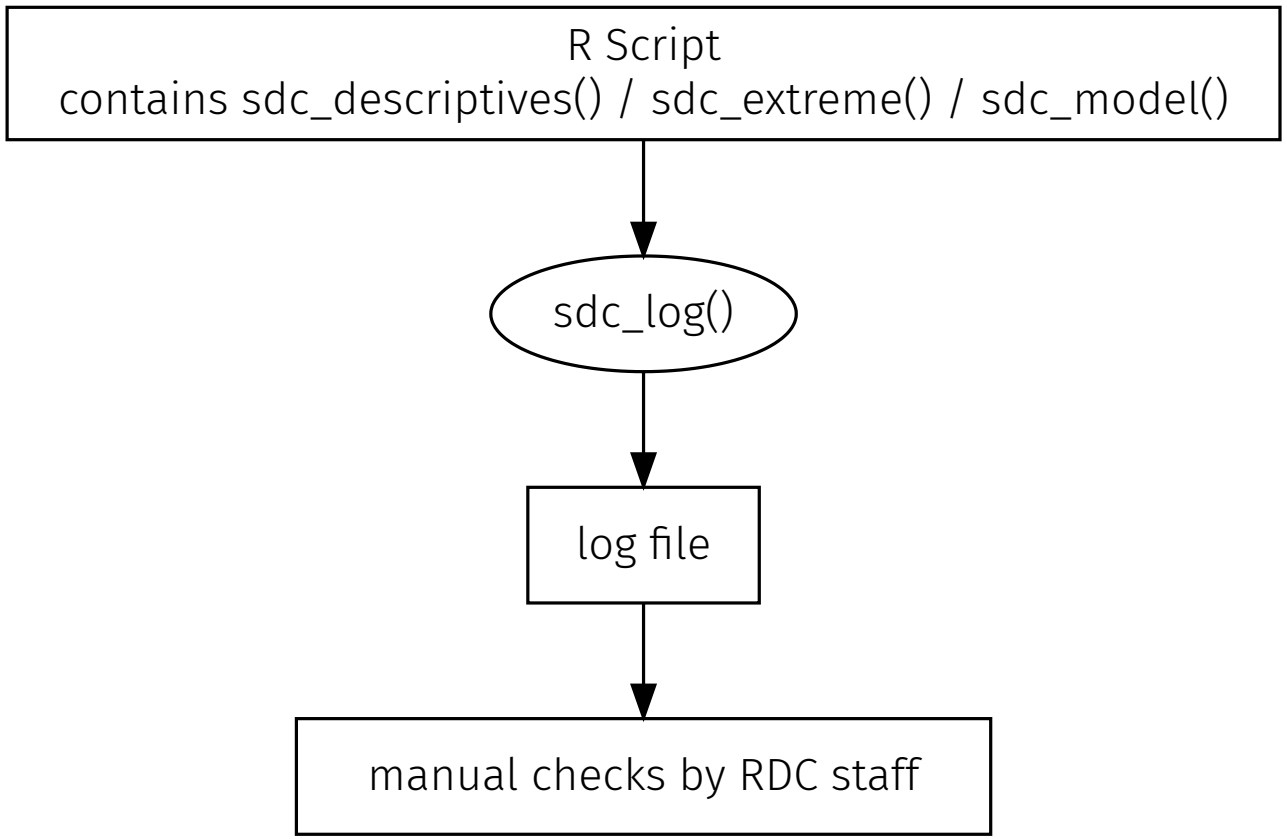
```
sdc_descriptives(DT, id_var = "id", val_var = "val_1", by = c("sector", "year"))
#> Warning: Potential disclosure problem: Not enough distinct entities.
#> Warning: Potential disclosure problem: Dominant entities.
#> [ OPTIONS:  sdc.n_ids: 5 | sdc.n_ids_dominance: 2 | sdc.share_dominance: 0.85 ]
#> [ SETTINGS: id_var: id | val_var: val_1 | by: sector, year | zero_as_NA: FALSE ]
#> Not enough distinct entities:
#>    sector year distinct_ids
#> 1:     S1 2019            4
#> 2:     S1 2020            5
#> 3:     S2 2019            5
#> 4:     S2 2020            5
#> Dominant entities:
#>    sector year value_share
#> 1:     S2 2020   0.9056314
#> 2:     S1 2020   0.8776852
#> 3:     S1 2019   0.6815011
#> 4:     S2 2019   0.5506965
```

Other functionality

`sdc_model()` for disclosure control of models

`sdc_extreme()` for non-confidential min/max values

Why is it called sdcLog?



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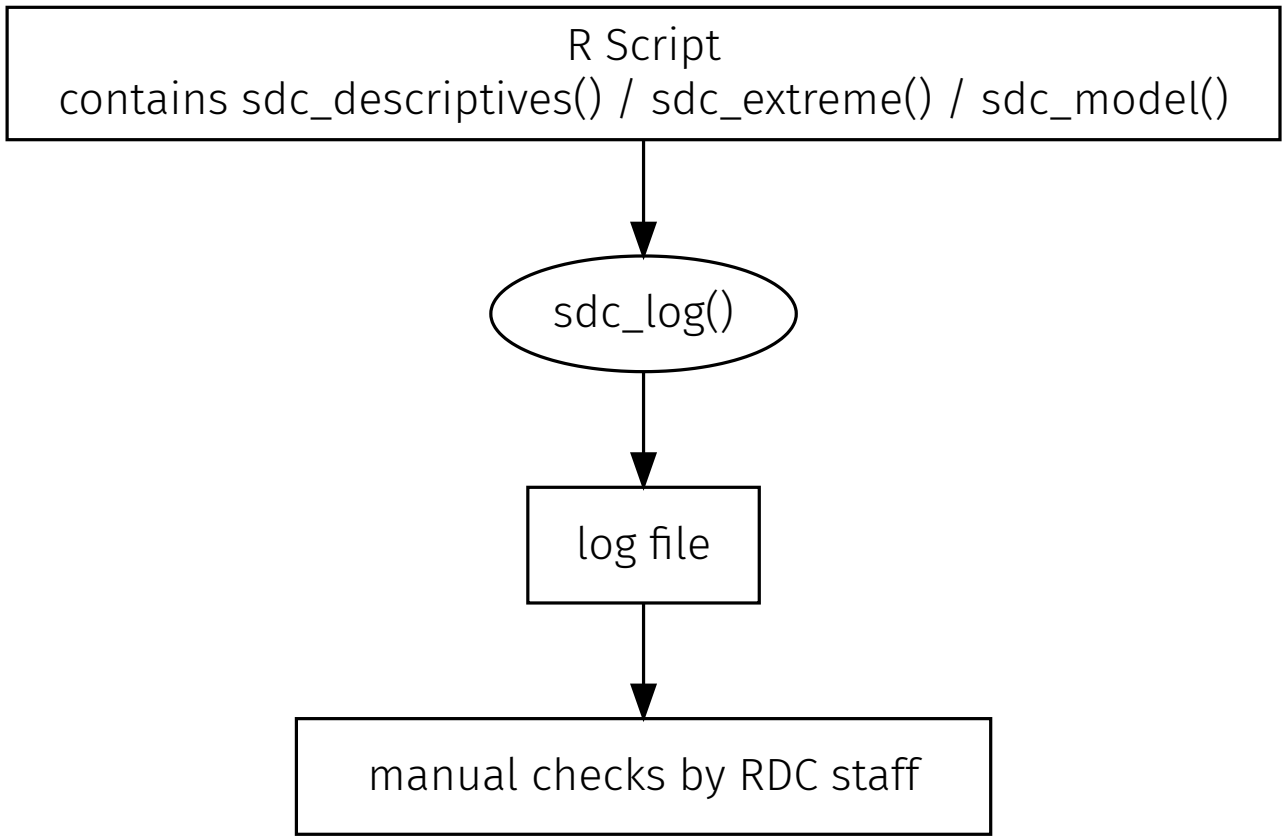

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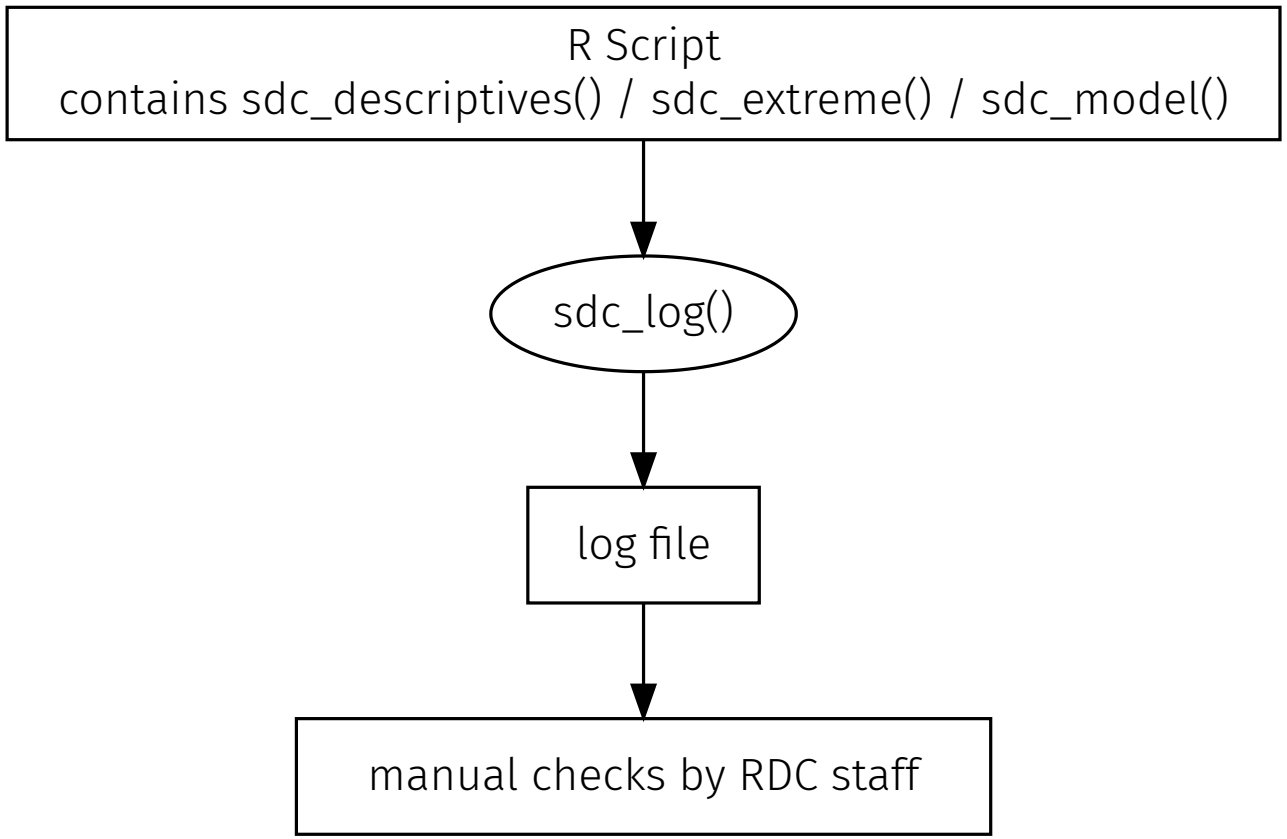

Get in touch!

```
# CRAN
install.packages("sdcLog")

# GitHub
remotes::install_github("https://github.com/matthiasgomolka/sdcLog")
```