testthat::with_mock()

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the testthat package

"**testthat** tries to make testing as fun as possible …" – testthat.r-lib.org

```
install.packages("testthat")
```

the with_mock()* method

"Executes code after temporarily substituting implementations of package functions. … useful for testing code that relies on functions that are **slow**, have unintended **side effects** or access [**external resources**] when testing." **–** testthat/R/mock.R

```
with_mock(..., .env = topenv())
```

the tidycensus api

```r
library(tidycensus)

census_api_key("YOUR API KEY GOES HERE")

# Compile query arguments

m90 <- get_decennial(...)
```

load_data_decennial()

```r
load_data_decennial <- function(...) {
  # Check args, build endpoint URL

  call <- GET(base, query = ...)
  if (call$status_code == 404)
    stop("Bad blah blah ...")
  }
  # Check for lots of other issues

  # Wrap up with post-processing
}
```

when the service is down stop and say "Bad blah blah …"

```
expect_error(
  load_data_decennial(...),
  "Bad blah blah …"
)
```

when the service is down stop and say "Bad blah blah ..."

```r
GET_DOWN <- function(x, y) {
  list("status_code" = 404, ...)
}

with_mock(
  GET = GET_DOWN,
  expect_error(
    load_data_decennial(...),
    "Bad blah blah …"
  )
)
```

load_data_decennial()

```r
load_data_decennial <- function(...) {
  # Check args, build endpoint URL

  call <- GET_DOWN(base, query = ...)
  if (call$status_code == 404)
    stop("Bad blah blah ...")
  }
  # Check for lots of other issues

  # Wrap up with post-processing
}
```

the with_mock()* method

"Executes code after temporarily substituting implementations of package functions. … useful for testing code that relies on functions that are slow, have unintended side effects or access [external resources] when testing." – testthat/R/mock.R

```
with_mock(..., .env = topenv())
```