

Package: vmxr (via r-universe)

July 2, 2026

Title VeloMetrix R Client

Version 0.1.1

Author Eric Novik [aut, cre], Juho Timonen [ctb], Generable [cph, fnd]

Maintainer Eric Novik <eric@generable.com>

Description A native R client for the VeloMetrix REST API (vmx-api). Wraps the treatment-to-simulation analysis workflow in ergonomic, pipe-friendly verbs that block-and-poll for asynchronous server jobs and return native R objects (tibbles and typed S3 objects). The package orchestrates server-side jobs; it holds no business logic of its own. Targets API 0.2.x / CLI 0.6.x.

License Apache License (>= 2)

URL <https://github.com/generable/vmxr>

BugReports <https://github.com/generable/vmxr/issues>

Depends R (>= 4.1.0)

Imports cli, curl, httr2, rlang, tibble, vctrs

Suggests arrow, dplyr, ggplot2, httptest2, jsonlite, knitr, rmarkdown, testthat (>= 3.0.0), withr

VignetteBuilder knitr

Config/testthat/edition 3

Encoding UTF-8

Roxygen list(markdown = TRUE)

Config/roxygen2/version 8.0.0

RoxygenNote 7.3.3

Config/pak/sysreqs libssl-dev

Repository <https://generable.r-universe.dev>

Date/Publication 2026-07-02 13:02:55 UTC

RemoteUrl <https://github.com/generable/vmxr>

RemoteRef HEAD

RemoteSha bbd051e249d4e53960bc87e8451576a59b1faed4

Contents

vmx_analysis_log	3
vmx_client	4
vmx_data_version	5
vmx_data_version_archive	5
vmx_data_version_create	6
vmx_data_version_export	6
vmx_data_version_table	7
vmx_data_version_unarchive	8
vmx_data_versions	8
vmx_dataset	9
vmx_dataset_cancel	9
vmx_dataset_download	10
vmx_dataset_files	10
vmx_dataset_tags	11
vmx_datasets	11
vmx_dosing_input	12
vmx_dosing_input_status	12
vmx_fit_global_estimates	13
vmx_fit_obs_vs_pred	13
vmx_fit_subject_estimates	14
vmx_fit_vpc	14
vmx_health	15
vmx_model_build	15
vmx_model_build_artifacts	16
vmx_model_build_cancel	17
vmx_model_build_events	17
vmx_model_build_export	18
vmx_model_build_logs	18
vmx_model_build_report	19
vmx_model_build_report_create	19
vmx_model_build_results	20
vmx_model_build_runs	20
vmx_model_build_status	21
vmx_model_catalog	21
vmx_model_data	22
vmx_model_describe	22
vmx_model_fit	23
vmx_model_fit_postprocessor_status	23
vmx_model_fits	24
vmx_modeling_options	24
vmx_nca	25
vmx_nca_analyses	26
vmx_nca_get	26
vmx_nca_result	27
vmx_nlmixr_data	27
vmx_pd	28

vmx_pk	28
vmx_prep_answer	29
vmx_prep_questions	29
vmx_prep_status	30
vmx_sim_cancel	30
vmx_sim_existing_subject	31
vmx_sim_existing_subject_from_text	32
vmx_sim_hypothetical_subject	33
vmx_sim_hypothetical_subject_from_text	34
vmx_sim_jobs	35
vmx_sim_population	35
vmx_sim_population_from_text	36
vmx_sim_result	37
vmx_sim_status	37
vmx_studies	38
vmx_study	38
vmx_study_create	39
vmx_study_update	39
vmx_subjects	40
vmx_torsten_data	40
vmx_treatment	41
vmx_treatment_create	41
vmx_treatment_update	42
vmx_treatments	42
vmx_upload	43
vmx_upload_ignore	44
vmx_upload_unignore	44
vmx_wait	45
vmx_whoami	45

Index 47

vmx_analysis_log	<i>Audit / analysis log for a study</i>
------------------	---

Description

GET /studies/{std_id}/analysis-log — the unified newest-first event feed, auto-paginated into a tibble with a kind discriminator per row.

Usage

```
vmx_analysis_log(
  study,
  kind = NULL,
  event_type = NULL,
  outcome = NULL,
  severity = NULL,
```

```

    since = NULL,
    resource = NULL,
    client = vmx_client()
  )

```

Arguments

study	A study id (std_...) or vmx_study.
kind	Optional kind filter.
event_type	Optional event-type filter.
outcome	Optional outcome filter.
severity	Optional severity filter.
since	Optional lower time bound: a POSIXct/Date (formatted to ISO-8601 UTC) or an ISO-8601 string.
resource	Optional resource id (or object) to scope to.
client	A vmx_client.

Value

A tibble.

vmx_client	<i>Create a vmxr client</i>
------------	-----------------------------

Description

Resolves connection config with the precedence: explicit args -> VMX_API_BASE_URL / VMX_API_TOKEN environment variables -> ~/.Renviron -> a classed error. The token is stored on the object but redacted in `print()` and never logged.

Usage

```
vmx_client(base_url = NULL, token = NULL, ...)
```

Arguments

base_url	API base URL. Defaults to <code>Sys.getenv("VMX_API_BASE_URL")</code> .
token	Authentik personal access token (PAT). Defaults to <code>Sys.getenv("VMX_API_TOKEN")</code> . Never hard-code a PAT in source.
...	Reserved for future options (timeouts, retries, user agent).

Value

An object of class `vmx_client`.

vmx_data_version	<i>Fetch one data version</i>
------------------	-------------------------------

Description

Fetch one data version

Usage

```
vmx_data_version(id, client = vmx_client())
```

Arguments

id	A data-version id (dv_...) or vmx_data_version.
client	A vmx_client.

Value

A vmx_data_version.

vmx_data_version_archive	<i>Archive a data version</i>
--------------------------	-------------------------------

Description

Archive a data version

Usage

```
vmx_data_version_archive(dv, reason = NULL, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
reason	Optional free-text reason.
client	A vmx_client.

Value

The updated vmx_data_version.

 vmx_data_version_create

Create a data version

Description

Starts a format job over an explicit upload composition (POST /datasets/{ds_id}/data-versions). Returns the in-flight prep-status; poll it with `vmx_wait()`.

Usage

```
vmx_data_version_create(
  dataset,
  uploads,
  prior_config = NULL,
  client = vmx_client()
)
```

Arguments

dataset	A dataset id (ds_...) or vmx_dataset.
uploads	Character vector of upload ids (upl_...) to format over.
prior_config	Optional prior data-version (dv_...) whose config seeds this job (the config-update lineage pointer).
client	A vmx_client.

Value

A vmx_prep_status for the new job.

 vmx_data_version_export

Export a data version

Description

Fetches the signed-URL export envelope (GET /data-versions/{id}/export). When dest is supplied the bundle is streamed to that path; otherwise the parsed envelope (including the signed download_url) is returned.

Usage

```
vmx_data_version_export(dv, dest = NULL, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
dest	Optional local file path to stream the bundle to.
client	A vmx_client.

Value

The export envelope (list), or, when dest is set, dest invisibly.

vmx_data_version_table
A prepared data-version table

Description

GET /data-versions/{id}/tables/{domain} — returns the formatter's prepared domain table as a tibble (columns typed per the server's column metadata, which is attached as the "columns" attribute). gen_subject_uuid is the canonical subject join key.

Usage

```
vmx_data_version_table(
  dv,
  domain = c("subjects", "pk", "dosing", "pd", "labs", "covariates"),
  client = vmx_client()
)
```

Arguments

dv	A data-version id (dv...) or vmx_data_version.
domain	One of "subjects", "pk", "dosing", "pd", "labs", "covariates".
client	A vmx_client.

Value

A tibble.

vmx_data_version_unarchive

Unarchive a data version

Description

Unarchive a data version

Usage

```
vmx_data_version_unarchive(dv, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
client	A vmx_client.

Value

The updated vmx_data_version.

vmx_data_versions

List data versions

Description

List data versions

Usage

```
vmx_data_versions(
  treatment = NULL,
  study = NULL,
  include_archived = FALSE,
  eligible_for_modeling = NULL,
  client = vmx_client()
)
```

Arguments

treatment	Optional treatment filter.
study	Optional study filter.
include_archived	Include archived versions.
eligible_for_modeling	Optional modeling-eligibility filter.
client	A vmx_client.

Value

A tibble.

vmx_dataset	<i>Fetch one dataset</i>
-------------	--------------------------

Description

Fetch one dataset

Usage

```
vmx_dataset(id, client = vmx_client())
```

Arguments

id	A dataset id (ds_...) or vmx_dataset.
client	A vmx_client.

Value

A vmx_dataset.

vmx_dataset_cancel	<i>Cancel a dataset's in-flight format job</i>
--------------------	--

Description

POST /datasets/{ds_id}/cancel — terminates the format job and mints a cancelled DataVersion.

Usage

```
vmx_dataset_cancel(dataset, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
client	A vmx_client.

Value

The updated vmx_prep_status.

vmx_dataset_download *Download a dataset's files*

Description

Not implemented: the API's dataset-files listing does not expose per-file download URLs. Use [vmx_data_version_export\(\)](#) to pull a curated bundle.

Usage

```
vmx_dataset_download(dataset, dest = ".", client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
dest	Destination directory.
client	A vmx_client.

Value

Not yet implemented.

vmx_dataset_files *List the files in a dataset*

Description

List the files in a dataset

Usage

```
vmx_dataset_files(dataset, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
client	A vmx_client.

Value

A tibble.

vmx_dataset_tags	<i>The tags on a dataset</i>
------------------	------------------------------

Description

Returns the dataset's allowlisted tag map as a two-column (key, value) tibble. Reads the tags off a vmx_dataset object when given one, else fetches the dataset.

Usage

```
vmx_dataset_tags(dataset, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
client	A vmx_client.

Value

A tibble with key and value columns.

vmx_datasets	<i>List datasets</i>
--------------	----------------------

Description

List datasets

Usage

```
vmx_datasets(study = NULL, treatment = NULL, client = vmx_client())
```

Arguments

study	Optional study filter.
treatment	Optional treatment filter.
client	A vmx_client.

Value

A tibble.

vmx_dosing_input	<i>Create a dosing input for a fit</i>
------------------	--

Description

POST /model-fits/{mf_id}/simulation-dosing-inputs.

Usage

```
vmx_dosing_input(fit, dosing_text, scenario_name, client = vmx_client())
```

Arguments

fit	A fit id (mf_...) or vmx_model_fit.
dosing_text	The dosing regimen text.
scenario_name	One or more scenario names.
client	A vmx_client.

Value

A vmx_dosing_input (carries dosing_input_id).

vmx_dosing_input_status	<i>Dosing-input status</i>
-------------------------	----------------------------

Description

Dosing-input status

Usage

```
vmx_dosing_input_status(dosing_input, client = vmx_client())
```

Arguments

dosing_input	A dosing-input id or vmx_dosing_input.
client	A vmx_client.

Value

A vmx_dosing_input.

`vmx_fit_global_estimates`*Global (population) parameter estimates (tidy)*

Description

One row per parameter, with the point estimate and credible interval.

Usage

```
vmx_fit_global_estimates(fit, client = vmx_client())
```

Arguments

<code>fit</code>	A fit id or <code>vmx_model_fit</code> .
<code>client</code>	A <code>vmx_client</code> .

Value

A tibble.

`vmx_fit_obs_vs_pred` *Observed-vs-predicted diagnostic (tidy)*

Description

Reshapes the pk block's parallel observation arrays (subject ids, time, observed concentration, BLQ/ALOQ flags, LLOQ, ...) into a one-row-per- observation tibble. Non-columnar members — notably the predicted- concentration quantile bands — are kept on the "extra" attribute; the PD block is on "pd" and the fit id on "model_fit_id".

Usage

```
vmx_fit_obs_vs_pred(fit, client = vmx_client())
```

Arguments

<code>fit</code>	A fit id or <code>vmx_model_fit</code> .
<code>client</code>	A <code>vmx_client</code> .

Value

A tibble (one row per PK observation).

 vmx_fit_subject_estimates

Subject-level parameter estimates (tidy, long)

Description

One row per subject x parameter, with the posterior point estimate (value) and credible interval (ci_lower/ci_upper).

Usage

```
vmx_fit_subject_estimates(fit, client = vmx_client())
```

Arguments

fit	A fit id or vmx_model_fit.
client	A vmx_client.

Value

A tibble.

 vmx_fit_vpc

Visual predictive check artifact

Description

Returns the parsed VPC artifact (per dose-group and per-subject quantile bands over time grids). Tibble reshaping is deferred; see the package NEWS.

Usage

```
vmx_fit_vpc(fit, client = vmx_client())
```

Arguments

fit	A fit id or vmx_model_fit.
client	A vmx_client.

Value

A list (the parsed artifact).

vmx_health	<i>Connectivity probe</i>
------------	---------------------------

Description

Calls GET /health.

Usage

```
vmx_health(client = vmx_client())
```

Arguments

client A vmx_client.

Value

Invisibly, a vmx_health object (status, version, api_contract_version, engine, engine_version); raises a classed error if the API is unreachable or unhealthy.

vmx_model_build	<i>Start a model build run (optionally wait)</i>
-----------------	--

Description

pd_marker uses the design's "GEN_uuid:increasing" / ":decreasing" shorthand; it is parsed into the API's {gen_uuid, direction} form.

Usage

```
vmx_model_build(
  data_version,
  time_basis,
  pd_marker = NULL,
  covariate = NULL,
  idempotency_key = NULL,
  retried_from = NULL,
  wait = FALSE,
  ...,
  client = vmx_client()
)
```

Arguments

data_version	A data-version id or vmx_data_version.
time_basis	Time basis.
pd_marker	Optional "GEN_uuid:increasing" / ":decreasing" string(s).
covariate	Optional covariate name(s).
idempotency_key	Optional idempotency key.
retried_from	Optional prior run to retry from.
wait	If TRUE, block until the run settles.
...	Polling controls forwarded to <code>vmx_wait()</code> when wait = TRUE (e.g. timeout, interval, progress).
client	A vmx_client.

Value

A vmx_model_build_run.

vmx_model_build_artifacts

Download build-run artifacts

Description

Download build-run artifacts

Usage

```
vmx_model_build_artifacts(run, dest = ".", client = vmx_client())
```

Arguments

run	A build-run id or object.
dest	Destination directory.
client	A vmx_client.

Value

Not yet implemented.

vmx_model_build_cancel
Cancel a build run

Description

Cancel a build run

Usage

```
vmx_model_build_cancel(run, client = vmx_client())
```

Arguments

run	A build-run id or object.
client	A vmx_client.

Value

A vmx_model_build_run.

vmx_model_build_events
Build-run events (SSE stream)

Description

Build-run events (SSE stream)

Usage

```
vmx_model_build_events(run, client = vmx_client())
```

Arguments

run	A build-run id or object.
client	A vmx_client.

Value

Not yet implemented.

`vmx_model_build_export`*Markdown export of a build run*

Description

Markdown export of a build run

Usage

```
vmx_model_build_export(run, client = vmx_client())
```

Arguments

<code>run</code>	A build-run id or object.
<code>client</code>	A <code>vmx_client</code> .

Value

The export markdown as a length-1 character vector.

`vmx_model_build_logs` *Build-run logs*

Description

Build-run logs

Usage

```
vmx_model_build_logs(run, client = vmx_client())
```

Arguments

<code>run</code>	A build-run id or object.
<code>client</code>	A <code>vmx_client</code> .

Value

A tibble of log lines.

 vmx_model_build_report

Build-run report status (signed HTML report URL when ready)

Description

Build-run report status (signed HTML report URL when ready)

Usage

```
vmx_model_build_report(run, client = vmx_client())
```

Arguments

run	A build-run id or object.
client	A vmx_client.

Value

A list with status and, when ready, url.

vmx_model_build_report_create

Request build-run report generation

Description

POST /model-build-runs/{run_id}/report queues HTML report generation.

Usage

```
vmx_model_build_report_create(
  run,
  subject_plot_mode = c("all", "none"),
  client = vmx_client()
)
```

Arguments

run	A build-run id or object.
subject_plot_mode	One of "all" or "none".
client	A vmx_client.

Value

A list with report status.

`vmx_model_build_results`*Build-run results*

Description

Build-run results

Usage

```
vmx_model_build_results(run, client = vmx_client())
```

Arguments

<code>run</code>	A build-run id or object.
<code>client</code>	A <code>vmx_client</code> .

Value

A list (fits summary, modeling population, PK structure selection).

`vmx_model_build_runs` *List model build runs*

Description

List model build runs

Usage

```
vmx_model_build_runs(  
  data_version = NULL,  
  study = NULL,  
  treatment = NULL,  
  status = NULL,  
  client = vmx_client()  
)
```

Arguments

<code>data_version, study, treatment, status</code>	Optional filters.
<code>client</code>	A <code>vmx_client</code> .

Value

A tibble.

vmx_model_build_status
Build-run status

Description

Build-run status

Usage

```
vmx_model_build_status(run, client = vmx_client())
```

Arguments

run A build-run id (run_...) or object.
client A vmx_client.

Value

A vmx_model_build_run.

vmx_model_catalog *Model catalog*

Description

GET /model-catalog returns categories of models; this flattens them into one tibble with a category column.

Usage

```
vmx_model_catalog(data_version = NULL, client = vmx_client())
```

Arguments

data_version Optional data-version to tailor the catalog to.
client A vmx_client.

Value

A tibble.

vmx_model_data	<i>Fetch model-ready tidy tables for a data version</i>
----------------	---

Description

Returns a `vmx_model_data` bundle with `$subjects`, `$pk`, `$pd` (each a tibble, or NULL when the `DataVersion` has no such prepared table), and `$meta` (units, time bases, PD-marker manifest, subject count) read from the `DataVersion`. Only domains flagged in the DV's `table_availability` are fetched, so absent optional tables don't 404.

Usage

```
vmx_model_data(dv, client = vmx_client())
```

Arguments

<code>dv</code>	A data-version id or <code>vmx_data_version</code> .
<code>client</code>	A <code>vmx_client</code> .

Value

A `vmx_model_data` object.

vmx_model_describe	<i>Describe a model</i>
--------------------	-------------------------

Description

Describe a model

Usage

```
vmx_model_describe(model_name, client = vmx_client())
```

Arguments

<code>model_name</code>	Catalog model name.
<code>client</code>	A <code>vmx_client</code> .

Value

A named list.

vmx_model_fit	<i>Fetch one model fit's details</i>
---------------	--------------------------------------

Description

Fetch one model fit's details

Usage

```
vmx_model_fit(id, client = vmx_client())
```

Arguments

id	A fit id (mf_...) or vmx_model_fit.
client	A vmx_client.

Value

A vmx_model_fit (metadata / model / inference).

vmx_model_fit_postprocessor_status	<i>Model-fit postprocessor status</i>
------------------------------------	---------------------------------------

Description

Model-fit postprocessor status

Usage

```
vmx_model_fit_postprocessor_status(fit, client = vmx_client())
```

Arguments

fit	A fit id or vmx_model_fit.
client	A vmx_client.

Value

A list with postprocessor status.

vmx_model_fits	<i>List model fits</i>
----------------	------------------------

Description

List model fits

Usage

```
vmx_model_fits(
  run = NULL,
  data_version = NULL,
  model_type = NULL,
  marker_name = NULL,
  status = NULL,
  client = vmx_client()
)
```

Arguments

run, data_version, model_type, marker_name, status
Optional filters.

client A vmx_client.

Value

A tibble.

vmx_modeling_options	<i>Preview modeling options for a data version</i>
----------------------	--

Description

Preview modeling options for a data version

Usage

```
vmx_modeling_options(
  data_version,
  time_basis,
  pd_marker = NULL,
  covariate = NULL,
  client = vmx_client()
)
```

Arguments

<code>data_version</code>	A data-version id or <code>vmx_data_version</code> .
<code>time_basis</code>	Time basis.
<code>pd_marker</code>	Optional PD marker <code>gen_uuid(s)</code> (character vector).
<code>covariate</code>	Optional covariate name(s).
<code>client</code>	A <code>vmx_client</code> .

Value

A list (the selection preview).

<code>vmx_nca</code>	<i>Run an NCA analysis</i>
----------------------	----------------------------

Description

Creates the analysis (POST /nca-analyses) and, by default, blocks until it settles. `time_basis` is one of "observed", "nominal", or "nominal_from_observed_dose" (validated server-side against the DataVersion's available bases).

Usage

```
vmx_nca(
  data_version,
  time_basis,
  idempotency_key = NULL,
  retried_from = NULL,
  wait = TRUE,
  ...,
  client = vmx_client()
)
```

Arguments

<code>data_version</code>	A data-version id (<code>dv_...</code>) or <code>vmx_data_version</code> .
<code>time_basis</code>	The time basis to compute on.
<code>idempotency_key, retried_from</code>	Optional create fields.
<code>wait</code>	If TRUE (default), block until the analysis is terminal.
<code>...</code>	Polling controls forwarded to <code>vmx_wait()</code> when <code>wait = TRUE</code> (e.g. <code>timeout</code> , <code>interval</code> , <code>progress</code>).
<code>client</code>	A <code>vmx_client</code> .

Value

A `vmx_nca_analysis`.

vmx_nca_analyses	<i>List NCA analyses</i>
------------------	--------------------------

Description

List NCA analyses

Usage

```
vmx_nca_analyses(  
  data_version = NULL,  
  study = NULL,  
  treatment = NULL,  
  status = NULL,  
  time_basis = NULL,  
  client = vmx_client()  
)
```

Arguments

data_version	Optional data-version (dv_...) filter.
study	Optional study (std_...) filter.
treatment	Optional treatment (tmt_...) filter.
status	Optional status filter (queued/running/completed/ degraded/failed).
time_basis	Optional time-basis filter.
client	A vmx_client.

Value

A tibble, one row per analysis.

vmx_nca_get	<i>Fetch one NCA analysis</i>
-------------	-------------------------------

Description

Fetch one NCA analysis

Usage

```
vmx_nca_get(id, client = vmx_client())
```

Arguments

id An NCA id (nca_...) or vmx_nca_analysis.
 client A vmx_client.

Value

A vmx_nca_analysis.

vmx_nca_result	<i>NCA result table (PK parameters, one row per subject)</i>
----------------	--

Description

Reshapes the point_estimates payload (metric -> per-subject values, parallel to the subject arrays) into a tidy tibble: subject_id, gen_subject_uuid, and one column per PK quantity. The quantity metadata (display names, units, explanations) is attached as the "quantities" attribute.

Usage

```
vmx_nca_result(nca, client = vmx_client())
```

Arguments

nca An NCA id or vmx_nca_analysis.
 client A vmx_client.

Value

A tibble.

vmx_nlmixr_data	<i>NONMEM-layout data.frame for nlmixr2 / rxode2</i>
-----------------	--

Description

Not yet implemented. Assembling the NONMEM/nlmixr2 layout (ID/TIME/DV/AMT/EVID/CMT/MDV/RATE/II/ADDL/+ covariates) from the pk and dosing domain tables requires the DataVersion column/manifest contract to be pinned and validated against real data; see the package NEWS. Use [vmx_pk\(\)](#) / [vmx_data_version_table\(\)](#) for the tidy tables today.

Usage

```
vmx_nlmixr_data(dv, analyte = NULL, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
analyte	Analyte to assemble.
client	A vmx_client.

Value

Not yet implemented.

vmx_pd	<i>PD observations table</i>
--------	------------------------------

Description

PD observations table

Usage

```
vmx_pd(dv, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
client	A vmx_client.

Value

A tibble.

vmx_pk	<i>PK observations + events table</i>
--------	---------------------------------------

Description

PK observations + events table

Usage

```
vmx_pk(dv, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
client	A vmx_client.

Value

A tibble.

vmx_prep_answer	<i>Answer prep questions and resume formatting</i>
-----------------	--

Description

Answer prep questions and resume formatting

Usage

```
vmx_prep_answer(dataset, answers, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
answers	A named list mapping each prompt field to its answer value.
client	A vmx_client.

vmx_prep_questions	<i>Questions raised by prep (when awaiting input)</i>
--------------------	---

Description

Questions raised by prep (when awaiting input)

Usage

```
vmx_prep_questions(dataset, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
client	A vmx_client.

Value

A tibble of pending questions.

vmx_prep_status	<i>Prep status for a dataset</i>
-----------------	----------------------------------

Description

Calls GET /datasets/{ds_id}/prep-status.

Usage

```
vmx_prep_status(dataset, client = vmx_client())
```

Arguments

dataset	A dataset id (ds_...) or vmx_dataset.
client	A vmx_client.

Value

A vmx_prep_status (status, and data_version_id once settled).

vmx_sim_cancel	<i>Cancel a simulation job</i>
----------------	--------------------------------

Description

Cancel a simulation job

Usage

```
vmx_sim_cancel(job, client = vmx_client())
```

Arguments

job	A job id or vmx_simulation_job.
client	A vmx_client.

Value

A vmx_simulation_job.

`vmx_sim_existing_subject`*Simulate existing (observed) subjects*

Description

POST /model-fits/{mf_id}/existing-subject-simulation-jobs.

Usage

```
vmx_sim_existing_subject(  
  fit,  
  dosing_input,  
  subjects,  
  idempotency_key = NULL,  
  retried_from = NULL,  
  min_timepoints = NULL,  
  wait = FALSE,  
  ...,  
  client = vmx_client()  
)
```

Arguments

<code>fit</code>	A fit id or <code>vmx_model_fit</code> .
<code>dosing_input</code>	A dosing-input id or <code>vmx_dosing_input</code> .
<code>subjects</code>	Subjects to simulate: a <code>data.frame/tibble</code> with <code>gen_subject_uuid</code> + <code>subject_name</code> columns, or a list of such records.
<code>idempotency_key</code> , <code>retried_from</code>	Optional create fields.
<code>min_timepoints</code>	Optional minimum number of simulated timepoints.
<code>wait</code>	If TRUE, block until the job settles.
<code>...</code>	Polling controls forwarded to <code>vmx_wait()</code> .
<code>client</code>	A <code>vmx_client</code> .

Value

A `vmx_simulation_job`.

 vmx_sim_existing_subject_from_text

Simulate existing subjects from dosing text

Description

POST /model-fits/{mf_id}/existing-subject-simulation-jobs/from-text.

Usage

```
vmx_sim_existing_subject_from_text(
  fit,
  dosing_text,
  subjects,
  idempotency_key = NULL,
  retried_from = NULL,
  min_timepoints = NULL,
  wait = FALSE,
  ...,
  client = vmx_client()
)
```

Arguments

fit	A fit id or vmx_model_fit.
dosing_text	The dosing regimen text.
subjects	Subjects to simulate: a data.frame/tibble with gen_subject_uuid + subject_name columns, or a list of such records.
idempotency_key, retried_from	Optional create fields.
min_timepoints	Optional minimum number of simulated timepoints.
wait	If TRUE, block until the job settles.
...	Polling controls forwarded to vmx_wait() .
client	A vmx_client.

Value

A vmx_simulation_job.

vmx_sim_hypothetical_subject
Simulate hypothetical subjects

Description

POST /model-fits/{mf_id}/hypothetical-subject-simulation-jobs.

Usage

```
vmx_sim_hypothetical_subject(  
  fit,  
  dosing_input,  
  subjects,  
  idempotency_key = NULL,  
  retried_from = NULL,  
  min_timepoints = NULL,  
  wait = FALSE,  
  ...,  
  client = vmx_client()  
)
```

Arguments

fit	A fit id or vmx_model_fit.
dosing_input	A dosing-input id or vmx_dosing_input.
subjects	A data.frame/tibble with a subject_name column plus one column per covariate, or a list of {subject_name, covariates} records.
idempotency_key, retried_from	Optional create fields.
min_timepoints	Optional minimum number of simulated timepoints.
wait	If TRUE, block until the job settles.
...	Polling controls forwarded to vmx_wait() .
client	A vmx_client.

Value

A vmx_simulation_job.

`vmx_sim_hypothetical_subject_from_text`*Simulate hypothetical subjects from dosing text*

Description

POST /model-fits/{mf_id}/hypothetical-subject-simulation-jobs/from-text.

Usage

```
vmx_sim_hypothetical_subject_from_text(  
  fit,  
  dosing_text,  
  subjects,  
  idempotency_key = NULL,  
  retried_from = NULL,  
  min_timepoints = NULL,  
  wait = FALSE,  
  ...,  
  client = vmx_client()  
)
```

Arguments

<code>fit</code>	A fit id or <code>vmx_model_fit</code> .
<code>dosing_text</code>	The dosing regimen text.
<code>subjects</code>	A data.frame/tibble with a <code>subject_name</code> column plus one column per covariate, or a list of { <code>subject_name</code> , <code>covariates</code> } records.
<code>idempotency_key</code> , <code>retried_from</code>	Optional create fields.
<code>min_timepoints</code>	Optional minimum number of simulated timepoints.
<code>wait</code>	If TRUE, block until the job settles.
<code>...</code>	Polling controls forwarded to <code>vmx_wait()</code> .
<code>client</code>	A <code>vmx_client</code> .

Value

A `vmx_simulation_job`.

vmx_sim_jobs	<i>List simulation jobs for a model fit</i>
--------------	---

Description

List simulation jobs for a model fit

Usage

```
vmx_sim_jobs(fit, client = vmx_client())
```

Arguments

fit	A fit id or vmx_model_fit.
client	A vmx_client.

Value

A tibble.

vmx_sim_population	<i>Simulate a population scenario</i>
--------------------	---------------------------------------

Description

POST /model-fits/{mf_id}/population-simulation-jobs.

Usage

```
vmx_sim_population(  
  fit,  
  dosing_input,  
  scenario_name,  
  idempotency_key = NULL,  
  retried_from = NULL,  
  min_timepoints = NULL,  
  wait = FALSE,  
  ...,  
  client = vmx_client()  
)
```

Arguments

fit	A fit id or vmx_model_fit.
dosing_input	A dosing-input id or vmx_dosing_input.
scenario_name	The population scenario name.
idempotency_key, retried_from	Optional create fields.
min_timepoints	Optional minimum number of simulated timepoints.
wait	If TRUE, block until the job settles.
...	Polling controls forwarded to <code>vmx_wait()</code> .
client	A vmx_client.

Value

A vmx_simulation_job.

vmx_sim_population_from_text

Simulate a population scenario from dosing text

Description

POST /model-fits/{mf_id}/population-simulation-jobs/from-text.

Usage

```
vmx_sim_population_from_text(
  fit,
  dosing_text,
  scenario_name,
  idempotency_key = NULL,
  retried_from = NULL,
  min_timepoints = NULL,
  wait = FALSE,
  ...,
  client = vmx_client()
)
```

Arguments

fit	A fit id or vmx_model_fit.
dosing_text	The dosing regimen text.
scenario_name	The population scenario name.
idempotency_key, retried_from	Optional create fields.

min_timepoints Optional minimum number of simulated timepoints.
 wait If TRUE, block until the job settles.
 ... Polling controls forwarded to `vmx_wait()`.
 client A `vmx_client`.

Value

A `vmx_simulation_job`.

vmx_sim_result	<i>Simulation result</i>
----------------	--------------------------

Description

GET `/simulation-jobs/{id}/result`. Returns the parsed result payload (subject/time series with prediction bands). Tibble reshaping is deferred pending confirmation of the artifact shape; see the package NEWS.

Usage

```
vmx_sim_result(job, grouping_variable = NULL, client = vmx_client())
```

Arguments

job A job id or `vmx_simulation_job`.
 grouping_variable Optional server-side grouping.
 client A `vmx_client`.

Value

A list (the parsed result).

vmx_sim_status	<i>Simulation job status</i>
----------------	------------------------------

Description

Simulation job status

Usage

```
vmx_sim_status(job, client = vmx_client())
```

Arguments

job	A job id (simjob_...) or vmx_simulation_job.
client	A vmx_client.

Value

A vmx_simulation_job.

vmx_studies	<i>List studies for a treatment</i>
-------------	-------------------------------------

Description

List studies for a treatment

Usage

```
vmx_studies(treatment = NULL, status = NULL, client = vmx_client())
```

Arguments

treatment	A treatment id (tmt_...) or vmx_treatment; NULL lists across all treatments.
status	Optional status filter.
client	A vmx_client.

Value

A tibble, one row per study.

vmx_study	<i>Fetch one study</i>
-----------	------------------------

Description

Fetch one study

Usage

```
vmx_study(id, client = vmx_client())
```

Arguments

id	A study id (std_...) or vmx_study object.
client	A vmx_client.

Value

A vmx_study.

vmx_study_create	<i>Create a study</i>
------------------	-----------------------

Description

Create a study

Usage

```
vmx_study_create(
  treatment,
  name,
  study_type = "clinical",
  phase = NULL,
  ...,
  client = vmx_client()
)
```

Arguments

treatment	A treatment id or vmx_treatment.
name	Study name.
study_type	Study type; defaults to "clinical".
phase	Optional clinical phase.
...	Additional fields (description, route_of_administration, pd_markers).
client	A vmx_client.

Value

A vmx_study.

vmx_study_update	<i>Update a study</i>
------------------	-----------------------

Description

Only the fields you pass are changed (the server applies exclude_unset).

Usage

```
vmx_study_update(id, ..., client = vmx_client())
```

Arguments

id	A study id or vmx_study.
...	Fields to update.
client	A vmx_client.

Value

A vmx_study.

vmx_subjects	<i>Subjects table (one row per subject)</i>
--------------	---

Description

Subjects table (one row per subject)

Usage

```
vmx_subjects(dv, client = vmx_client())
```

Arguments

dv	A data-version id or vmx_data_version.
client	A vmx_client.

Value

A tibble.

vmx_torsten_data	<i>Ragged-array data list for Stan / Torsten</i>
------------------	--

Description

Not yet implemented. The per-subject start[i]/end[i] index ranges and iObs observation index must be derived and verified against real data before shipping (this is the error-prone derivation the design flags); see the package NEWS.

Usage

```
vmx_torsten_data(dv, analyte = NULL, client = vmx_client())
```

Arguments

dv A data-version id or vmx_data_version.
 analyte Analyte to assemble.
 client A vmx_client.

Value

Not yet implemented.

vmx_treatment	<i>Fetch one treatment</i>
---------------	----------------------------

Description

Fetch one treatment

Usage

```
vmx_treatment(id, client = vmx_client())
```

Arguments

id A treatment id (tmt_...) or vmx_treatment object.
 client A vmx_client.

Value

A vmx_treatment.

vmx_treatment_create	<i>Create a treatment</i>
----------------------	---------------------------

Description

Create a treatment

Usage

```

vmx_treatment_create(
  name,
  indication = NULL,
  description = NULL,
  client = vmx_client()
)

```

Arguments

name	Treatment name.
indication	Optional indication.
description	Optional free-text description.
client	A vmx_client.

Value

A vmx_treatment.

vmx_treatment_update *Update a treatment*

Description

Only the fields you pass are changed (the server applies exclude_unset).

Usage

```
vmx_treatment_update(id, ..., client = vmx_client())
```

Arguments

id	A treatment id or vmx_treatment.
...	Fields to update (name, indication, description, status).
client	A vmx_client.

Value

A vmx_treatment.

vmx_treatments *List treatments*

Description

List treatments

Usage

```
vmx_treatments(status = NULL, client = vmx_client())
```

Arguments

status	Optional status filter.
client	A vmx_client.

Value

A tibble, one row per treatment.

vmx_upload	<i>Upload files to a study</i>
------------	--------------------------------

Description

Streamed multipart upload. With `wait = TRUE`, blocks through the prep pipeline (see [vmx_wait\(\)](#)).

Usage

```
vmx_upload(
  study,
  files,
  mode = c("initial", "incremental", "replacement"),
  treatment = NULL,
  config = NULL,
  wait = FALSE,
  client = vmx_client()
)
```

Arguments

study	A study id or vmx_study.
files	Character vector of local file paths.
mode	One of "initial" (auto-formats a default DataVersion), "incremental", or "replacement".
treatment	Optional treatment; inferred from study when possible.
config	Optional gecodata v2 project.yaml path (warm-start).
wait	If TRUE, block until prep settles.
client	A vmx_client.

Value

A vmx_dataset (status "uploaded").

vmx_upload_ignore *Ignore an upload within a dataset*

Description

POST /datasets/{ds_id}/ignore-upload. Soft-ignores one delivery.

Usage

```
vmx_upload_ignore(dataset, upload, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
upload	The upload id (upl_...) to ignore.
client	A vmx_client.

Value

The updated vmx_prep_status.

vmx_upload_unignore *Reverse a prior upload ignore*

Description

POST /datasets/{ds_id}/unignore-upload.

Usage

```
vmx_upload_unignore(dataset, upload, client = vmx_client())
```

Arguments

dataset	A dataset id or vmx_dataset.
upload	The upload id (upl_...) to ignore.
client	A vmx_client.

Value

The updated vmx_prep_status.

vmx_wait	<i>Block until an async handle reaches a terminal state</i>
----------	---

Description

An S3 generic dispatching on the handle type. Each method has a sensible default terminal state. Terminal-but-unsuccessful states raise a classed error so scripts fail loudly rather than hang.

Usage

```
vmx_wait(
  x,
  until = NULL,
  timeout = 900,
  interval = 5,
  progress = interactive(),
  client = vmx_client(),
  ...
)
```

Arguments

x	A pollable handle: a dataset / prep-status or an NCA analysis (more types as the API surface lands: model-build-run, simulation-job).
until	Target terminal state(s); a sensible default per type when NULL.
timeout	Timeout in seconds.
interval	Poll interval in seconds (exponential backoff up to 30s).
progress	Show a progress message each poll; defaults to interactive() .
client	A <code>vmx_client</code> .
...	Passed to methods.

Value

The updated object, or a `vmx_timeout_error`.

vmx_whoami	<i>Confirm the configured PAT and report identity</i>
------------	---

Description

Calls GET /me.

Usage

```
vmx_whoami(client = vmx_client())
```

Arguments

`client` A `vmx_client`.

Value

A `vmx_me` object: `user_id`, `email`, `name`, `workspace_id`, `roles`, and `counts`.

Index

`interactive()`, 45

`print()`, 4

`vmx_analysis_log`, 3

`vmx_client`, 4

`vmx_data_version`, 5

`vmx_data_version_archive`, 5

`vmx_data_version_create`, 6

`vmx_data_version_export`, 6

`vmx_data_version_export()`, 10

`vmx_data_version_table`, 7

`vmx_data_version_table()`, 27

`vmx_data_version_unarchive`, 8

`vmx_data_versions`, 8

`vmx_dataset`, 9

`vmx_dataset_cancel`, 9

`vmx_dataset_download`, 10

`vmx_dataset_files`, 10

`vmx_dataset_tags`, 11

`vmx_datasets`, 11

`vmx_dosing_input`, 12

`vmx_dosing_input_status`, 12

`vmx_fit_global_estimates`, 13

`vmx_fit_obs_vs_pred`, 13

`vmx_fit_subject_estimates`, 14

`vmx_fit_vpc`, 14

`vmx_health`, 15

`vmx_model_build`, 15

`vmx_model_build_artifacts`, 16

`vmx_model_build_cancel`, 17

`vmx_model_build_events`, 17

`vmx_model_build_export`, 18

`vmx_model_build_logs`, 18

`vmx_model_build_report`, 19

`vmx_model_build_report_create`, 19

`vmx_model_build_results`, 20

`vmx_model_build_runs`, 20

`vmx_model_build_status`, 21

`vmx_model_catalog`, 21

`vmx_model_data`, 22

`vmx_model_describe`, 22

`vmx_model_fit`, 23

`vmx_model_fit_postprocessor_status`, 23

`vmx_model_fits`, 24

`vmx_modeling_options`, 24

`vmx_nca`, 25

`vmx_nca_analyses`, 26

`vmx_nca_get`, 26

`vmx_nca_result`, 27

`vmx_nlmixr_data`, 27

`vmx_pd`, 28

`vmx_pk`, 28

`vmx_pk()`, 27

`vmx_prep_answer`, 29

`vmx_prep_questions`, 29

`vmx_prep_status`, 30

`vmx_sim_cancel`, 30

`vmx_sim_existing_subject`, 31

`vmx_sim_existing_subject_from_text`, 32

`vmx_sim_hypothetical_subject`, 33

`vmx_sim_hypothetical_subject_from_text`, 34

`vmx_sim_jobs`, 35

`vmx_sim_population`, 35

`vmx_sim_population_from_text`, 36

`vmx_sim_result`, 37

`vmx_sim_status`, 37

`vmx_studies`, 38

`vmx_study`, 38

`vmx_study_create`, 39

`vmx_study_update`, 39

`vmx_subjects`, 40

`vmx_torsten_data`, 40

`vmx_treatment`, 41

`vmx_treatment_create`, 41

`vmx_treatment_update`, 42

`vmx_treatments`, 42

`vmx_upload`, 43

vmx_upload_ignore, [44](#)
vmx_upload_unignore, [44](#)
vmx_wait, [45](#)
vmx_wait(), [6](#), [16](#), [25](#), [31–34](#), [36](#), [37](#), [43](#)
vmx_whoami, [45](#)