

PULSE / Forma

Guide and commands

Autodesk Forma / Autodesk Construction Cloud

Installation, first steps and natural-language examples. Technical command names remain unchanged.

Verified source: <https://github.com/LuDattilo/pulse-forma>

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Descriptions in English. Command names, parameters and technical values are unchanged. Source catalogue dated 4 October 2026; translations updated on 8 October 2026.

<https://pulse-ai.it/documentazione-forma.html>

Installation and connection

Install the dedicated package, connect your AI client and complete Autodesk sign-in in the browser when requested. Select an account and project; data and operations follow Autodesk permissions.

Connect an MCP-compatible AI client: Claude, Codex, opencode or another client, including local models.

Open the project and describe the goal. Check the result and approve changes when requested.

Work on a project copy. Request a read operation or preview before changes, check the selection and approve only the intended operations.

On the first eligible registration, a personal 14-day Premium Trial. Another request does not renew an existing trial.

Example requests

- > Find the structural model versions in the project folder.
- > Show the open issues and their linked attachments.
- > Open the model in the viewer and isolate the query results.

FEATURES

Projects and documents

Browse accounts, projects and folders; search files, read versions and download authorized documents.

Model properties and data

Query AEC Data Model, properties, quantities and custom attributes without copying data by hand.

Issues and collaboration

Find, create and update issues and attachments; inspect RFIs, relationships and locations.

Federated viewer

Open models, select, isolate and color elements; save a view to share the context.

Folders and processes

Organize folders, uploads, permissions and webhooks in the workflows enabled for your account.

Permissions and control

Autodesk permissions govern access; changes also depend on your license and write settings.

Command catalog

Descriptions in English. Command names, parameters and technical values are unchanged. Source catalogue dated 4 October 2026; translations updated on 8 October 2026.

admin

`acc_add_project_user`

Add a user to a project (email or userId). Admin-gated; fail-fast when SSA-only. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

`acc_add_service_account_to_project`

Add the service account (SSA) as a project member. Admin-gated; depends on Admin API access. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

`acc_create_project`

Create an ACC project. Requires allowAdminWrites + an admin client (3LO/SSA-impersonation); fails fast with AuthRequired otherwise. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

`acc_create_project_from_template`

Create an ACC project from a template. Same admin gating as acc_create_project. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

`acc_import_companies`

Bulk-import missing account companies. Admin-gated. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

`acc_import_project_users`

Bulk-import project users (bounded by maxUsersPerImport). Admin-gated. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

`acc_list_companies`

List account companies available for companyId assignment. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

`acc_list_parameter_collections`

List parameter collections within a group. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_parameter_groups

List Autodesk Parameters API groups for an account (top level of the parameter service). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_parameters

List parameters within a collection. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_project_users

List members of an ACC project. Requires the admin tool group and an admin client (SSA must have Account Admin or Project Admin role). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_remove_project_user

Remove a user from a project. Admin-gated. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_setup_project_workspace

Orchestrate project create + users + folder tree. Admin-gated; full orchestration depends on Admin API access. Defaults to dryRun (returns a multi-step plan).

Scope: write | forma/src/mcp/registerTools.ts

acc_update_project_user

Update a project user's role/company/products. Admin-gated. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

aec Data Model

aec_check_access

Probe whether AEC Data Model is reachable and usable for this identity (token, data:read scope, GraphQL reachability, optional project access).

Scope: read | forma/src/mcp/registerTools.ts

aec_count_elements_by_category

Count elements per category (optionally restricted to given categories).

Scope: read | forma/src/mcp/registerTools.ts

aec_distinct_property_values

List distinct values (with counts) of a named parameter across a model.

Scope: read | forma/src/mcp/registerTools.ts

`aec_find_elements_by_parameter`

Find elements where a parameter is empty/not-empty/equals/not-equals/contains a value. Data-quality helper.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_get_element_properties`

Get named properties of elements (by `revitElementId`, or first N). `propertyNames` is required - the AEC Data Model has no "all properties" query; use `aec_list_property_definitions` to discover names first.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_get_extraction_status`

Get the AEC Data Model extraction status of a file at its tip version, and the element group id when available.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_list_categories`

List element categories with counts for a model.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_list_models`

List the queryable AEC Data Model models (element groups) in an ACC project.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_list_property_definitions`

List the parameter/property definitions available in a model.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_query_elements`

Query elements with optional category/property/`revitElementId` filters (RSQL). Compact by default; pass `includeProperties` + `propertyNames` for values.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_resolve_element_group`

Resolve an ACC project + model name/fileUrn to an AEC `elementGroupId` and region.

Scope: read | `forma/src/mcp/registerTools.ts`

`aec_summarize_model`

Compact model profile: category counts, top property definitions, optional sample elements.

Scope: read | `forma/src/mcp/registerTools.ts`

modelsnapshot_capture_read

Return the latest durable model-snapshot capture (a model's PROJECT_STATUS) for one enrolled model, as the frozen core-modelsnapshot-capture-1.0 frame - read-only, without opening the authoring app. Called by the Pulse Core's signed on-connect reconciler via { enrolled_model_id }; not a general query tool.

Scope: read | forma/src/mcp/registerTools.ts

auth

acc_auth_login

Start or complete APS OAuth 2.0 3-legged PKCE login. Opens the Autodesk browser login by default.

Scope: read | forma/src/mcp/registerTools.ts

acc_auth_status

Report current APS 3-legged PKCE token status and whether refresh is possible.

Scope: read | forma/src/mcp/registerTools.ts

acc_whoami

Report the Autodesk user identity behind the current token (name, email, id) via the User Profile API. Most useful in 3LO/browser-login mode.

Scope: read | forma/src/mcp/registerTools.ts

data Connector

acc_create_data_extract_request

Create a recurring Data Connector export request (e.g. admin/issues/locations activity as CSV). NOT instant -- spawns jobs on a schedule. Requires allowAdminWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_get_data_extract_file_url

Get a short-lived (~60s) signed download URL for one file in a Data Connector job's extract. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_data_extract_files

List the files (CSV + a bundling ZIP) produced by a completed Data Connector job. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_data_extract_jobs

List jobs spawned by a Data Connector request. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

`acc_list_data_extract_requests`

List Data Connector export requests for an account. Read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

docs

`acc_copy_folder`

Copy a folder's subfolder structure (folders only, no files) under a new parent/name. Sequential (429-safe), bounded, skips existing by default. Defaults to dryRun.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_create_folder`

Create a folder under a parent folder. Skips if it already exists (default). Defaults to dryRun; pass `dryRun:false` to commit.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_create_folder_permissions`

Create Autodesk Docs folder permission assignments. Defaults to dryRun.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_create_folder_tree`

Create a folder tree under a root folder (bounded; stops on first error, reports partial). Defaults to dryRun.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_delete_file`

Soft-delete a file to Deleted Items. Consumes a single-use plan (`planId` + `confirmationToken` + `confirmationText` from `acc_prepare_delete_items`); re-runs safety blocks + snapshot check at commit. Requires `allowDestructiveWrites`. Defaults to dryRun.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_delete_folder`

Soft-delete a folder to Deleted Items. Consumes a single-use plan; re-runs top-folder/non-empty blocks + snapshot check at commit. Requires `allowDestructiveWrites`. Defaults to dryRun.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_delete_folder_permissions`

Delete Autodesk Docs folder permission assignments for provided subjects. Defaults to dryRun.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_delete_items_batch`

Soft-delete the planned batch (bounded by `maxDeleteBatchItems`). Consumes a single-use plan and acts **ONLY** on its stored targets; re-verifies blocks + snapshot. Requires `allowDestructiveWrites`. Partial-safe. Defaults to `dryRun`.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_get_folder`

Get a single folder's details (name, parent, dates). Read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

`acc_get_item_versions`

List the version history of a file/item: every prior version with its version number, so you can review or roll back to an earlier one. Read-only. To upload a NEW version use `acc_upload_file_version`.

Scope: read | `forma/src/mcp/registerTools.ts`

`acc_list_deleted_items`

List soft-deleted items under a parent folder. Read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

`acc_list_folder_contents`

List folders and files inside a folder, paginated.

Scope: read | `forma/src/mcp/registerTools.ts`

`acc_list_folder_permissions`

List Autodesk Docs folder permission assignments. Read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

`acc_move_folder`

Move a folder under a new parent folder. Defaults to `dryRun`; pass `dryRun:false` to commit.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_prepare_delete_items`

Plan a soft-delete of files/folders without mutating ACC. Captures a content snapshot, applies block rules, and (only when nothing is blocked) registers a single-use, TTL-bound plan returning `planId` + opaque `confirmationToken` + `confirmationText`. Read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

`acc_prepare_file_upload`

Preview a file upload: verify the local file exists, its size, and that it is under an allowed upload root. Read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

acc_prepare_folder_upload

Scan a folder and diff it against an ACC target folder; returns a compact upload plan (new/version/skip/rename/conflict). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_prepare_restore_items

Plan a restore of soft-deleted items; registers a single-use plan returning planId + confirmationToken + confirmationText. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_rename_folder

Rename a folder. Defaults to dryRun; pass dryRun:false to commit.

Scope: write | forma/src/mcp/registerTools.ts

acc_restore_deleted_item

Restore one soft-deleted item (typed file vs folder lineage). Consumes a single-use restore plan. Requires the lighter allowRestoreWrites gate (recovery action). Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_restore_items_batch

Restore the planned batch of soft-deleted items (typed per item). Consumes a single-use restore plan. Requires allowRestoreWrites. Partial-safe. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_scan_local_folder

Scan a local/server folder (under allowedUploadRoots) with filters; returns the file list + exclusions. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_search_files

Find or search for files (documents) in the project by name - with optional extensions - using bounded folder traversal. Use for 'find the file named X' or 'search the project for a drawing'. For finding MODEL files specifically use model_find_across_project.

Scope: read | forma/src/mcp/registerTools.ts

acc_update_folder_permissions

Replace Autodesk Docs folder permission assignments for provided subjects. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_upload_file

Upload a new file to a folder (requires allowFileWrites). conflictStrategy fail|new_version|rename. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_upload_file_version

Upload a new version of an existing item (requires allowFileWrites). Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_upload_folder_files

Upload all matching files from a local folder to an ACC folder (requires allowFileWrites). Rebuilds the plan, bounded by maxFiles, partial-safe. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_upload_manifest

Upload an explicit list of files (path + optional targetName/targetRelativeFolder) to an ACC folder (requires allowFileWrites). Path-safety, size, and extension allowlist enforced; nested folders resolved/created when allowed. Partial-safe, defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

docs Custom Attributes

acc_create_folder_custom_attribute

Create a custom attribute definition (metadata rule) scoped to an Autodesk Docs folder. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_get_custom_attribute_values

Get the custom attribute values assigned to up to 50 document versions (or items, for their tip version). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_folder_custom_attributes

List custom attribute definitions scoped to a folder, including unassigned ones. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_project_custom_attributes

List every custom attribute definition in a project. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_set_custom_attribute_values

Set (or clear, with value:null) custom attribute values on a document version. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

field Ops Assets

acc_batch_update_assets

Batch-update assets (bounded by maxAssetBatch). Partial-safe. Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_create_asset

Create an asset. Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_export_assets_table

Export assets as a flat table (columns + rows), bounded by limit. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_get_asset

Get one asset record. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_asset_categories

List asset categories. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_asset_custom_attributes

List asset custom attributes. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_asset_statuses

List asset statuses. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_assets

List project assets with optional category/status filters (paginated). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_update_asset

Update an asset. Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

field Ops Issue Attachments

acc_delete_issue_attachment

Remove an attachment link from an issue. Requires allowFileWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_download_issue_attachment

Resolve an attachment's storageUrn + fileName for download via the OSS flow. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_issue_attachments

List the file attachments linked to an issue. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_upload_issue_attachment

Link an already-uploaded file (storageUrn) to an issue. Requires allowFileWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

field Ops Locations

acc_create_location_node

Create a location node. Admin-gated (changes project structure). Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_delete_location_node

Delete a location node. Admin-gated. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_import_location_tree

Import a location tree (bounded by maxLocationImportNodes). Admin-gated. Partial-safe. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_list_locations

List the project's location (Areas) tree. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_update_location_node

Update a location node. Admin-gated. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

field Ops Relationships

acc_create_relationship

Create a relationship between two entities. 3LO-only for SSA. Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_delete_relationships

Delete relationships (bounded by maxRelationshipBatch). 3LO-only for SSA. Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_get_entity_references

List the entities linked to a given entity. 3LO-only for SSA. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_intersect_relationships

Find relationships intersecting a set of entities. 3LO-only for SSA. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_link_asset_to_file

Convenience: link an asset to a file via a relationship. 3LO-only for SSA. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_link_issue_to_file

Convenience: link an issue to a file via a relationship. 3LO-only for SSA. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_search_relationships

Search entity relationships. 3LO-only for SSA (fail-fast when no relationships client). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

field Ops Rfis

acc_add_rfi_comment

Add a comment to an RFI (pre-flight canComment). Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_create_rfi

Create an RFI (pre-flight canCreate permission check). Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_create_rfi_response

Create an RFI response (pre-flight canRespond). Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

acc_get_rfi

Get one RFI. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_get_rfi_workflow

Get the RFI workflow (statuses + transitions). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_rfi_attachments

List an RFI's attachments. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_rfi_comments

List an RFI's comments. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_rfi_custom_attributes

List RFI custom attributes. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_rfi_types

List RFI types. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_rfi_get_permissions

Get the current user's RFI permissions. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_search_rfis

Search RFIs with optional status/assignee filters (bounded). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_update_rfi

Update an RFI; status changes validated against the workflow transitions. Requires allowWrites. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

issues

acc_add_issue_comment

Add a comment to an issue. Defaults to dryRun; pass dryRun:false to commit.

Scope: write | forma/src/mcp/registerTools.ts

acc_assign_issue

Assign an issue to a user/company/role. Defaults to dryRun; pass dryRun:false to commit.

Scope: write | forma/src/mcp/registerTools.ts

acc_create_issue

Create an issue (requires issueSubtyped). Defaults to dryRun; pass dryRun:false to commit.

Scope: write | forma/src/mcp/registerTools.ts

acc_field_ops_check_access

Probe Field Ops module availability + auth mode for a project (issue attachments, relationships, locations, assets, RFIs). Never throws; returns a per-module read/write-likely report. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

acc_get_issue

Get one issue with normalized fields.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_issue_types

List issue types and subtypes for a project.

Scope: read | forma/src/mcp/registerTools.ts

acc_list_issues

List issues in a project, with optional status/type/assignee filters.

Scope: read | forma/src/mcp/registerTools.ts

acc_update_issue_status

Update an issue's status. Defaults to dryRun; pass dryRun:false to commit.

Scope: write | forma/src/mcp/registerTools.ts

meta

pulse_doctor

Diagnose the Pulse for Forma -> Autodesk APS chain step-by-step (config -> auth -> token -> hub -> region -> permissions) with a plain-language remedy for each failure. Local by default; probe:true adds capped live checks.

Scope: read | forma/src/mcp/registerTools.ts

pulse_license_activate

Activate Pulse for Forma with a purchased serial. Binds the license to this machine and unlocks the paid (Pro) tools in-process.

Scope: read | forma/src/mcp/registerTools.ts

`pulse_license_deactivate`

Return this machine to the Free tier by removing the local Pulse for Forma license token.

Scope: read | forma/src/mcp/registerTools.ts

`pulse_status`

Check that Pulse for Forma is alive: version, uptime, auth state, region, tool counts, write gates, license tier. Local and instant; pass probe:true for a live APS token check.

Scope: read | forma/src/mcp/registerTools.ts

model Data

`derivative_get_aec_metadata`

Get AEC model data (levels/grids/etc.) for a metadata view, when present.

Scope: read | forma/src/mcp/registerTools.ts

`derivative_get_manifest`

Get the Model Derivative manifest for a file URN: translation status + flattened derivative tree + whether a viewable exists.

Scope: read | forma/src/mcp/registerTools.ts

`derivative_get_metadata_views`

List metadata views (model GUIDs) inside a translated URN.

Scope: read | forma/src/mcp/registerTools.ts

`derivative_get_object_properties`

Get all object properties for a metadata view (bounded; truncates very large payloads).

Scope: read | forma/src/mcp/registerTools.ts

`derivative_get_object_tree`

Get the object/instance tree for a metadata view (bounded; truncates very large trees).

Scope: read | forma/src/mcp/registerTools.ts

`derivative_get_thumbnail`

Get a PNG thumbnail for a URN (returns byte length + base64 preview; disk-save deferred).

Scope: write | forma/src/mcp/registerTools.ts

`ifc_parse_summary`

Lightweight IFC header + entity-count summary for a local .ifc file under allowedUploadRoots. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

model_ask

Deterministic planner (no AI call): routes a natural-language question to the right model tools and gathers cheap data.

Scope: read | forma/src/mcp/registerTools.ts

model_compare_files

Lightweight comparison of two files using available backends (versions + derivative status).

Scope: read | forma/src/mcp/registerTools.ts

model_download_file

Download a file version to a path under allowedUploadRoots. Requires modelData.allowDownloads. Defaults to dryRun.

Scope: write | forma/src/mcp/registerTools.ts

model_download_prepare

Preview a file download (version, size, within-limit) without writing anything. Read-only.

Scope: read | forma/src/mcp/registerTools.ts

model_find_across_project

Find files in a project whose name matches a query (bounded traversal). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

model_inventory

Inventory model-like files across a project/account/all hubs (bounded). Read-only.

Scope: read | forma/src/mcp/registerTools.ts

model_list_versions

List normalized versions for an item/file.

Scope: read | forma/src/mcp/registerTools.ts

model_profile_file

Profile which backends (AEC Data Model, Model Derivative, Model Properties, download) can answer questions about a file, and why/why not.

Scope: read | forma/src/mcp/registerTools.ts

model_query_capabilities

Report which model backends are enabled in settings and what each can answer. Pure, no network.

Scope: read | forma/src/mcp/registerTools.ts

`model_resolve_file`

Resolve a single ACC file to a normalized model ref (by itemId or fileName). Returns candidates with `ambiguous:true` when multiple match.

Scope: read | forma/src/mcp/registerTools.ts

`modelprops_build_or_get_index`

Build or fetch a Model Properties index for a set of version URNs. Side-effecting job; requires `modelData.allowModelPropertiesIndexJobs`. Defaults to `dryRun`.

Scope: write | forma/src/mcp/registerTools.ts

`modelprops_check_availability`

Probe whether the Model Properties indexed-query backend is usable for this identity (may require 3LO). Never fails; returns a structured availability.

Scope: read | forma/src/mcp/registerTools.ts

`modelprops_compare_versions`

Compare two Model Properties indexes; returns added/removed/changed counts + a bounded sample.

Scope: read | forma/src/mcp/registerTools.ts

`modelprops_get_diff`

Diff two Model Properties indexes; returns the actual added/removed/changed rows (bounded).

Scope: read | forma/src/mcp/registerTools.ts

`modelprops_list_fields`

List queryable fields/columns for a Model Properties index (optional search filter).

Scope: read | forma/src/mcp/registerTools.ts

`modelprops_query`

Run an Index Query Language query against a Model Properties index (bounded rows).

Scope: read | forma/src/mcp/registerTools.ts

projects

`acc_list_accounts_projects`

List ACC/Forma accounts (hubs) accessible to this identity and the projects within each.

Scope: read | forma/src/mcp/registerTools.ts

`acc_list_project_roots`

List the top-level folders for a project.

Scope: read | forma/src/mcp/registerTools.ts

viewer

viewer_attach_project_tree

Build an ACC project tree (folders + model files, resolving each file's encodedUrn) from Data Management and attach it to an active Viewer session. Updates the Viewer project tree panel.

Scope: read | forma/src/mcp/registerTools.ts

viewer_attach_pulse_tree

Attach a Pulse for Revit project tree to an active Viewer session, optionally with ACC/Forma refs for host/link models. Updates the Viewer project tree panel.

Scope: read | forma/src/mcp/registerTools.ts

viewer_capture_snapshot

Request/save a PNG snapshot of the current Viewer view under the controlled snapshot directory.

Scope: write | forma/src/mcp/registerTools.ts

viewer_clear_overlays

Clear selection, isolation, and/or theming colors in the Viewer (all default true).

Scope: read | forma/src/mcp/registerTools.ts

viewer_color_elements

Apply theming colors to element groups in the Viewer.

Scope: read | forma/src/mcp/registerTools.ts

viewer_fit_to_elements

Fit the Viewer camera to the given elements.

Scope: read | forma/src/mcp/registerTools.ts

viewer_get_element_properties

Read Viewer/derivative property-DB properties for dblds (not necessarily identical to AEC Data Model).

Scope: read | forma/src/mcp/registerTools.ts

viewer_get_selection

Read the Viewer's current selection (as last posted by the browser) back into Pulse for Forma.

Scope: read | forma/src/mcp/registerTools.ts

viewer_isolate_elements

Isolate elements in the Viewer by dblds/externalElementIds.

Scope: read | forma/src/mcp/registerTools.ts

viewer_list_open_models

List active Viewer sessions and the models currently known/open for each session.

Scope: read | forma/src/mcp/registerTools.ts

viewer_open_model

Create a Viewer session and return an openable local URL (requires the companion to be running).

Scope: read | forma/src/mcp/registerTools.ts

viewer_open_tree_model

Open a model from the attached RevitCortex tree in the current Viewer session when that model has an ACC/Forma URN/ref.

Scope: read | forma/src/mcp/registerTools.ts

viewer_prepare_model

Resolve a model's Model Derivative manifest + viewables for opening in the Viewer. Optionally request translation (gated by modelData.allowDerivativeJobs + dryRun); resolving alone changes nothing.

Scope: write | forma/src/mcp/registerTools.ts

viewer_query_open_models

Run one AEC Data Model element query (categories/propertyFilters, instancesOnly) across every loaded federated model - scoped to each model's elementGroupId - then isolate/color/select the matches per model. Reports per-model matched/mapped counts.

Scope: read | forma/src/mcp/registerTools.ts

viewer_select_elements

Select elements in the Viewer (replace/add/toggle).

Scope: read | forma/src/mcp/registerTools.ts

viewer_show_query_result

Push a query result to the Viewer (select/isolate/color/fit), mapping ids to dblds. Reports mapped/unmapped counts.

Scope: read | forma/src/mcp/registerTools.ts

viewer_start_companion

Start the local Viewer Companion HTTP server (127.0.0.1). Idempotent; tries the next port if busy.

Scope: read | forma/src/mcp/registerTools.ts

webhooks

`acc_create_webhook`

Register a webhook for a system/event. `callbackUrl` must be an https origin in `settings.webhooks.allowedCallbackHosts` (empty = disabled). Stamps `hookAttribute.createdBy`. Requires `allowWrites`.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_delete_webhook`

Delete one webhook registration by `system/event/hookId`. Requires `allowWrites`.

Scope: write | `forma/src/mcp/registerTools.ts`

`acc_list_webhooks`

List the webhook registrations for this app/identity (`system`, `event`, `callbackUrl`, `status`). Management-only; read-only.

Scope: read | `forma/src/mcp/registerTools.ts`

Verified source

<https://github.com/LuDattilo/pulse-forma>

master / 5abd76adec54b1250f77b5759909f5578e64bfb4

<https://pulse-ai.it/documentazione-forma.html>