Patterns in kernel/classes/help

Every class, view, fetch function, operator and plugin point of kernel/classes/help with its design patterns.

Source file: `doc/eng-us/standards/patterns/area-kernel-classes-help.md` Last changed 2026-11-04
https://doc.exponential.earth/learninminutes/exphelp/viewer/standards/patterns/area-kernel-classes-help.md

> **Note**
>
> This page is generated from the source code by `php bin/php/exppatterncatalogue.php --write`. Do not edit it by hand: change the code or the generator, then run the command again. How the patterns are recognized: the pattern catalogue.

Every class, interface and trait of `kernel/classes/help` with the patterns it was recognized as, followed by the module views, policy functions, fetch functions, template operators, cronjobs, event hooks and INI plugin points of the area. All patterns.

Classes (57)

Class	Kind	Patterns	File	Description
expHelp	class	Utility (static helper)	kernel/classes/help/exphelp.php:11	The help system's shared helpers (doc/eng-us/features/6.0/help-system.md): its settings, whether it is on, the install root it reads from, and the UR...
expHelpAllowlist	class	Factory and static factory methods	kernel/classes/help/exphelpallowlist.php:37	The files the help system may show (doc/eng-us/features/6.0/help-system.md, "Which files are shown").
expHelpAudience	class	Factory and static factory methods	kernel/classes/help/exphelpaudience.php:34	Who a help page is for, which section of the help it belongs to and what kind of page it is (doc/eng-us/features/6.0/help-system.md, "Audiences, cate...
expHelpCommitFeed	class	Factory and static factory methods	kernel/classes/help/exphelpcommitfeed.php:29	The latest commits of the Exponential repository for the developers' landing page of the help (exphelp/audience/developer, doc/eng-us/features/6.0/he...

Class	Kind	Patterns	File	Description
expHelpContentAccess	class	Factory and static factory methods	kernel/classes/help/content/exphelpcontentaccess.php:18	Who may see a topic, manual or chapter of help maintained as content, decided from the plain data the repository keeps of each object (expHelpContent...
expHelpContentBookCheck	class	–	kernel/classes/help/content/exphelpcontentbookcheck.php:26	The checks of an EPUB of a help manual (doc/eng-us/specifications/6.0/help-system.md, delivery path 3: "epubcheck + Ace by DAISY"; doc/eng-us/specifi...
expHelpContentDita	class	–	kernel/classes/help/content/exphelpcontentdita.php:45	The DITA 1.3 export of help maintained as content (doc/eng-us/specifications/6.0/help-system.md, "The standard: what DITA means here" and delivery pa...
expHelpContentDitaHistory	class	–	kernel/classes/help/content/exphelpcontentditahistory.php:21	The change history of the help in git (doc/eng-us/specifications/6.0/help-system.md, delivery path 4: "the DITA export runs regularly into its own gi...
expHelpContentEbooks	class	Factory and static factory methods	kernel/classes/help/content/exphelpcontentebooks.php:26	E-books of help manuals stored as content (doc/eng-us/specifications/6.0/help-system.md, delivery path 3: "stored as a file object under E-books (sec...
expHelpContentEditionProvider	class extends expHelpContentProvider	Strategy / handler	kernel/classes/help/content/exphelpcontenteditionprovider.php:16	What goes into a stored edition of a manual (expHelpContentEbooks): every Released object, whoever builds the book, and for a public manual only what...

Class	Kind	Patterns	File	Description
expHelpContentExport	class	–	kernel/classes/help/content/exphelpcontentexport.php:21	E-books of a manual of help maintained as content (doc/eng-us/features/6.0/help-content.md, "E-books"): EPUB 3 (written here, pure PHP with ZipArchiv...
expHelpContentFeedback	class	Utility (static helper)	kernel/classes/help/content/exphelpcontentfeedback.php:21	"Was this helpful?" on each help topic (doc/eng-us/specifications/6.0/help-system.md, phase 7; ISO/IEC/IEEE 26514, usability of the information): the...
expHelpContentHelpIds	class	Utility (static helper)	kernel/classes/help/content/exphelpcontenthelpids.php:21	The help_ids that were Released (doc/eng-us/specifications/6.0/help-style-guide.md, section 7: "A help_id is never renamed and never reused"): the ta...
expHelpContentInstaller	class	–	kernel/classes/help/content/exphelpcontentinstaller.php:23	Creates the content model of help maintained as content on an installed site, idempotently: the eight help_* classes (class group "Help"), the sectio...
expHelpContentPackage	class	Factory and static factory methods, Utility (static helper)	kernel/classes/help/content/exphelpcontentpackage.php:23	The help classes as a content class package (doc/eng-us/specifications/6.0/help-content-package.md, CJW #16564): the eight help_* classes of expHelpC...
expHelpContentProvider	class implements expHelpContextProviderInterface, expHelpContextPageInterface	INI plugin point (extension point), Singleton / instance(), Strategy / handler	kernel/classes/help/content/exphelpcontentprovider.php:19	Help maintained as content, delivered into the help system (exphelp): the topics the current user may see, rendered with the help's Markdown renderer...

Class	Kind	Patterns	File	Description
expHelpContentRepository	class	INI plugin point (extension point), Singleton / instance()	kernel/classes/help/content/exphelpcontentrepository.php:15	Reads help maintained as content out of the database into plain arrays (the shapes expHelpContentValidator describes), without any permission filter:...
expHelpContentReview	class	Utility (static helper)	kernel/classes/help/content/exphelpcontentreview.php:23	Overdue reviews of help maintained as content (doc/eng-us/specifications/6.0/help-system.md, phase 7 "a list of outdated topics (review date passed)...
expHelpContentSchema	class	Utility (static helper)	kernel/classes/help/content/exphelpcontentschema.php:20	The content model of help maintained as content (doc/eng-us/specifications/6.0/help-system.md, doc/eng-us/features/6.0/help-content.md): the eight he...
expHelpContentSeeder	class	–	kernel/classes/help/content/exphelpcontentseeder.php:15	Creates the initial glossary, topics, chapters and manuals from a data file (share/help/seed-glossary.json, share/help/seed-topics.json).
expHelpContentSite	class	–	kernel/classes/help/content/exphelpcontentsite.php:21	Help maintained as content on a site's own pages (doc/eng-us/specifications/6.0/help-system.md, delivery path 1: "templates full/help_*.tpl and line/...
expHelpContentTables	class	Utility (static helper)	kernel/classes/help/content/exphelpcontenttables.php:21	The two tables of help maintained as content (doc/eng-us/features/6.0/help-content.md) on any engine: whether they exist, and creating them from thei...

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expHelpContentValidator	class	–	kernel/classes/help/content/exphelpcontentvalidator.php:23	The machine-checkable rules of the help style guide (doc/eng-us/specifications/6.0/help-style-guide.md), on plain arrays: no database.
expHelpContentWorkflow	class	Utility (static helper)	kernel/classes/help/content/exphelpcontentworkflow.php:23	The review workflow of help maintained as content (doc/eng-us/specifications/6.0/help-system.md, "Status" and "Permissions"; style guide section 8, "...
expHelpContextPageInterface	interface	Interface (contract)	kernel/classes/help/exphelpcontextpageinterface.php:16	A context help provider (expHelpContextProviderInterface) that also serves pages which are not files below doc/: help topics maintained as content, w...
expHelpContextProviderInterface	interface	Interface (contract)	kernel/classes/help/exphelpcontextproviderinterface.php:15	A class that answers "help for this page" in code, for what one Map[] entry per view cannot say (a view whose help depends on its parameters, an exte...
expHelpContextRegistry	class	Factory and static factory methods, Registry, Singleton / instance()	kernel/classes/help/exphelpcontextregistry.php:45	Context help: which help page answers "help for this page", for a module, view and design.
expHelpDitaMarkup	class	–	kernel/classes/help/content/exphelpditamarkup.php:21	The help's safe HTML (expHelpMarkdownRenderer) of a topic field as DITA 1.3 elements, for the DITA export of help maintained as content (expHelpConte...

Class	Kind	Patterns	File	Description
expHelpDocumentIndex	class	Singleton / instance()	kernel/classes/help/exphelpdocumentindex.php:46	The index of the help pages (doc/eng-us/features/6.0/help-system.md, "The index"): one entry per document of the allowlist (expHelpAllowlist: git-tra…
expHelpExamplesGenerator	class	Builder	kernel/classes/help/exphelpexamplesgenerator.php:25	Writes the generated reference examples below doc/eng-us/examples/ (doc/eng-us/examples/README.md, "How the generated pages are made"): one Markdown…
expHelpExamplesTranslation	class	Factory and static factory methods	kernel/classes/help/exphelpexamplestranslation.php:30	The translation of the generated reference examples (expHelpExamplesGenerator) into one language of the help, for example German in doc/ger-de/ (doc/…
expHelpFrontMatter	class	Utility (static helper)	kernel/classes/help/exphelpfrontmatter.php:28	The front matter of a help page (doc/eng-us/features/6.0/help-system.md, "Front matter"): a block at the very top of a Markdown file between two line…
expHelpFunctionCollection	class	Fetch function (Query Object, Facade), Utility (static helper)	kernel/classes/help/exphelpfunctioncollection.php:10	The exphelp fetch functions (kernel/exphelp/function_definition.php).
expHelpHighlighter	class	Registry, Utility (static helper)	kernel/classes/help/exphelphighlighter.php:29	Server-side syntax highlighting of the code blocks of the help pages (exphelp, doc/eng-us/features/6.0/help-system.md), without JavaScript or an exte…

Class	Kind	Patterns	File	Description
expHelpIssueReport	class	–	kernel/classes/help/exphelpissuereport.php:18	Reporting an error (exphelp/report, doc/eng-us/features/6.0/help-system.md "Reporting an error"): where to report it (the trackers of [IssueTrackers]...
expHelpLanding	class	–	kernel/classes/help/exphelplanding.php:32	The landing page of one audience of the help: exphelp/audience/ (doc/eng-us/features/6.0/help-system.md, "Landing pages").
expHelpLanguage	class	Factory and static factory methods	kernel/classes/help/exphelplanguage.php:37	The languages of the documentation (doc/eng-us/features/6.0/help-system.md, "The pages in the reader's language"; doc/eng-us/bc/6.0/translated-docume...
expHelpLicense	class	Utility (static helper)	kernel/classes/help/exphelplicense.php:17	The license of the documentation the help shows (exphelp.ini [License], doc/eng-us/README-LICENSE.md).
expHelpLinkCheck	class	–	kernel/classes/help/exphelplinkcheck.php:25	Checks the links and images of the help pages (doc/eng-us/features/6.0/help-system.md, "Checking the documentation"; "./console exp:help check").
expHelpLinks	class	Utility (static helper)	kernel/classes/help/exphelplinks.php:12	The link and image resolvers the viewer gives expHelpMarkdownRenderer (doc/eng-us/features/6.0/help-system.md): a relative link to an allowed page be...

Class	Kind	Patterns	File	Description
expHelpManualBuilder	class	Builder	kernel/classes/help/content/exphelpmanualbuilder.php:35	The manuals of help maintained as content, made from the Markdown help (doc/eng-us/features/6.0/help-content.md, "Manuals from the Markdown help").
expHelpManualSource	class	Factory and static factory methods	kernel/classes/help/content/exphelpmanualsource.php:13	The Markdown help as the source of the generated manuals (expHelpManualBuilder): the folders and pages of one language's index of the help (expHelpDo...
expHelpManualSync	class	–	kernel/classes/help/content/exphelpmanualsync.php:22	Makes the database match a plan of expHelpManualBuilder: creates the manuals, chapters and topics that are missing, updates those whose values differ...
expHelpMarkdownRenderer	class	Factory and static factory methods	kernel/classes/help/exphelpmarkdownrenderer.php:65	Renders the Markdown of the documentation (doc/**.md) to the HTML of the help viewer (exphelp/viewer, doc/eng-us/features/6.0/help-system.md): Common...
expHelpNavigation	class	–	kernel/classes/help/exphelpnavigation.php:20	The navigation tree of the help (doc/eng-us/features/6.0/help-system.md, "Viewer"): every page the index serves, in its folders, as nested lists.
expHelpPdf	class	Factory and static factory methods, Utility (static helper)	kernel/classes/help/exphelppdf.php:18	A help page as a PDF file (doc/eng-us/features/6.0/help-system.md, "Print and PDF"): the view exphelp/pdf/ and `./console exp:help pdf` ask here.

Class	Kind	Patterns	File	Description
expHelpPdfCanvas	class extends Cpdf	–	kernel/classes/help/exphelppdfcanvas.php:18	The page surface of a help page's PDF (doc/eng-us/features/6.0/help-system.md, "Print and PDF"): the kernel's own PDF library (lib/ezpdf, Cpdf) with...
expHelpPdfFontSubset	class	Factory and static factory methods, Utility (static helper)	kernel/classes/help/exphelppdffontsubset.php:17	Cuts a TrueType font down to the glyphs a PDF uses (doc/eng-us/features/6.0/help-system.md, "Print and PDF").
expHelpPdfWriter	class	–	kernel/classes/help/exphelppdfwriter.php:28	Lays a rendered help page out as a PDF (doc/eng-us/features/6.0/help-system.md, "Print and PDF").
expHelpProjectFiles	class	Factory and static factory methods	kernel/classes/help/exphelpprojectfiles.php:29	The project files of the help (doc/eng-us/features/6.0/help-system.md, "Project files"): the Markdown files of the repository outside doc/ that docum...
expHelpReadPolicyGrant	class	Utility (static helper)	kernel/classes/help/exphelpreadpolicygrant.php:22	Plans and applies the grant of the policy exphelp/read (bin/php/addexphelpreadpolicy.php): reading the help system (doc/eng-us/features/6.0/help-syst...
expHelpRecordRenderer	class	–	kernel/classes/help/exphelprecordrenderer.php:36	Plain text pages that are lists of records (doc/eng-us/release-overview, the release history; doc/branch-overview was one until it became Markdown) s...
expHelpRemoteImages	class	–	kernel/classes/help/exphelpremoteimages.php:22	The copies of the external images the help pages show (doc/eng-us/features/6.0/help-system.md, "External images").

Class	Kind	Patterns	File	Description
expHelpRestController	class extends ezpRestMvcController	–	kernel/classes/help/content/rest/exphelprestcontroller.php:23	The route's variables come from ezcMvcController::__get() (its properties); a declared property would hide them.
expHelpRestProvider	class implements ezpRestProviderInterface	INI plugin point (extension point), Strategy / handler	kernel/classes/help/content/rest/exphelprestprovider.php:21	The REST routes of context help (doc/eng-us/features/6.0/help-content.md, "Context help by help_id"; the plan's delivery path 2: "internal topics wit...
expHelpRestViewController	class implements ezpRestViewControllerInterface	–	kernel/classes/help/content/rest/exphelprestviewcontroller.php:10	The view of the context help routes (expHelpRestProvider): JSON
expHelpSearch	class	Factory and static factory methods	kernel/classes/help/exphelpsearch.php:34	expHelpSearch: the full-text search of the help system (doc/eng-us/features/6.0/help-system.md, "Search").

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