Chain of Responsibility

A request is passed along a list of handlers until one of them takes it: login handlers, URL matchers, router routes. 19 instances in Exponential.

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

A request is passed along a list of handlers until one of them takes it: login handlers, URL matchers, router routes.

Group	Behavior
Instances	19
Recognized by	Class name contains LoginHandler, Chain, Pipeline, Middleware, Router or Matcher.
Extension point	site.ini [UserSettings] LoginHandler[] (tried in order), siteaccess MatchOrder.

Classes by area

extension/expai (12)

All patterns of extension/expai

Class	Kind	File	Description	Extension point
`expAiBatchOpenRouter`	class extends expAiBatchApi	`extension/expai/classes/lanes/expaibatchopenrouter.php:25`	The OpenRouter Batch API (https://openrouter.ai/docs/batch-quickstart and https://openrouter.ai/docs/api/api-reference/batch/get-a-batch, read 2026-1…	–
`expAiChain`	class	`extension/expai/classes/chain/expaichain.php:23`	The definition of an AI chain (doc/chains.md): an ordered list of steps, each one structured call to a model, a human checkpoint or a hand-off, read…	–

Class	Kind	File	Description	Extension point
expAiChainApplier	class	extension/expai/classes/chain/expaichainapplier.php:14	The applier "chain" of queued requests ([QueueSettings] Appliers[chain]): hands the stored answer of a chain step to expAiChainEngine::onAnswer(), wh...	extension/expai/settings/expai.ini [QueueSettings] Appliers[chain]
expAiChainCriteria	class	extension/expai/classes/chain/expaichaincriteria.php:23	The pass criteria of a chain step ([ChainStep_.] PassCriteria[]): each entry is one comparison " ", all of them must hold.	–
expAiChainEngine	class	extension/expai/classes/chain/expaichainengine.php:24	Runs AI chains (doc/chains.md) through the job queue.	–
expAiChainFunctionCollection	class	extension/expai/classes/chain/expaichainfunctioncollection.php:18	Template fetch functions of AI chains:	–
expAiChainPolicy	class	extension/expai/classes/chain/expaichainpolicy.php:20	Access to AI chains: the policy expai/chain (limitation Chain) starts runs and acts on them at the checkpoint.	–
expAiChainPrompt	class	extension/expai/classes/chain/expaichainprompt.php:21	The prompts of chain steps.	–
expAiChainRun	class extends eZPersistentObject	extension/expai/classes/chain/expaichainrun.php:20	One run of an AI chain (table expai_chain_run).	–
expAiChainSchema	class	extension/expai/classes/chain/expaichainschema.php:19	The tables of AI chains, added to expAiSchema::definition() (bin/php/expaischema.php --install creates and upgrades them on every engine like the oth...	–

Class	Kind	File	Description	Extension point
expAiChainStep	class extends eZPersistentObject	extension/expai/classes/chain/expaichainstep.php:19	One step of a chain run (table expai_chain_step): each call to a model is one row with its queue job, model, lane, tokens, cost and the usage row; a...	–
expAiChainTranslateSync	class	extension/expai/classes/chain/expaichaintranslatesync.php:20	The shipped translation hand-off of chains ([ChainSettings] TranslateHandler=expAiChainTranslateSync): the translate step hands the run's object to t...	extension/expai/settings/expai.ini [ChainSettings] TranslateHandler

extension/ezjscore (1)

All patterns of extension/ezjscore

Class	Kind	File	Description	Extension point
ezjscServerRouter	class	extension/ezjscore/classes/ezjscserverrouter.php:39	–	–

extension/hcaptcha (1)

All patterns of extension/hcaptcha

Class	Kind	File	Description	Extension point
hcaptchaInfo	class	extension/hcaptcha/ezinfo.php:22	hCaptcha extension for Exponential Written by 7x Based on works by: Bruce Morrison	–

extension/recaptcha (1)

All patterns of extension/recaptcha

Class	Kind	File	Description	Extension point
recaptchaInfo	class	extension/recaptcha/ezinfo.php:22	reCAPTCHA extension for Exponential Written by Bruce Morrison	–

kernel/classes/datatypes (1)

All patterns of kernel/classes/datatypes

Class	Kind	File	Description	Extension point
eZUserLoginHandler	class	kernel/classes/datatypes/ezuser/ezuserloginhandler.php:19	–	–

kernel/classes/ini (1)

All patterns of kernel/classes/ini

Class	Kind	File	Description	Extension point
expSettingsChain	class	kernel/classes/ini/expsettingschain.php:32	The override chain of one INI file, built once from the files eZINI reads for it, in eZINI's own order.	–

kernel/private (1)

All patterns of kernel/private

Class	Kind	File	Description	Extension point
ezpRestRouter	class extends ezcMvcRouter	kernel/private/rest/classes/router.php:11	–	–

kernel/private/classes/commands (1)

All patterns of kernel/private/classes/commands

Class	Kind	File	Description	Extension point
Exponential\Command\Kernel\VelocityRouter	class	kernel/private/classes/commands/velocity-router.php:46	The code of bin/php/velocity-router.php, moved into a class (#207).	–

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