

# OA4MP Modules

This is a quick overview of the QDL modules that extend OA4MP and what they do.

## Synopsis

Name	Namespace	Loader	default variable
ACL	oa2:/qdl/acl	oa2.util.acl	acl
JWT	oa2:/qdl/jwt	oa2.util.jwt	jwt
Claims	oa2:/qdl/oidc/claims	oa2.util.claims	claims
Command line Client	oa2:/qdl/oidc/client	oa2.client.clc	clc
Client Management	oa2:/qdl/oidc/client/manage	oa2.client.cm	cm
Test Utilities	oa2:/qdl/oidc/test/util	oa2.client.test_utils	test_utils
Permission Store	oa2:/qdl/p_store	oa2.client.store	--
Stores	oa2:/qdl/store	oa2.client.store	--

## Descriptions

### ACL

Access Control Lists for OA4MP scripts.

### JWT

JSON web Token utilities. These allow for creating JWTs from stems, signing and validating. You can also create signing keys.

### Claims

OA4MP utilities for working with claims. The major functions are `get_claims`, `new_template` and `create_sources`. Largely this is documented in [creating claims sources](#) and [claim source examples](#).

## Command Line Client

The fully functional command line client. It allows you to write your own OAuth2 client in QDL, for instance.

## Client Management

A set of tools that allow you to manage (all CRUD operations) your clients on an OA4MP server using the client management API

## Test Utilities

Mostly used for writing tests. This exposes the logic the server uses for computing lifetimes of various tokens. Since the logic can be quite complex, requiring the server default, client defaults, configuration overrides and specific request overrides, it is of limited use outside of testing.

## Permission Store

Permissions are types of stores, but require some special handling. This (there is one per OA4MP instance) is not automatically imported at system start.

## Stores

Access to the stores on an OA4MP server. These are not imported initially since an instance typically refers to a component, such as transactions, clients, admin clients etc. Import these and configure as needed.