

# Token Handling Within CMR

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## Audience

This document is meant for the maintainers of CMR and is considered DRAFT

## Overview

Technical documentation of the types of tokens that pass thru CMR.

## Tokens

Token	Source	Usage	Example	Client	Length	Tech Docs	Notes
Legacy	Legacy-Services	-H "Echo-Token: <token>"	AF14A97A-A916-B45A-B7C9-31BBB73ECB99	stable with :	35?		The creation of legacy Echo Tokens and use of the Echo-Token header are deprecated and scheduled for decommissioning.
"EDL-" Prefixed	EDL	-H "ECHO-Token: <token>:<client>"	EDL-<BASE 64 text 60 long>:<client>	settable with :	64		Use of the Echo-Token header are deprecated and scheduled for decommissioning.
Bearer Token	EDL	-H "Authorization: Bearer <token>"	EDL-<BASE 64 text 60 long>			<a href="https://tools.ietf.org/html/rfc6750">https://tools.ietf.org/html/rfc6750</a>	
JWT	EDL	-H "Authorization: Bearer <token>"	<Base64-Text>.<Base64-Text>.<Base64-Text>	settable with :	Up to 2k	<a href="#">JWT Intro</a> <a href="#">RFC7519</a>	
LaunchPad	idmax. nasa.gov	-H "Authorization: <token>"	something really long and ugly ; a SAML token	null	4k	<a href="#">Launchpad Authentication User's Guide</a>	

## Notes

- The "Authorization: Bearer" flag is only for EDL(URS) tokens which do not need to define a client.

## CMR Token Processing

CMR reads tokens from three places, Authorization header, 'token' parameter, or Echo-Token header. First found is stored in the context as :token (see `acl-lib/src/cmr/acl/core.clj`). There is very little processing of the token inside of CMR, the value is handed over to legacy services for processing. The one exception is in a few cases where actions are only allowed if the token is a launchpad token.

## Legacy Services Processing Notes

<urs-token>:<client-id> (on behalf form)

Bearer <urs-token> (assumed client id of cmr-<user-name>)

Launchpad has no client id (null)

URS tokens must have either a Bearer or a client id section.

## LaunchPad Token Notes

see [Launchpad Authentication User's Guide](#)

Launchpad tokens are passed in as an Echo-Token or Authorization header and do not use either a client separator (":") nor do they use the Bearer marker. Launchpad tokens have no client (null).

## Questions

## Token Usage

```
curl -H "Authorization: Bearer XXXX" https://cmr.sit.earthdata.nasa.gov/search/collections/
```

## Code

legacy-services

cmr.common-app.api.launchpad-token-validation/launchpad\_token\_validation.clj