

ClojureScript analyzer

An *expression object* (or ast-node) is a map with an `:op` key. In addition to `:op`, the following keys are also always present:

- `:form` - The (macro expanded) form which, when analyzed, resulted in this expression object.
- `:env` - The environment.

<code>:op</code>	Properties	Children (<code>:children</code>)	Example form
<code>:if</code>	<code>:test</code> <code>:then</code> <code>:else</code> <code>:unchecked</code>	<code>[test then else]</code>	<code>(if (pred? x) (inc x) (dec x))</code>
<code>:throw</code>	<code>:throw</code>	<code>[throw]</code>	<code>(throw (js/Error. "err"))</code>
<code>:try*</code>	<code>:try</code> - a block <code>:catch</code> - a block <code>:finally</code> - a block <code>:name</code> - is this the 'e'?	<code>(vec (mapcat block-children [try catch finally]))</code>	<code>(try (proc x) (/ x n) (catch js/Error e (print "err: " e) (finally (hmm...) (close file)))</code>
<code>:def</code>	<code>:name</code> <code>:doc</code> <code>:init</code> <i>;; Some of these might be present:</i> <code>:tag</code> <code>:dynamic</code> <code>:export</code>	<code>[init-expr]</code>	<code>(def foo (fn [x] (inc x)))</code>
<code>:fn</code>	<code>:name</code> <code>:methods</code> <code>:variadic</code> <code>:recur-frames</code> <code>:loop-lets</code> <code>:jsdoc</code> <code>:max-fixed-arity</code>	<code>(vec (mapcat block-children methods))</code>	<code>(fn ([x] (inc x)) ([x y] (+ x y)))glad</code>
<code>:do</code>	<code>:statements</code> <code>:ret</code>	<code>(cons ret statements)</code>	<code>(do 1 (* x y) (f y))</code>

:let	:loop :bindings :statements :ret	(into (vec (map :init bes)) (conj (vec statements) ret))	(let [x 1] [y (f x)] (+ x y))
:recur	:frame :exprs	exprs	(recur (conj v x) (inc n))
:quote			ⱴ(a b c)
:new	:ctor :args	(conj argexprs ctorexpr)	(Foo. 1 2 3)
:set!	:target :val	[targetexpr valexpr]	(set! foo (inc x))
:ns	:name :uses :requires :uses-macros :requires-macros :excludes		
:deftype*	:t (?) :fields		
:defrecord*	:t :fields		
:dot	:target :field or :method :args (if :method)	[targetexpr] - or - (into [targetexpr] argexprs)	(.method obj x y z) (.-field obj)
:js	:segs :args :tag - or if not args - :code :tag	argexprs	
:invoke	:f	(conj argexprs fexpr)	(foo 1 2 3)

	:args :tags		
:var	:info		
:map	:keys :vals :simple-keys?	(vec (concat ks vs))	{:a 1 :b 2}
:vector	:items	items	[1 2 3 4]
:set	:items	items	#{1 2 3}
:meta	:meta :expr	[meta-expr expr]	
:constant			

The environment

:line
:ns - :name
 :excludes
 :requires
:locals - a map of names to bindings, e.g. {ethel {:name ethel__123 :init nil}}
:context - one of :return, :expr, :statement

Tab 2

Tab 3

Tab 4

Tab 5

Title

📅 Date





Add a welcome message and provide a brief overview of what's in the manual.

Make sure to mention the purpose, importance of proper training, and the role employees play in creating a great workplace.

Training manual
objective 1

Training manual
objective 2

Training manual
objective 3

Describe who this training manual is designed for. It might be new hires, experienced employees learning new machines, technology, or something else.

Note any necessary previous training or experience, or any prior knowledge that could be helpful for employees to review.

**Getting
started**

Getting started

Overview

Summarize the contents of the training, highlighting the key information that will be shared.

Structure

Explain the format of the training. In many cases, there are theoretical (for example, classroom, reading, etc.) and practical (hands-on) portions.

Duration

Outline the total duration of the training. If applicable, break down how long the various portions of the training will take.

Delivery method

Add detail to the training formats used, such as classroom training, written materials, experiential training with a supervisor, and more. Separate theoretical and practical training methods, if applicable.

Importance & relevance

Describe why this training matters. The goals are often safety, efficiency, or understanding standardized procedures.

Basic concepts & terminology

Provide a quick introduction, noting the importance of understanding the basic concepts and terminology.

Include a glossary of concepts and terms.

Term or concept	Definition or explanation
Term or concept	Definition or explanation
Term or concept	Definition or explanation



Issue resolution

Issue resolution

Common problems & solutions

Provide a brief introduction acknowledging common issues or challenges. Note that this section includes step-by-step resolution instructions.

Common problem 1

Step 1

- Let your department head know about the issue
- Additional details
- Additional details

Step 2

- Keep a running feedback log

Common problem 2

Step 1

- Let your department head know about the issue
- Additional details
- Additional details

Step 2

- Keep a running feedback log

- Additional details
- Additional details

- Additional details
- Additional details

Error messages

If applicable, introduce this section, noting that it provides a full list of all possible error messages an operator might encounter on a particular piece of equipment.

Error code

Solution

1. Restart the equipment
2. Step 2 to resolve
3. Step 3 to resolve

Error code

Solution

1. Restart the equipment
2. Step 2 to resolve
3. Step 3 to resolve

Basic & advanced operations

Basic operations

Step-by-step for common tasks

Briefly introduce the tasks and share instructions for each topic.

Common task 1

Step 1

- Follow standard protocols
- Additional details
- Additional details

Common task 2

Step 1

- Checklists should be done in order
- Additional details
- Additional details

Step 2

- Additional details
- Additional details
- Additional details

Step 2

- Additional details
- Additional details
- Additional details

Tips & shortcuts

Note that it's critical to follow protocol and there are established tips and shortcuts that can streamline certain tasks.

1.

Example: When completing tasks, make sure to initial the spreadsheet so other team members can track progress.

2.

Tip or shortcut

3.

Tip or shortcut

4.

Tip or shortcut

**Advanced
operations**

Advanced features

Add a brief overview of advanced features or specialized procedures.

Advanced feature 1

Step 1

- Only use your company email to log on and off company devices
- Additional details
- Additional details

Step 2

- Additional details
- Additional details
- Additional details

Advanced feature 2

Step 1

- Only use your company email to log on and off company devices
- Additional details
- Additional details

Step 2

- Additional details
- Additional details
- Additional details

Best practices

Introduce this section by highlighting best practices for a safe and efficient working environment. This may include techniques for effective communication, collaboration, and problem-solving.

1.

Example: Get sign-off from department heads when deploying any new company-wide initiatives.

2.

Best practice 2

3.

Best practice 3

4.

Best practice 4

Customization options

If applicable, introduce this section, noting that it provides guidance on adjusting procedures to accommodate custom orders or other specific requirements.

Customization option 1

Step 1

- Additional details
- Additional details
- Additional details

Step 2

- Additional details
- Additional details
- Additional details

Customization option 2

Step 1

- Additional details
- Additional details
- Additional details

Step 2

- Additional details
- Additional details
- Additional details

Summary of key points

Provide a brief conclusion, summarizing the contents of the manual. Include any important details in bullet points.

1.

Example: You should now have the knowledge and skills necessary to perform your role effectively and safely.

2.

Key point 02

3.

Key point 03

4.

Key point 04

Closing remarks

Close with a friendly and encouraging message, connecting the lessons of the manual with employee and company success.

Consider reiterating the most important key point, which is often about safety.

Contact information

If you have any questions, concerns, or require further assistance after completing this training, please reach out to the following resources:

Role or department

Person

Role or department

Person

Role or department

Person

g completion approvals

Trainee	Approval status	Approval date	Facilitator	Facilitator signature or initials
 Person	Not started ▾	 Date	 Person	Signature
 Person	In progress ▾	 Date	 Person	Signature
 Person	Under review ▾	 Date	 Person	Signature
 Person	Approved ▾	 Date	 Person	Signature

Resources

Resource s

Additional reading materials

Include a list of recommended reading materials, such as safety manuals, quality control guidelines, or industry publications.

 File  File  File

Online tutorials

Include a list of online resources such as video tutorials, interactive guides, or other useful resources.

[Link](#) [Link](#) [Link](#)

Community forums

Include information on community forums or support channels where employees can engage with other team members, ask questions, and share best practices.

[Link](#) [Link](#) [Link](#)