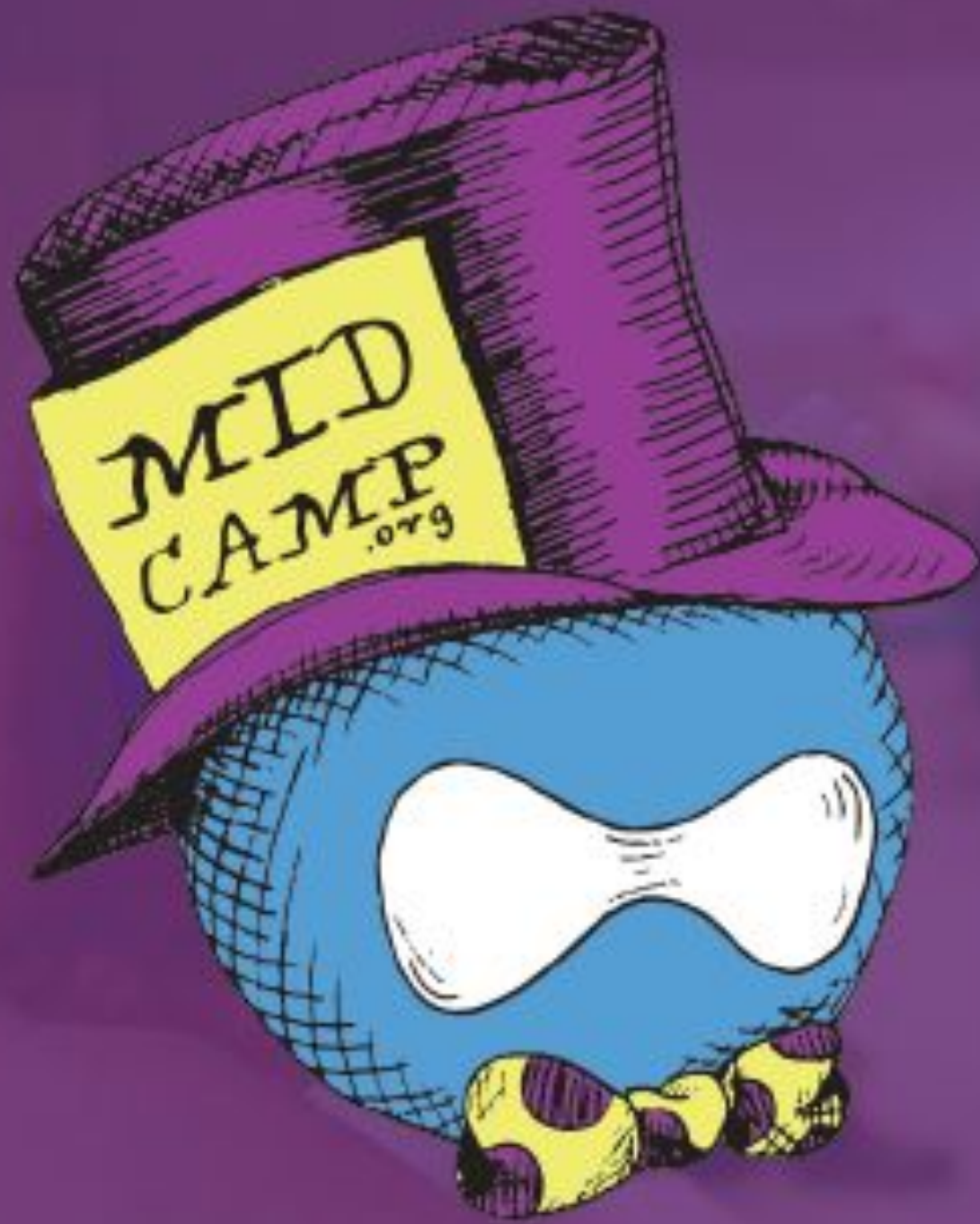


TRACK CHANGES: No-Code Custom Logging with ECA



Jacob Ineichen

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at Madison Public Library
@badgerbrarian



Who's here?

Session Itinerary

- 1. Logging within Drupal**
- 2. Our Use Case**
- 3. ECA/BPMN Overview**
- 4. Demo**

Logging within Drupal

Drupal Core

- Revisions
- Database log
- Logging API



Contrib

•diff

•entity_log

○367 installs, Jan 2025

•entity_changelog

○23 installs, Nov 2023

•elogger

○213 installs, Apr 2024

•events_logging

○180 installs, Nov 2023, beta

•events_log_track

○3620 installs, May 2025

midcamp.org

Event log track ☆									
Home » Administration » Reports									
► FILTERS									
UPDATED	TYPE	OPERATION	PATH	DESCRIPTION	USER	IP	ID	NAME	
2017-01-25 21:30:50	node	insert	node/add/page	page: Basic page	admin	127.0.0.1	12	Basic page	
2017-01-25 21:28:52	user	delete	batch	user1 (uid 5)	admin	127.0.0.1	5	user1	
2017-01-25 21:27:50	menu	update	admin/structure/menu/manage/new-menu	new menu (new-menu)	admin	127.0.0.1		new-menu	
2017-01-25 21:27:16	taxonomy	term update	taxonomy/term/4/edit	term 1 (4)	admin	127.0.0.1	4	test_event	
2017-01-25 21:26:16	authentication	login	user/login	admin (uid 1)	admin	127.0.0.1	1	admin	
2017-01-25 21:25:38	authentication	fail	user/login	atulesh (pass 1234)		127.0.0.1		atulesh	
2017-01-25 21:24:33	node	update	node/11/edit	article: Test page	admin	127.0.0.1	11	Test page	

^ Show diff

Body

1

-

<p>dsfsdsg
dag ddfda
gdsfh ftrsd
gadg dafgh
dafghdaf
ghadg
adfg
adfg
adfg
dfhd</p>

1

+

<p>hew
change</p>

The **node** [article](#) was updated by [admin](#) on *Wednesday, November 15, 2023 - 16:51.*

node

172.22.0.5

Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7; AppleWebKit/537.36 (KHTML, like Gecko) Chrome/119.0.0.0 Safari/537.36

The **form** [views_exposed_form](#) was submitted by [admin](#) on *Wednesday, November 15, 2023 - 16:51.*

Show form data

172.22.0.5

Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7; AppleWebKit/537.36 (KHTML, like Gecko) Chrome/119.0.0.0 Safari/537.36

Entity log

Custom block

Comment

Contact message

Entity log

File

Flagging

Content

Search task

Shortcut link

Taxonomy term

User

Custom menu link

▼ ARTICLE

Fields

☐ ID

☐ UUID

☐ Revision ID

☐ Language

☐ Content type

☐ Revision create time

☐ Revision user

☐ Revision log message

☐ Published

☒ Title

☐ Authored by

☐ Authored on

☐ Changed

☐ Promoted to front page

☐ Sticky at top of lists

☐ Default translation

☐ Default revision

☐ Revision translation affected

☐ URL alias

☒ Body

☐ Comments

☐ Image

☐ Tags

Select fields you would like to log on update

► BASIC PAGE

Select on which fields you want to log changes on

☒ Log in logger (watchdog)

☒ Log in Entity Log entity

Save

Home » Administration » Reports

IP

Name

Type

Apply

DATE	AUTHORED BY	NAME	TYPE	OPERATION	DESCRIPTION
Wed, 02/21/2018 - 23:40	root	fsda	node_update	update	user root (uid 1) performed
Wed, 02/21/2018 - 23:34	root	fsda	node_insert	insert	user root (uid 1) performed

Our Use Case:

Why Build It Custom With ECA

Our Use Case

- Confirmation emails

- Tracking when and to who a confirmation email was sent

- UX-friendly field changes

- Clear, simple listing of adjustments

Reservation Info

Jake Ineichen patron-424

Staff Info

⌚ Reserved time: 7:00am - 8:30am

📅 Not showing on daily schedule

Who

👤 Jake Ineichen

✉ jwineichen@gmail.com

🏠 Jake Ineichen patron-424

Where

📍 Central Library

📍 Study Room 102

When

📅 5/17/25

⌚ 7:00am - 8:30am

Meta

★ Confirmed

📅 Walk-in

🔢 205563

⚙ Patron Study Room

👤 Created by: jineichen

⌚ Created: 5/17/25 - 1:56

Log notes

• 5/17/25 - 1:56, email sent to jwineichen@gmail.com

• 5/17/25 - 1:58, email sent to jwineichen@gmail.com

property-1011

View

Edit

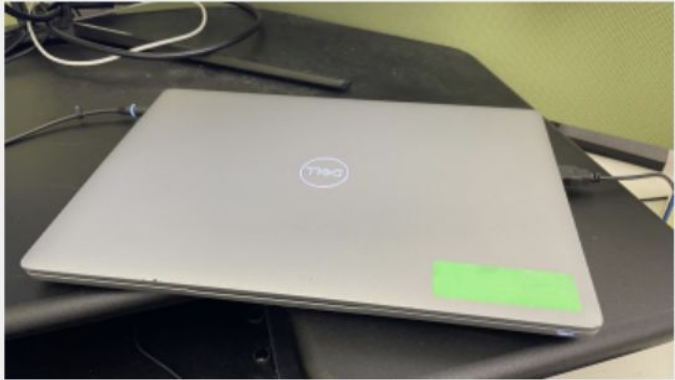
Delete

Revisions

Devel

Submitted by [jineichen](#) on Tue, 10/01/2024 - 8:59am

Property Item(s)



over \$50

Status change log

05/17/2025 - 1:49am: storage --> transferred

Record ID

1011

Date of acquisition

Wed, Sep 18

Location

[Central Library](#)

Area of Library

staff meeting room

Staff member initials

Jl

Property status

transferred

Recipient of transfer/return

Police

ECA and BPMN Overview

Conditionally-triggered actions (or reactive rules)

- Event → Condition → Action



Installing and Using ECA

- **Install the processing engine and at least one modeller**
 - **BPMN.io**
 - "BPMN modeller with a feature-rich UI"
 - **Camunda**
 - "BPMN modeller desktop client for designing and deploying automated processes"
 - **ECA Classic**
 - "Simple modeller using the Drupal Form API"

BPMN.iO

drupal.org/project/bpmn_io

Business Process Model and Notation (BPMN)

In Drupal, we'll use:

- **Flow objects**
 - **Events** (circles)
 - **Activities** (rounded-corner rectangles)
 - **Gateways** (diamonds)
- **Connecting objects**
 - **Sequences** (solid line with arrowhead)
- **Artifacts**
 - **Annotation** (opening square bracket)

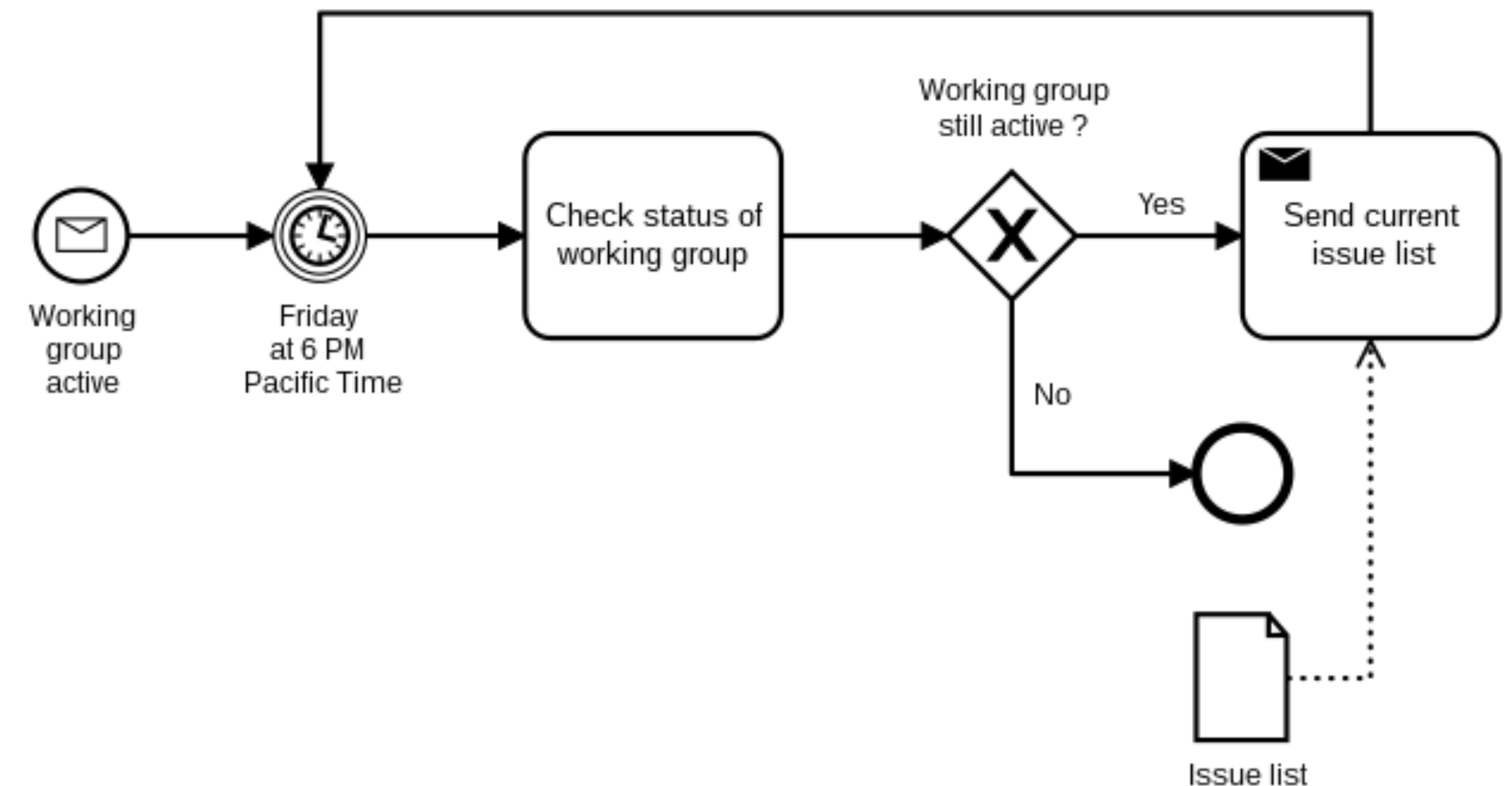
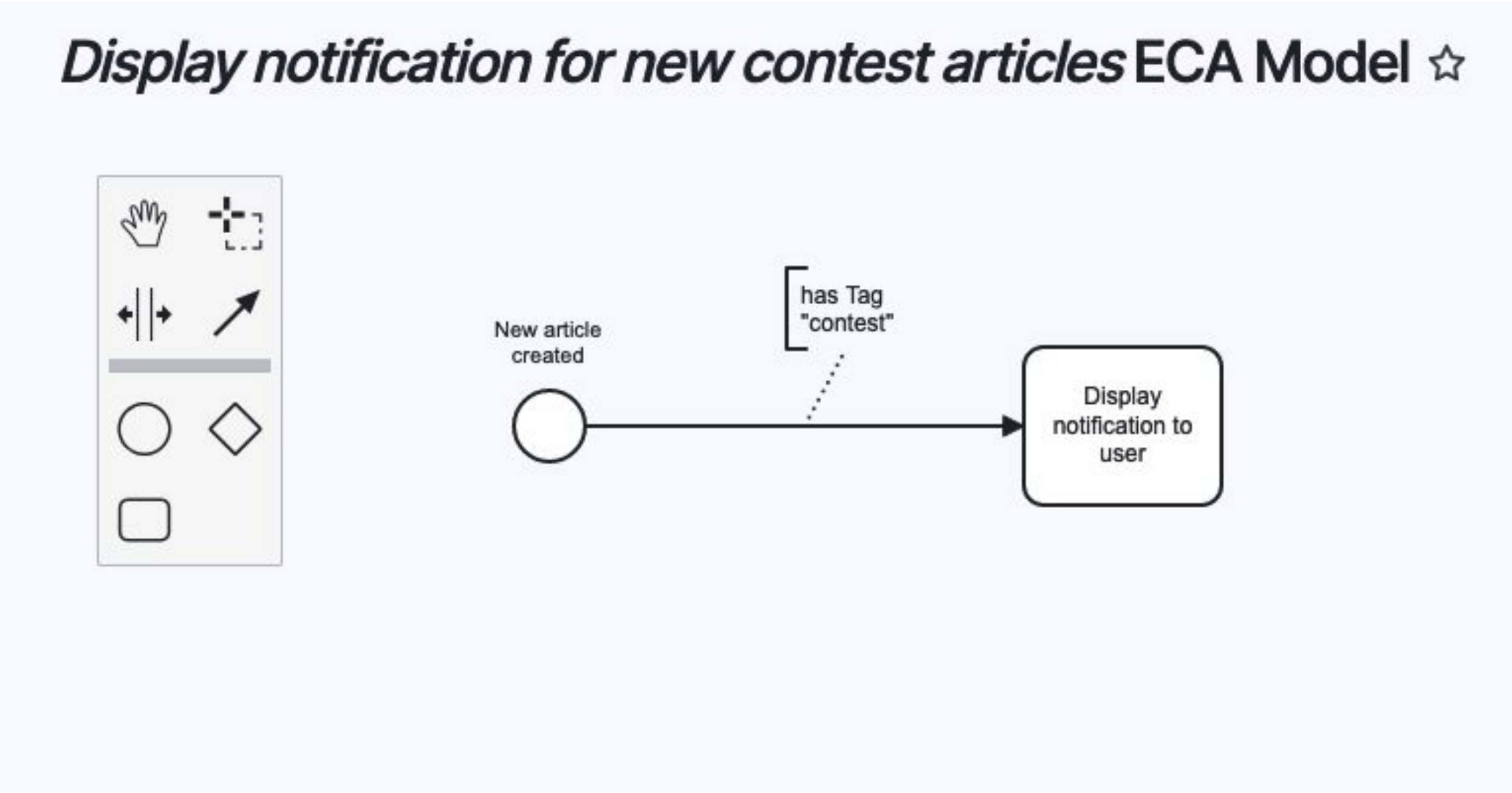


image from Wikimedia, <https://en.wikipedia.org/wiki/File:BPMN-AProcessWithNormalFlow.svg>

BPMN.iO



ECA Classic

Display notification for new content ECA Model ☆

Label *
Display notification for new content Machine name: new_content_notify [\[Edit\]](#)
The human-readable name of this ECA configuration.

^ Events (1)

Event	Configuration	Successors	Operations
✚ Insert content entity Machine name: content_entity_insert	type: 'node article'	- id: action_message_action_1 condition: eca_entity_field_value	Edit

^ Add event

^ Conditions (1)

Condition	Configuration	Operations
✚ Entity: compare field value Machine name: eca_entity_field_value	expected_value: '1' field_name: field_tags operator: contains type: value case: false negate: false	Edit

^ Add condition

^ Actions (1)

Action	Configuration	Successors	Operations
✚ Display new contest message to user Display a message to the user Machine name: action_message_action_1	message: 'NEW CONTEST!!!' replace_tokens: false	No successor	Edit

ECA Resources

- **ECA module**
 - **drupal.org/project/eca**
- **Documentation**
 - **ecaguide.org**
- **Community Support**
 - **#eca channel in Drupal Slack**

DEMO

Demo Installation: Modules

- **Admin stuff**
 - DDEV Gin Admin Theme (gin), Gin Toolbar (gin_toolbar), Admin Toolbar (admin_toolbar), Admin Toolbar Extras (admin_toolbar_tools)
- **Useful core/contrib**
 - Content Moderation (content_moderation), Date Range (date_range), Token (token), Smart Date (smart_date)
- **ECA main**
 - ECA (eca), BPMN.io (bpmn_io)
- **ECA events, conditions, and actions**
 - ECA Base, ECA Core, ECA Content, ECA User, etc.

Demo Installation: Content and Config

- **Content Moderation: "Customer Booking"**
- **Content type: "Booking"**
 - **Has desc, date, contact, room, send email indicator, log fields**

Credits and Thanks

- **Images from Unsplash, Wikimedia, & Drupal**

PLEASE PROVIDE YOUR FEEDBACK!

mid.camp/8719



CONTRIBUTION DAY

Thursday 10:00am to
4:00pm

You don't have to know code to give back!

New Contributor training 9:00am to 10:00am

**THANK YOU,
QUESTIONS?**