# Moodle is for life not just for Christmas

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Moodle is 'free' ...

... but needs to be cared for.

Image: Designed by rawpixel.com / Freepik



- Moodle mission: "Empowering educators to improve our world"
- OU values: education for social change, openness and innovation.
- Open source: license-free, cost effective, we contribute to community.
- VLE & LMS: content delivery & collaboration and administration.
- Flexible and customisable: Simple interface and still feature rich.
- Institutional knowledge: Wealth of experience at OU from 2006.





# Managing OU Moodle

## What we do



- Product management / user research in Learning Systems and Online Student Experience
- Collaborative partnership with IT development teams with links to Moodle community
- Range of experience and expertise with OU Moodle VLE systems

Support Adoption
Decommissioning Requirements Accessibility
Proof of concept
Performance
Testing Delivery
Research
DevOps
Analysis
Analysis
Specification
Negotiation
Negotiation
Feedback
Insight

Who we are





Learning systems & **Online Student Experience** 

**UX** designer

**Product development manager** 

Service administrator

Service analyst

IT development & **Support** Tester

Scrum master

Project manager

**Technical Developer** 

Server monitoring

Server admin

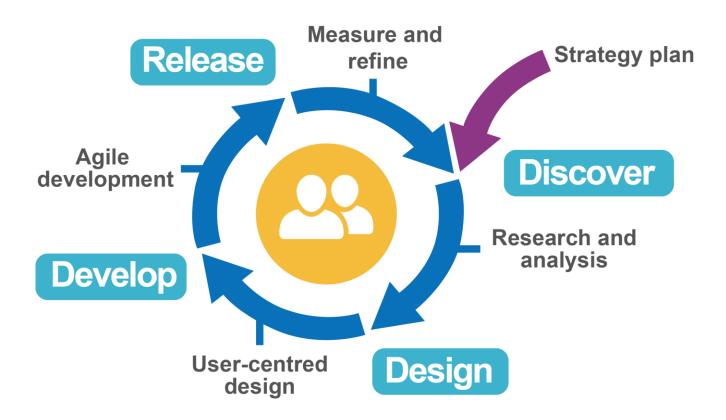
Incident manager



Moodle

**Admins** 





# Adoption and use



System administration > Reports > Ad-hoc database queries > iPud on websites

iPud on websites

Link to Forum

CourseID	shortname	Forum
207527	BBXY857- 19E	Discussing trends
207527	BBXY857- 19E	Reasons for failure
207459	BXY132- 19H	In-page discussions
207838	EE811- 19J	Activity 2.10: Section 1 refl discussion
206474	L223-19J	L223
207853	W340-19J	Unit 1 in-page discussions
207853	W340-19J	Unit 2 in-page discussion

# Increased file upload on websites

http://learn2.open.ac.uk/mod/forumng/view.php?

This reports lists websites which have a max upload limit set to 500MB or Site upload limit (500MB)

id	shortname	maxbytes	Website link
204884	AMC123-16J	524288000	http://learn2.open.ac.uk/course/view.php?id=204884
205480	BXY130-17E	524288000	http://learn2.open.ac.uk/course/view.php?id=205480
206506	BXY130-18B	524288000	http://learn2.open.ac.uk/course/view.php?id=206506
207444	BXY130-19B	524288000	http://learn2.open.ac.uk/course/view.php?id=207444
206852	E304-18J	524288000	http://learn2.open.ac.uk/course/view.php?id=206852
207713	E304-19J	524288000	http://learn2.open.ac.uk/course/view.php?id=207713
204933	IGB48	524288000	http://learn2.open.ac.uk/course/view.php?id=204933
204948	IMD-TT-TESTING	524288000	http://learn2.open.ac.uk/course/view.php?id=204948
204839	MAGDAP-OSEP	524288000	http://learn2.open.ac.uk/course/view.php?id=204839
206402	OU102-17J	524288000	http://learn2.open.ac.uk/course/view.php?id=206402
206134	STEM-CS	524288000	http://learn2.open.ac.uk/course/view.php?id=206134
207392	TM112-18J	524288000	http://learn2.open.ac.uk/course/view.php?id=207392





# People, roles and permissions

## **OU Moodle platforms and users**





#### Learn 1 – Community VLE sites

https://learn1.open.ac.uk/

Open to all OU users, staff and students

Main guidance and support sites

Community spaces for the OUSA, AL community

University-wide content e.g. library induction/training



# Learn 3 – Staff VLE https://learn2.open.ac.uk/

Restricted access for staff only

Reference and internal guidance

Sandboxes for experimentation, module production preparation, projects



# Learn 2 – Core Student VLE

https://learn2.open.ac.uk/

Main teaching and learning content, course and course-related websites, parent subjects & qualification sites

Business critical delivery of sites for all modules – around 450 live sites at any time, on average 35,000-40,000 unique users per day



#### Learn 5 – The Open Science Lab

https://learn5.open.ac.uk/

Award-winning, innovative online laboratory

Features investigations based on on-screen instruments, remote access experiments and virtual scenarios using real data

Used within modules and as a public access OER



# Learn 7 – Students in Secure

Environments
https://learn7.open.ac.uk/

Used by HM Prison Service for offender learner programmes

Highly secure cut-down version of Learn 2

**180k active users** per year



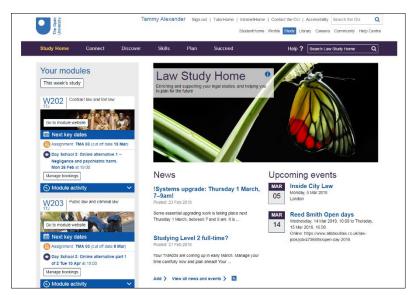
55 roles

~ **450 live courses** per year

## Websites, courses and tools











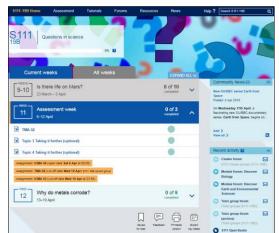














# People

Learning Systems

Online Student Experience

IT
Development
/ Support

Online Services Administrators

Learning Design

Assessment Administrators

Accessibility Experts

Academics

Module & Qualification Teams

Curriculum Manager

Editorial

Interactive Media
Developer

Sound and Vision

Graphic Design

Media Assistant

Learning & Teaching Librarians

Careers Advisors

Disabled Student Support

Computing Helpdesk

Supporting students in secure environments



The Orivers YEARS

Students

Associate Lecturers

Moderators

Learning Advisors

Student Support Teams

### **Roles and enrolments**



## Our roles are

- Automated
- Manual
- Granular
- Cumulative

# Our permissions are

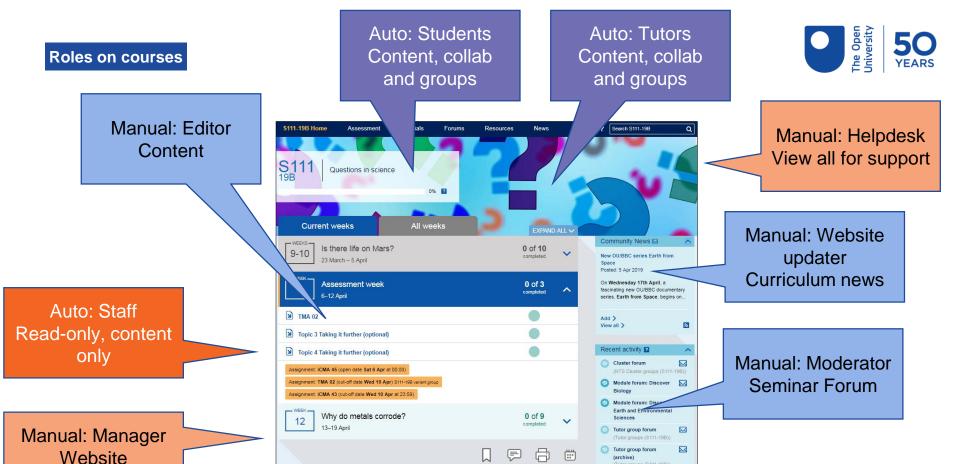
- Managed
- Audited
- Flexible

**System Roles:** Administrator, Manager, Site-wide staff, HelpDesk, E&A Manager, Interactive Media Developer ...

Category Roles: Production staff, Website Reviewer ...

**Course Roles:** Website updater, Editor, Tutor, Contributing Student, Student, Library staff ...

Activity Roles: Moderator ...

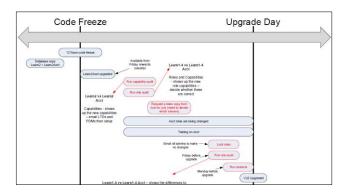


configuration

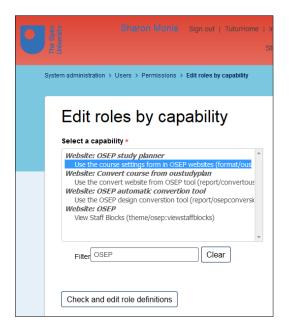
S111 Open Studio

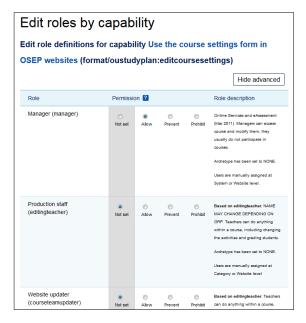
# **Managing Roles and Permissions**

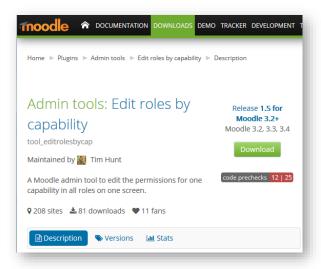
- · Quarterly review
- Product Manager and Developer sign off
- Process does not hamper business as usual









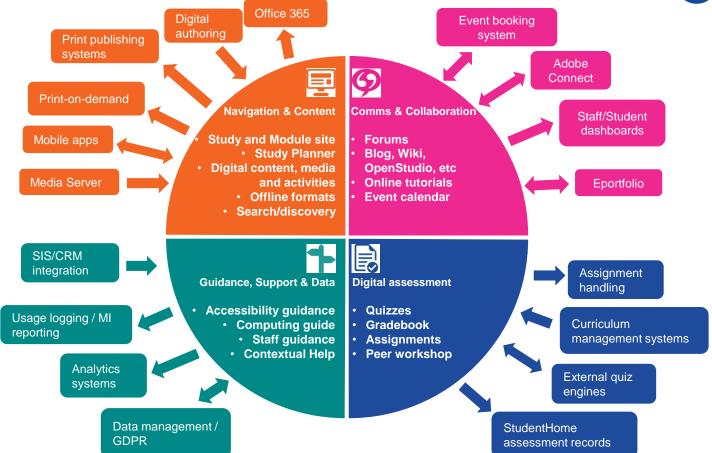


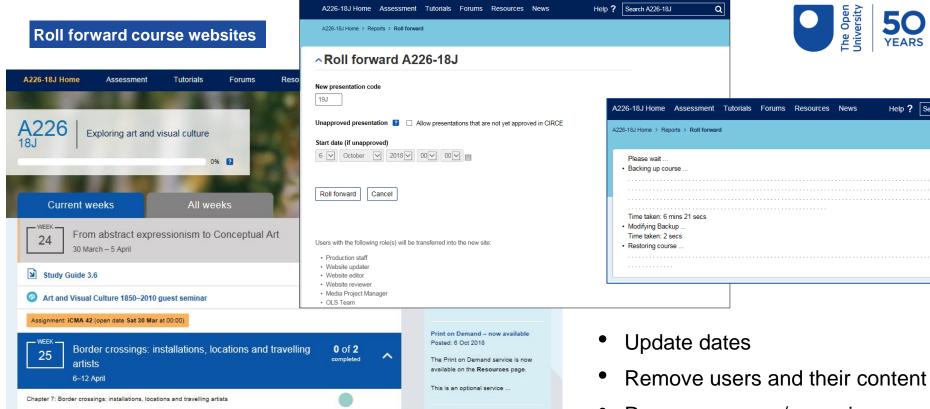


# **Building websites**

# Hybrid VLE ecosystem







Add >

View all >

Study Guide 3.7

- Rename groups / groupings
- Clear down news items
- Add new workflows

# **Workflow system**

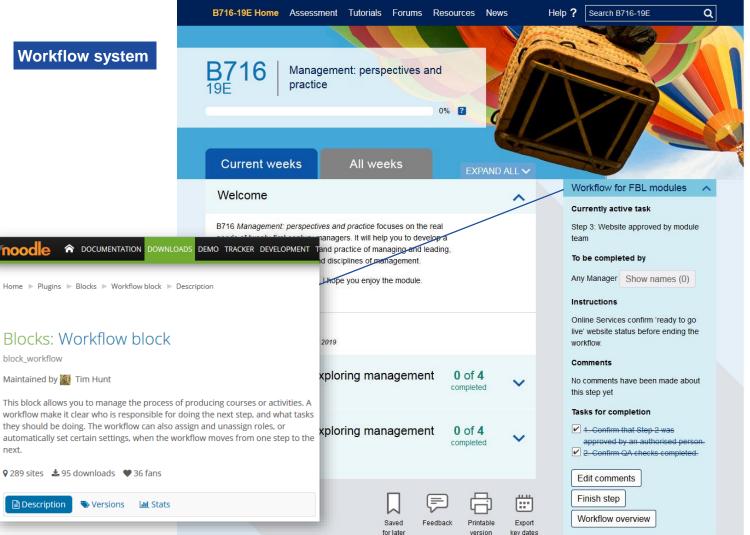
block workflow

☐ Description

Versions

next.

Maintained by M Tim Hunt







# Workflow settings

Shortname Workflow for FBL modules Workflow for FBL modules Name Description same day as This workflow applies to Website This workflow is currently enabled (disable it). It is currently in use in 50 locations. Workflow status Edit, Clone, Export

# Workflow steps

Step No.	Step name	Roles	Instructions	Finish	
					+
1	Step 1: Create draft website	Manager	Online Services create, configure and prepare the draft website ready for editing,	Do not automatically finish	+ +
2	Step 2: Update website	Website updater, Website editor	LTI editorial staff and Module Team prepare, upload and configure the website resources. Target completion date: 5 working days before the site goes live to tutors.	Do not automatically finish	÷ + •
3	Step 3: Website approved by module team	Manager	Online Services confirm 'ready to go live' website status before ending the workflow.	Do not automatically finish	÷ +
After step 3, this workflow will end.					+

#### ↑ Step completion ②

#### On step completion

# The users in the roles of Website editor and Website updater will be added to the Workflow editing role assignrole workflowediting to courseteamupdater editor mediaprojectmanager

# An email will be sent to any user with one of these site roles:

# Website updater, Website editor, Media Project Manager, OLS team.

email FBLWFS2 to courseteamupdater editor mediaprojectmanager olsteam

Do not automatically finis

#### Automatically finish

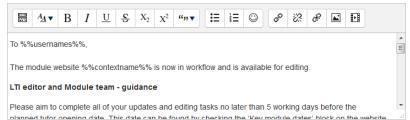
# Edit email template 'FBLWFS2'

#### Shortname FBLWFS2

#### Subject \*

%%contextname%% Workflow Step 2: Update website

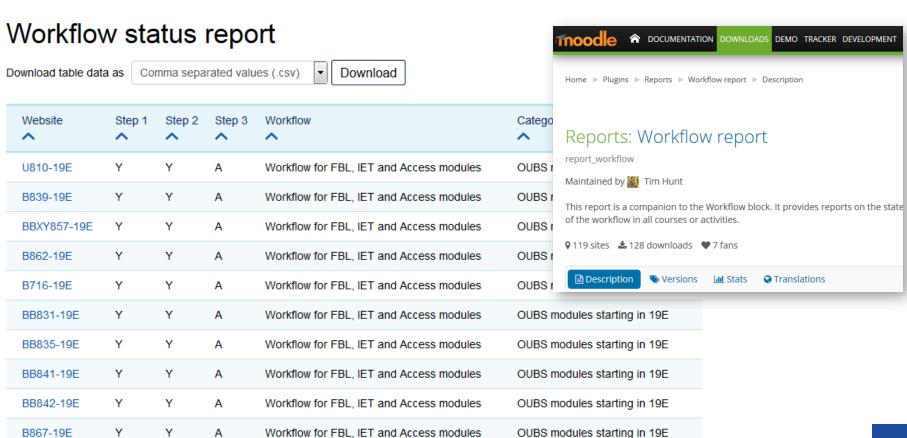
#### Message \*



The following placeholders can be used in the subject line and message:

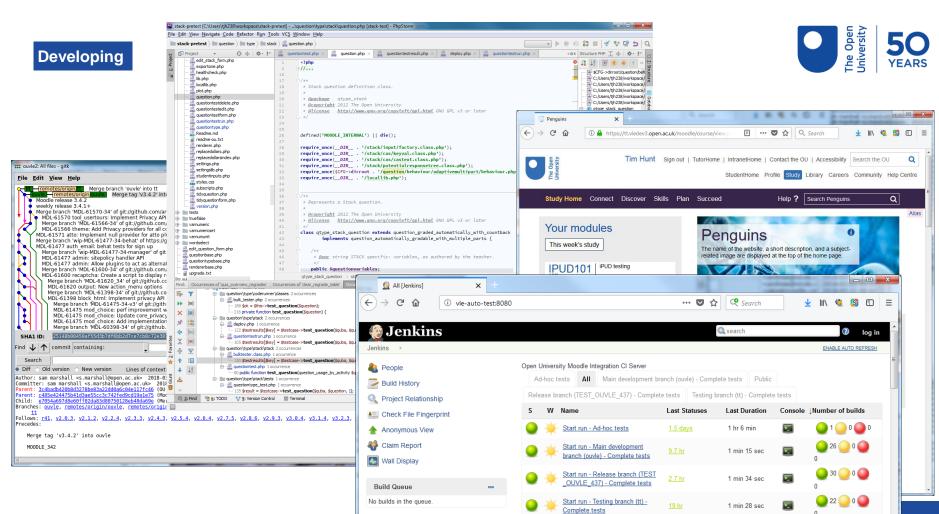
- . %%workflowname%% the name of the workflow.
- . %%stepname%% the name of the current step.
- %%contextname%% the name of the thing the workflow applies to for example the website or quiz name.







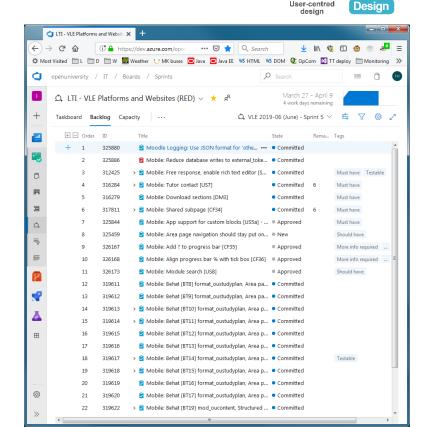
# **Development**



## Managing development





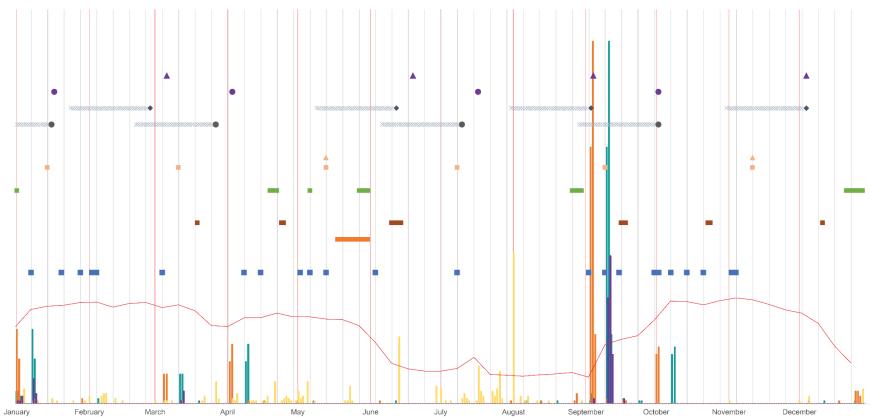


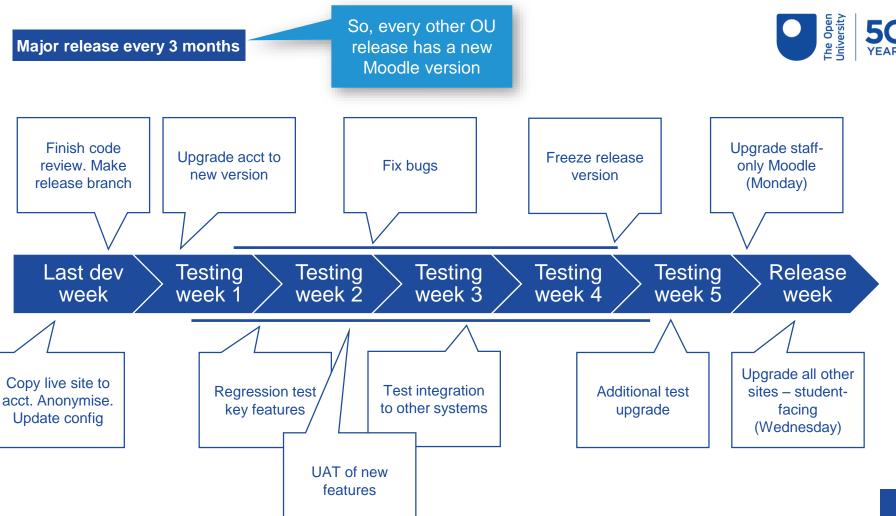


Specify Develop Test UAT

# When can we release?







## **Automated testing**

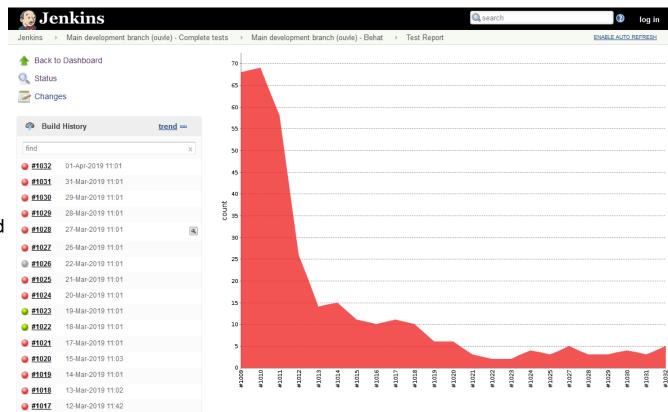


CI server

Runs all PHPunit ... and Behat for OU plugins ... every night.

This graph shows what happened when we merged Moodle 3.6.2.

~70 failures out of 1,869 scenarios to fix.





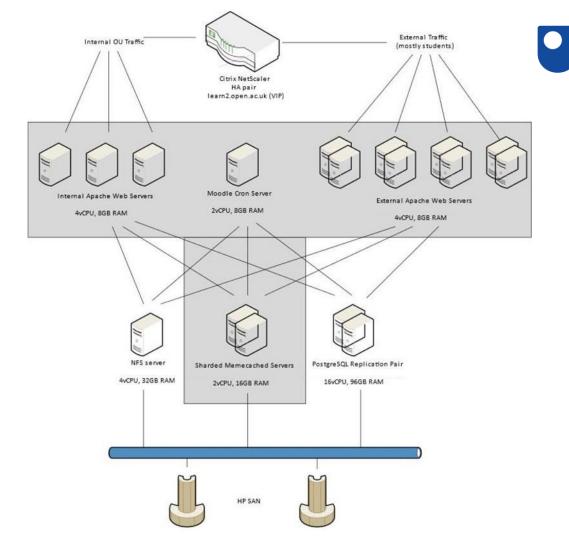
# **Servers & Monitoring**

# **Hosting Moodle**

17 virtual machines6TB storage

Split over 2 data centres

Started with less Grew as needed Will change again

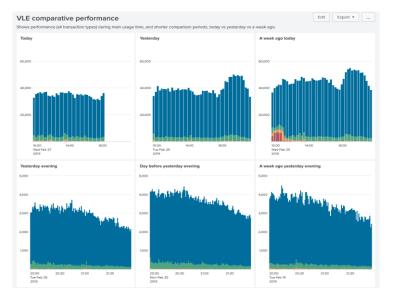


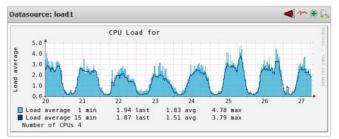
# Monitoring

# 24/7 monitoring of

- Server status
- · Application health
- Student experience

Procedures for standard problems, or we get a call

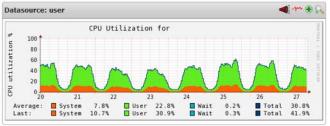


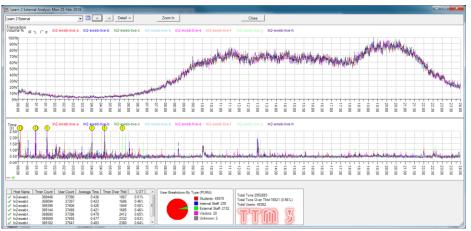




Host: Service: CPU utilization

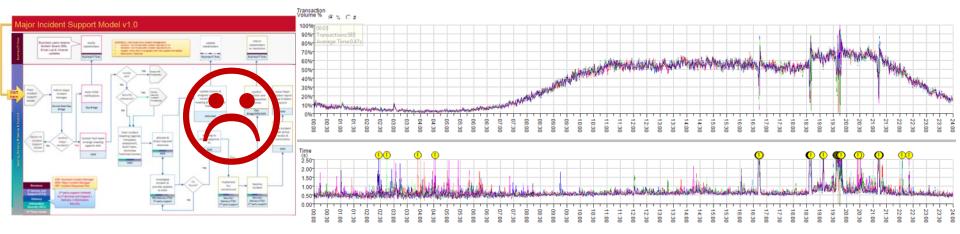
One Week 20.02.19 11:48 - 27.02.19 18:48

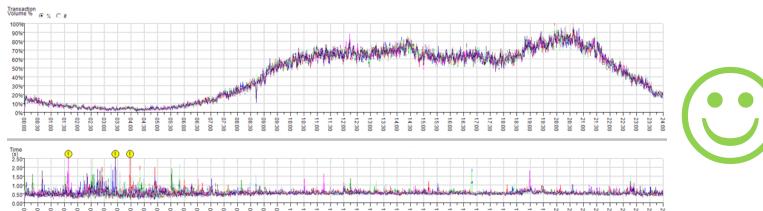




# Incident response







# **Monitoring key events**

# Monitor alt formats conversion

Return with the total number of the delayed alt format jobs.

Query run date	Delayed jobs
2019-03-01	4
2019-03-02	NO-DELAYS
2019-03-03	NO-DELAYS
2019-03-04	3
2019-03-05	NO-DELAYS
2019-03-06	5
2019-03-07	5
2019-03-08	18
2019-03-09	NO-DELAYS
2019-03-10	NO-DELAYS
2019-03-11	7
2019-03-12	5

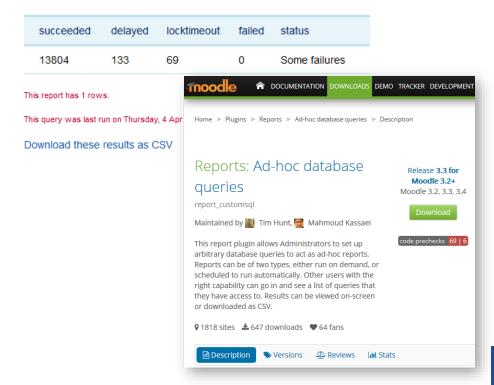
# Check VLE dataload events



This query checks the logs of events received from the VLE dataload. The results indicate the number of successes and any failures.

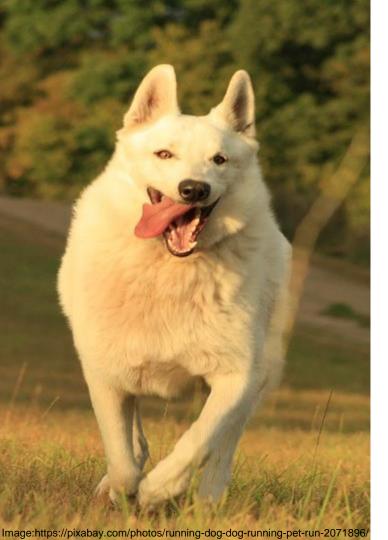
This is emailed automatically to some lead developers.

## Query run on 4 Apr 2019





# **Summary**



The right people

in the right teams

with the right tools





Don't panic:

Evolve practice and processes as they are needed

Be part of the Moodle community

