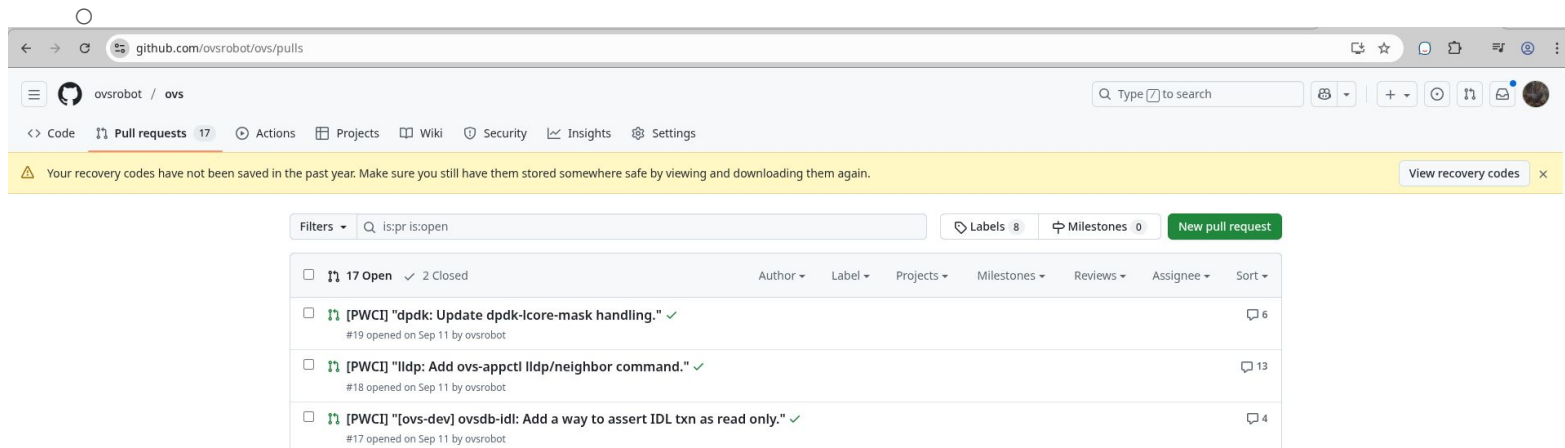


When CI Shouts Back: LLMs in the OVS CI Pipeline

Evaluating LLMs in OVS Pipeline

- Tried out CodeRabbit, and Sourcery



The screenshot shows the GitHub interface for the repository `ovsrobot / ovs`. The page displays a list of pull requests under the 'Pull requests' tab, which has 17 items. A yellow banner at the top of the pull request list contains a warning: 'Your recovery codes have not been saved in the past year. Make sure you still have them stored somewhere safe by viewing and downloading them again.' Below this, the pull request list is filtered by 'is:pr is:open'. The list shows three pull requests, each with a checkbox, a green checkmark, and a comment icon. The first pull request is titled '[PWCII] "dpdk: Update dpdk-icore-mask handling."' and was opened on Sep 11 by ovsrobot. The second is '[PWCII] "lldp: Add ovs-appctl lldp/neighbor command."' and was also opened on Sep 11 by ovsrobot. The third is '[PWCII] "[ovs-dev] ovsdb-ctl: Add a way to assert IDL txn as read only."' and was opened on Sep 11 by ovsrobot. The interface includes navigation links for Code, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. A search bar is located at the top right, and a 'New pull request' button is at the bottom right.

github.com/ovsrobot/ovs/pulls

ovsrobot / ovs


Code Pull requests 17 Actions Projects Wiki Security Insights Settings

⚠ Your recovery codes have not been saved in the past year. Make sure you still have them stored somewhere safe by viewing and downloading them again. View recovery codes


Filters is:pr is:open Labels 8 Milestones 0 New pull request

<input type="checkbox"/>	17 Open ✓ 2 Closed	Author	Label	Projects	Milestones	Reviews	Assignee	Sort
<input type="checkbox"/>	[PWCII] "dpdk: Update dpdk-icore-mask handling." ✓ #19 opened on Sep 11 by ovsrobot							6
<input type="checkbox"/>	[PWCII] "lldp: Add ovs-appctl lldp/neighbor command." ✓ #18 opened on Sep 11 by ovsrobot							13
<input type="checkbox"/>	[PWCII] "[ovs-dev] ovsdb-ctl: Add a way to assert IDL txn as read only." ✓ #17 opened on Sep 11 by ovsrobot							4

Evaluating LLMs in OVS Pipeline

sourcery-ai  left a comment ...

Hey there - I've reviewed your changes and they look great!

coderabbitai  left a comment ...

Actionable comments posted: 2

▼ 📖 Review details

Configuration used: CodeRabbit UI

Review profile: CHILL

Plan: Pro


💡 Knowledge Base configuration:

- MCP integration is disabled by default for public repositories
- Jira integration is disabled by default for public repositories
- Linear integration is disabled by default for public repositories

You can enable these sources in your CodeRabbit configuration

Evaluating LLMs in OVS Pipeline

- PW-CI infra changes needed - pull request
 - Downsides with PRs - Difficult to track, alternate area for patch discussion, etc.



The screenshot displays a vertical list of GitHub commits. At the top, a summary line states "Linda Wang and others added 4 commits 3 months ago". Below this, four individual commits are listed, each with a commit icon, a commit message, and a commit hash. The commits are: 1) "netdev-offload-dpdk: Fix vport hw-offload stat." with hash b1e295d; 2) "AUTHORS: Add Linda Wang." with hash df37034; 3) "netdev-offload-dpdk: Fix memory leak for matching fragments." with hash 5deb964; and 4) "checkpatch: Use the AI suggested group syntax." with hash b8302d4, which is marked with a green checkmark.


Commit Message	Commit Hash
netdev-offload-dpdk: Fix vport hw-offload stat.	b1e295d
AUTHORS: Add Linda Wang.	df37034
netdev-offload-dpdk: Fix memory leak for matching fragments.	5deb964
checkpatch: Use the AI suggested group syntax.	✓ b8302d4

Evaluating LLMs in OVS Pipeline

- Weird behavior
 - Need to keep branches *very* in-sync
 - Bots like to suggest doing one thing then doing another



utilities/checkpatch.py

```
404 404 words = ""
405 405 matched = re.search(r'#([^\.]*)$', line)
406 406 if matched:
407 - words = matched.group(1)
```


 **sourcery-ai** bot on Sep 2


issue (bug_risk): Using 'matched[1]' instead of 'matched.group(1)' may cause issues if 'matched' is not a Match object.

'matched[1]' will raise a `TypeError` if 'matched' is a `re.Match` object. Use 'matched.group(1)' unless you are certain 'matched' is a tuple or similar.

 1  1

Reply...

 **coderabbitai** bot on Sep 2 • edited


 **Potential Issue**


Use Match.group(1) instead of subscription for portability

`matched[1]` isn't supported on older Python versions commonly used with OVS; the rest of this file already uses `.group(n)`. This change can raise `"re.Match" object is not subscriptable`.

Apply:

```
- if matched:
- words = matched[1]
+ if matched:
+ words = matched.group(1)
```



►  Committable suggestion

Custom Shouting

Claude RFC:

<https://patchwork.ozlabs.org/project/openvswitch/patch/20251114143143.931985-1-aconole@redhat.com/>

```
.ci/ai_review/README.md | 197 ++++++++
.ci/ai_review/prompts/review-start.md | 110 +++++
.ci/ai_review/requirements.txt | 1 +
.ci/ai_review/review.py | 411 +++++
.ci/ai_review/run_code_review_session.sh | 302 +++++
5 files changed, 1021 insertions(+)
create mode 100644 .ci/ai_review/README.md
create mode 100644 .ci/ai_review/prompts/review-start.md
create mode 100644 .ci/ai_review/requirements.txt
create mode 100755 .ci/ai_review/review.py
create mode 100755 .ci/ai_review/run_code_review_session.sh
```

Custom Shouting

Some advantages

- Our own custom prompt
- Can be run by developers
- Can get integrated in GHA

Costs \$\$

```
> diff --git a/lib/dpif-offload.c b/lib/dpif-offload.c
> index 62bdd31b9..672df8a38 100644
> --- a/lib/dpif-offload.c
> +++ b/lib/dpif-offload.c
> @@ -43,10 +43,14 @@ static const struct dpif_offload_class *base_dpif_offload_classes[] = {
>  #ifdef DPDK_NETDEV
>      &dpif_offload_dpdk_class,
>  #endif
>  + /* If you add an offload class to this structure, make sure you also
>  +   * update the dpif_offload_provider_priority_list below. */
>      &dpif_offload_dummy_class,
>      &dpif_offload_dummy_x_class,
>  };
>
> +static char *dpif_offload_provider_priority_list = "tc,dpdk,dummy,dummy_x";

Does this code leak the original string when dpif_offload_set_global_cfg()
overwrites dpif_offload_provider_priority_list with a new xstrdup'd value?

> @@ -125,6 +129,12 @@ dpif_offload_show_classes(struct unixctl conn *conn, int argc OVS_UNUSED,
```

Custom Shouting

```
aconole@RHTRH0061144:~/git/ovs/.ci/ai_review/gaeta... x aconole@RHTRH0061144:~/git/openvswitch.github.io x
+ *
+ * Unless required by applicable law or agreed to in writing, software
+ * distributed under the License is distributed on an "AS IS" BASIS,
+ * WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied.
+ * See the License for the specific language governing permissions and
+ * limitations under the License.
+ */
+
+#include <config.h>
+
+#include <stdint.h>
+
+#include "dpif-netdev-perf.h"
+#include "openvswitch/util.h"
+#include "ovstest.h"
+#include "random.h"
+#include "util.h"

Is the random.h include used anywhere in this file?
```