

feat(docker): provide modular images for openadkit planning simulator visualizer #4673

New issue

❌ Closed

oguzkaganozt wants to merge 48 commits into `main` from `4538-provide-modular-images-for-openadkit-planning-simulator-visualizer`

Conversation53

Commits48

Checks14

Files changed



oguzkaganozt commented on Apr 30 • Contributor

Description

Provide modular planning, simulator and visualizer containers to enable easier development and deployment of Autoware functionalities with distinct needs.

- Move monolithic autoware images into `autoware` package and, openadkit images into `autoware-openadk` package
- Provide `planning`, `simulator`, `visualizer` container images
- Provide `docker-compose` file for running autoware with multiple images easily

Detailed information can be found at the below related issue.

Related links

[#4538](#)

Tests performed

docker build action:  
<https://github.com/autowarefoundation/autoware/actions/runs/9254434490>  
New docker images are thoroughly tested in a fresh environment.

Reviewers

- youtalk
- xmfcx
- TakaHoribe
- mitsudome-r

Assignees

- oguzkaganozt

Labels

- component:planning
- component:system
- DevOps Dojo: Build & Run
- tag:run-health-check
- type:ci

Projects

None yet

Milestone

No milestone

Development

Successfully merging this pull request may close these issues.

4 participants

# Notes for reviewers



## Interface changes

N/A as it will only introduce new modular container images.

## Effects on system behavior

N/A to bare-metal setups, but it will provide new modular deployment scheme.

## Pre-review checklist for the PR author

The PR author **must** check the checkboxes below when creating the PR.

- ☒ I've confirmed the [contribution guidelines](#).
- ☒ The PR follows the [pull request guidelines](#).

## In-review checklist for the PR reviewers

The PR reviewers **must** check the checkboxes below before approval.

- ☐ The PR follows the [pull request guidelines](#).
- ☐ The PR has been properly tested.
- ☐ The PR has been reviewed by the code owners.

## Post-review checklist for the PR author

The PR author **must** check the checkboxes below before merging.

- ☒ There are no open discussions or they are tracked via tickets.
- ☒ The PR is ready for merge.

After all checkboxes are checked, anyone who has write access can merge the PR.



**oguzkaganozt** added **component:system**

**component:planning**

**DevOps Dojo: Build & Run**


**type:ci**

labels on Apr 30



**oguzkaganozt** self-assigned this on Apr 30



 **oguzkaganozt** requested review from **mitsudome-r** and **xmfcx** as code owners 7 months ago



**youtalk** commented on May 7 • edited ▼

Member

**@oguzkaganozt** It is good PR but quite a big changes to review it.

To streamline the review process, please minimize the amount of revisions per PR and break it up into multiple PRs.

In addition, for both maintenance and build efficiency, a single Dockerfile should be used with `multi-stage build` instead of creating multiple Dockerfiles.

ref

<https://github.com/orgs/autowarefoundation/discussions/4661>



1



**oguzkaganozt** commented on May 8

Contributor

Author

**@oguzkaganozt** It is good PR but quite a big changes to review it.

To streamline the review process, please minimize the amount of revisions per PR and break it up into multiple PRs. In addition, for both maintenance and build efficiency, a single Dockerfile should be used with `multi-stage build` instead of creating multiple Dockerfiles. ref

<https://github.com/orgs/autowarefoundation/discussions/4661>

Thank you for the review **@youtalk**. You're right on big PR changes but since this PR includes many tightly-related changes I thought that it will be more easier to review in all-in-one PR.

For the multi-stage build we are already utilizing it in the monolithic images of Autoware `devel` and `runtime`. And these new modules also utilizing the base image from the monolithic images (which includes ros, rmw and some basic dependencies) but we still need to keep module dockerfiles separate because ideally in the near future we will only copy related nodes into specific dockerfile, which means reducing the size of the modules even better. (At this time, this PR copying all of the install folder into all modules which is not ideal).

**mitsudome-r** commented on May 9

Member



**@oguzkaganozt** Could you make modification to the documentation accordingly as well? I think the path for run scripts and build scripts must be changed on [this page](#).



**oguzkaganozt** mentioned this pull request on May 17

**fix: update docker installation**

Closed

autowarefoundation/autoware-documentation#550

4 tasks



**youtalk** commented on May 20

Member

I think the renaming refactoring and multi-stage build PRs should be done separately. If we do the renaming first, the diff would be smaller.



**oguzkaganozt** force-pushed the

4538-provide-modular-images-for-openadkit-planning-simulator-visualizer branch from **9f002d5** to **6199c9c** 6 months ago [Compare](#)



**oguzkaganozt** commented on May 22

Contributor

Author

**@oguzkaganozt** Could you make modification to the documentation accordingly as well? I think the path for run scripts and build scripts must be changed on [this page](#).

**@mitsudome-r** we don't need to update any documentation for this PR anymore, as right now it is only adding `openadkit` directory which only contains modular images.



**oguzkaganozt** force-pushed the

4538-provide-modular-images-for-openadkit-planning-simulator-visualizer branch from **d998572** to **69b7859** 6 months ago [Compare](#)



**oguzkaganozt** commented on May 22

Contributor

Author

I think the renaming refactoring and multi-stage build PRs should be done separately. If we do the renaming first, the diff would be smaller.

I know the changes look like a lot, but as I said this work is tightly coupled and includes the all work that previously demonstrated at the last CES. Creating separate PRs would be ideal but the time timeline is tight for these features to make users to replicate the last demo.



**oguzkaganozt** requested review from **youtalk** and **TakaHoribe** 6 months ago



**oguzkaganozt** force-pushed the `4538-provide-modular-images-for-openadkit-planning-simulator-visualizer` branch from **363229f** to **cbc9263** 6 months ago [Compare](#)



**mitsudome-r** reviewed on May 23

[View reviewed changes](#)

`.github/actions/docker-build-and-push-openadkit/action.yaml`

Outdated

[Show resolved](#)

`.github/workflows/docker-build-and-push-main.yaml`

[Show resolved](#)

`ansible/playbooks/openadkit.yaml`

[Show resolved](#)



**youtalk** reviewed on May 24

[View reviewed changes](#)

**youtalk** left a comment

Member

I tried to review it, but the diff is too large to write review comments easily. Although it is divided into multiple images, it looks very wasteful because the same `vcs import` and `rosdep install` are repeated in various Dockerfiles. Also, the Dockerfiles other than the `simulator` are almost the same in content.

`.github/workflows/docker-build-and-push-main-self-hosted.yaml`

Outdated

[Show resolved](#)

`.github/workflows/docker-build-and-push-main.yaml`

Outdated

[Show resolved](#)



mitsudome-r reviewed

View reviewed changes

on May 24

.github/actions/docker-build-and-push/action.yaml

Outdated

Show resolved

.github/actions/docker-build-and-push/action.yaml

Outdated

Show resolved

.github/actions/docker-build-and-push/action.yaml

Show resolved

docker/docker-bake.hcl

Show resolved

.github/workflows/docker-build-and-push-main-self-hosted.yml

Outdated

Show resolved

3 hidden conversations

[Load more...](#)

docker/build.sh

Outdated

Show resolved

docker/openadkit/etc/ros\_entrypoint.sh

Outdated

Show resolved

docker/openadkit/etc/ros\_entrypoint.sh

Show resolved

docker/openadkit/modules/planning-control/Dockerfile

Outdated

Show resolved

docker/run.sh

Outdated

Show resolved



oguzkaganozt commented

on May 24



Contributor

Author

I tried to review it, but the diff is too large to write review comments easily. Although it is divided into multiple images, it looks very wasteful because the same `vcs import` and `rosdep install` are repeated in various Dockerfiles. Also, the Dockerfiles other than the `simulator` are almost the same in content.

**@youtalk** at this stage of development my main focus was to just introduce these 3 different modules with demonstration of planning scenario. You're right that there are not much of diff between these dockerfiles but in the near future after defining the `perception-localization` container there will be.

Refining of each module's dockerfiles will be done on top of that, also we can leverage `src-imported` layer in the next PR of modular images. But at the time being intention was to upstream planning-control, simulator and visualizer containers and enable users to run planning scenarios with modular container setting with the help of [this docker-compose file](#).

  **oguzkaganozt** requested review from **mitsudome-r** and **youtalk** 6 months ago



**oguzkaganozt** commented  
on May 24

Contributor

Author

Removed the upload artifacts section from the workflow because of the disk space after resolving the issue we can re-enable them. [@youtalk](#) [@mitsudome-r](#)



**youtalk** commented on May 24

Member

[#4771](#) reduces the image size. Please merge the latest main branch and check the CI again.



**youtalk** commented on May 25

Member

Removed the upload artifacts section from the workflow because of the disk space after resolving the issue we can re-enable them. [@youtalk](#) [@mitsudome-r](#)

[@oguzkaganozt](#) You were saying the opposite [#4738 \(comment\)](#). So I think we can't remove the `Upload Artifact`.

Uploading of images is necessary because you can test out the produced images without pushing them into the registry.



**oguzkaganozt** commented  
on May 26

Contributor

Author

Removed the upload artifacts section from the workflow because of the disk space after resolving the issue we can re-enable them.

[@youtalk](#) [@mitsudome-r](#)

[@oguzkaganozt](#) You were saying the opposite [#4738 \(comment\)](#). So I think we can't remove the Upload Artifact .

Uploading of images is necessary because you can test out the produced images without pushing them into the registry.

[@youtalk](#) Since it's stepping on our feet with various features I think we can re-enable them after we solve the disk space issue for now. I just don't want to slow down our development process for now, but eventually, we will need them soon.

👍 2



[oguzkaganozt](#) [force-pushed](#) the

[4538-provide-modular-images-for-openadkit-planning-simulator-visualizer](#)

branch from **6c10f71** to **582a2c9** 6 months ago [Compare](#)

19 hidden items

[Load more...](#)





[pre-commit-ci](#) [\(bot\)](#) and others added 10 commits


[6 months ago](#)

- 🔗 style(pre-commit): autofix 43824c5
- 🔗 . ... cf43ae9
- 🔗 update yamllint settings ... 1705246
- 🔗 Remove data\_path as it is included in the image again ... c32b00f
- 🔗 download artifacts inside the dockerfile again ... 29d1a47
- 🔗 . ... 83dad77
- 🔗 fix playbook naming ... 6293ea2
- 🔗 add caching ... 9ddc399
- 🔗 remove base from build.sh ... e6d49b5





 remove extra dash '-' from docker image tagging  d0a6d20




 **oguzkaganozt** force-pushed the `4538-provide-modular-images-for-openadkit-planning-simulator-visualizer` branch from **f4652bb** to **d0a6d20** 6 months ago [Compare](#)



 Merge branch 'main' into `4538-provide-modular-images-for-openadkit-pl...`  573fbde



 **oguzkaganozt** marked this pull request as ready for review 6 months ago



**oguzkaganozt** commented on May 28

Contributor

Author

This PR includes too many changes and will take a lot of time to merge, so I have split out a subset PR for only renaming. [#4785](#)

Thanks [@youtalk](#) i really didn't have the time to do this as i am busy with demo prep. Now that I have merged `main` into this PR and the diff should be more human-readable :) [@mitsudome-r](#)



**oguzkaganozt** and others added 3 commits [6 months ago](#)




 add clone repositories into build.sh  95f1bb5



  style(pre-commit): autofix  0b28c0e



 .  ef2683a



**youtalk** reviewed on May 28

[View reviewed changes](#)

docker/Dockerfile

...	...	@@ -72,11 +72,9 @@ ENV CXX="/usr/li
72	72	# cspell: ignore libcu libnv
73	73	# Set up development environment
74	74	RUN --mount=type=ssh \
75	-	./setup-dev-env.sh -y --module al
	75	+ ./setup-dev-env.sh -y --module al



**youtalk** on May 28

Member

I think the change of [#4771](#) was reverted. Do you have some reason?



youtalk on May 31

Member

We need to decrease the image size to re-enable the `Upload Artifacts` step.



youtalk mentioned this pull request on May 29

**feat(ci): disable `Upload Artifacts` on `docker-build-and-push` action**

Merged

#4789

4 tasks



youtalk commented on May 29 • edited

Member

I have split out a subset PR for only disabling `Upload Artifacts`.

[#4789](#)



oguzkaganozt and others added 2 commits [6 months ago](#)



Merge branch 'main' into `deb0d40`  
`4538-provide-modular-images-for-openadkit-pl...`  
...



`style(pre-commit): autofix` `04477cf`



youtalk reviewed on May 31

[View reviewed changes](#)

`.github/actions/docker-build-and-push-openadkit/action.yaml`

131	+	<code>echo 'No artifacts uploaded</code>
132	+	<code>shell: bash</code>
133	+	
134	+	<code># TODO:Enable after solving the</code>



youtalk on May 31

Member

We are using the version control tool. We can revert the commit. That's why removing them is simple.

`.github/actions/docker-build-and-push/action.yaml`

106	119	<code>set:  </code>
107	120	<code>{{ inputs.build-args }}</code>

108	121		
109		-	- name: Build <u>only</u>
	122	+	- name: Build <u>Only</u>



**youtalk** on May 31

Member

Please focus on the minimum change. If you want to refactor please make another PR.

Suggested change

122	-	- name: Build <u>Only</u>
122	+	- name: Build <u>only</u>

.yamllint.yaml

...	...	@@ -10,6 +10,7 @@ rules:
10	10	comments:
11	11	level: error
12	12	min-spaces-from-content: 1 # To
	13	+ comments-indentation: disable # D



**youtalk** on May 31

Member

Suggested change

```
13 - comments-indentation: disable
    # Disable as it's sometimes
    # fails to detect vscode auto-
    # commenting
    # https://github.com/adrienverge/
    # yamllint/issues/384
```

docker/Dockerfile

...	...	@@ -72,11 +72,9 @@ ENV CXX="/usr/li
72	72	# cspell: ignore libcu libnv
73	73	# Set up development environment
74	74	RUN --mount=type=ssh \
75		- ./setup-dev-env.sh -y --module al
	75	+ ./setup-dev-env.sh -y --module al



**youtalk** on May 31

Member

We need to decrease the image size to re-enable the **Upload Artifacts** step.

docker/Dockerfile

Comment on lines -78 to -79

78		- && find / -name 'libcu*.a' -delete
79		- && find / -name 'libnv*.a' -delete



**youtalk** on May 31

Member

Why did you remove them?

docker/build.sh

Comment on lines +61 to -64

	61	+	targets=()
61	62		if [ "\$option_devel_only" = "true" ]
62	63		targets=("devel")
63		-	else
64		-	targets=()



youtalk on May 31

Member

Please focus on the minimum change. If you want to refactor please make another PR.

docker/etc/ros\_entrypoint.sh

...	...		@@ -22,7 +22,7 @@ else
22	22		# Add sudo privileges to the user
23	23		echo "\$USER_NAME ALL=(ALL) NOPASSWD:ALL"
24	24		
25		-	# Source <u>R0S2</u>
	25	+	# Source <u>R0S 2</u>



youtalk on May 31

Member

Please focus on the minimum change. If you want to refactor please make another PR.

Suggested change

25	-	# Source <u>R0S 2</u>
25	+	# Source <u>R0S2</u>



youtalk commented on May 31

Member

@oguzkaganozt I understand that you need to use this for a demonstration, but as I've pointed out several times, this PR includes too many changes that should be separated. Therefore, the PR can never be made merge-ready.



oguzkaganozt mentioned this pull request on Jun 10

feat(docker): fix CUDA compile on devel image and improve run.sh

Merged

#4849

4 tasks



**xmfcx** added the **tag:run-health-check** label on Jul 12



**oguzkaganozt** closed this on Jul 29



**oguzkaganozt** deleted the

4538-provide-modular-images-for-openadkit-planning...

branch 2 months ago



**oguzkaganozt** restored the

4538-provide-modular-images-for-openadkit-planning...

branch 2 months ago



**oguzkaganozt** deleted the

4538-provide-modular-images-for-openadkit-planning...

branch 2 months ago