CRaC Project

Welcome to the CRaC Project!

The CRaC (Coordinated Restore at Checkpoint) Project researches coordination of Java programs with mechanisms to checkpoint (make an image of, snapshot) a Java instance while it is executing. Restoring from the image could be a solution to some of the problems with the start-up and warm-up times. The primary aim of the Project is to develop a new standard mechanism-agnostic API to notify Java programs about the checkpoint and restore events. Other research activities will include, but will not be limited to, integration with existing checkpoint/restore mechanisms and development of new ones, changes to JVM and JDK to make images smaller and ensure they are correct.

Resources

- CRaC Project
- Repository
- Mailing list: crac-dev (archives)
- JBS issues
- Early-Access Builds
- Latest Javadoc

Project structure

- `master` branch - synced automatically with the master branch of openjdk/jdk
- `crac` - java.crac Java API and proof-of-concept implementation

Contributing

Testing

Download the EA build and give it a try! There is a work-in-progress HOWTO.

Making changes to the code

Minor changes (build failures fixes, typos, ...) can be pushed directly. Pull Request is a recommended way since it will check the build succeeds.

For new features and major changes, use Skara:

- create a JBS issue in JDK project with Affected and Fix Version equal to repo-crac (per convention please start the Summary with "[CRaC] ")
- make a Pull Request following suggestions from the Skara bot (Change must not contain extraneous whitespace, Commit message must refer to an issue, Change must be properly reviewed)
- wait for the peer-review (all members of the project can approve the PR)

Recent space activity

Volker Simonis
Main updated Jul 06, 2022 view change

Anton Kozlov
Main updated Sep 29, 2021 view change

Iris Clark
Main updated Sep 13, 2021 view change

Space contributors

- Volker Simonis (492 days ago)
- Anton Kozlov (772 days ago)
- Iris Clark (788 days ago)