

# How to survive an artifact evaluation with HotCRP

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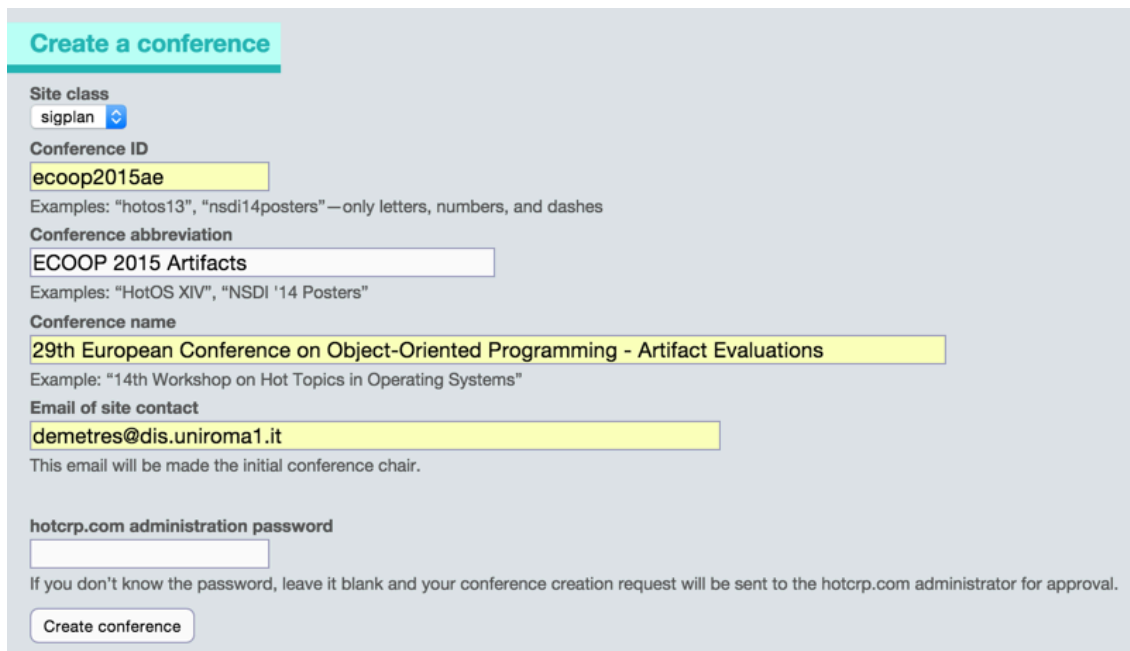
[Last updated on June 11, 2015]

These notes describe how Matthew Flatt and I used the `HotCRP.com` service to support the evaluation of artifacts submitted to ECOOP 2015. It may help future artifact evaluation committee (AEC) chairs repeat the process (and avoid the same mistakes :-). For comprehensive information on artifact evaluations refer to <http://www.artifact-eval.org>.

HotCRP.com is a commercial service. Check with the organizers if the budget allows covering HotCRP costs for running the artifact evaluation process. Eddie Kohler <kohler@seas.harvard.edu> was our HotCRP.com contact. He kindly provided support for all non-conventional uses of HotCRP required by our workflow.

## Registering a HotCRP.com account

- I filled the form at <https://hotcrp.com> using SIGPLAN as conference class:



The screenshot shows the 'Create a conference' form on the HotCRP website. The form fields are as follows:

- Site class:** A dropdown menu with 'sigplan' selected.
- Conference ID:** A text box containing 'ecoop2015ae'. Below it, examples are given: "hotos13", "nsdi14posters" — only letters, numbers, and dashes.
- Conference abbreviation:** A text box containing 'ECOOP 2015 Artifacts'. Below it, examples are given: "HotOS XIV", "NSDI '14 Posters".
- Conference name:** A text box containing '29th European Conference on Object-Oriented Programming - Artifact Evaluations'. Below it, an example is given: "14th Workshop on Hot Topics in Operating Systems".
- Email of site contact:** A text box containing 'demetres@dis.uniroma1.it'. Below it, a note says: 'This email will be made the initial conference chair.'
- hotcrp.com administration password:** An empty text box. Below it, a note says: 'If you don't know the password, leave it blank and your conference creation request will be sent to the hotcrp.com administrator for approval.'

At the bottom of the form is a button labeled 'Create conference'.

- In about 4 hours, I received a confirmation email:

```
From: ECOOP 2015 Artifacts HotCRP <noreply@ecoop2015aec.hotcrp.com>
To: demetres@dis.uniroma1.it
Subject: [ECOOP 2015 Artifacts] Account information
```

Greetings,

An account has been created for you at the 29th European Conference on Object-Oriented Programming - Artifact Evaluations (ECOOP 2015 Artifacts) submissions site.

Site: <https://ecoop2015aec.hotcrp.com/>  
Email: [demetres@dis.uniroma1.it](mailto:demetres@dis.uniroma1.it)

Password: \*\*\*\*\*

Use the link below to sign in.

[https://ecoop2015aec.hotcrp.com/?email=demetres%40dis.uniroma1.it&password=\\*\\*\\*\\*\\*](https://ecoop2015aec.hotcrp.com/?email=demetres%40dis.uniroma1.it&password=*****)

If you already have an account under a different email address, you may merge this new account into that one. Go to your profile page and select "Merge with another account".

Contact [demetres@dis.uniroma1.it](mailto:demetres@dis.uniroma1.it) with any questions or concerns.

- ECOOP 2015 Artifacts Submissions

## Creating a mailing list of the co-chairs

I created a dedicated mailing list [ecoop15aec@dis.uniroma1.it](mailto:ecoop15aec@dis.uniroma1.it) in Google Groups including the email addresses of AEC co-chairs (Matthew and myself).

## Setting up conference information settings

- I opened the Administration->Settings panel and completed the basic info:

**ECOOP 2015 Artifacts** **Settings** demetres@dis.uniroma1.it [Profile](#)

Save changes Cancel

**Conference information**

[Accounts](#)  
[Messages](#)  
[Submissions](#)  
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[Reviews](#)  
[Review form](#)  
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[Decisions](#)

Conference abbreviation  
ECOOP 2015 Artifacts  
Examples: "HotOS XIV", "NSDI '14"

Conference name  
29th European Conference on Object-Oriented Programming - Artifact Evaluations  
Example: "14th Workshop on Hot Topics in Operating Systems"

Name of site contact  
Camil Demetrescu and Matthew Flatt

Email of site contact  
ecoop15aec@dis.uniroma1.it  
The site contact is the contact point for users if something goes wrong. It defaults to the chair.

Reply-To field for email  
ecoop15aec@dis.uniroma1.it

Default Cc for reviewer email  
ecoop15aec@dis.uniroma1.it  
This applies to email sent to reviewers and email sent using the [mail tool](#). It doesn't apply to account-related email or email sent to submitters.

Save changes Cancel

## Adding the co-chair

- I opened Administration->Users, clicked "Create account", and registered my co-chair Matthew Flatt as PC chair + Sysadmin:

ECOOP 2015 Artifacts		Create Account
Contact information	Email	<input type="text" value="mflatt@cs.utah.edu"/>
	First name	<input type="text" value="Matthew"/>
	Last name	<input type="text" value="Flatt"/>
	Affiliation	<input type="text" value="University of Utah"/>
	<a href="#">► Bulk account creation</a>	
Email notification	Send mail on: <input checked="" type="checkbox"/> Reviews and comments for authored or reviewed papers <input type="checkbox"/> Reviews and comments for <i>any</i> paper <input type="checkbox"/> Updates to final versions	
Roles	<input checked="" type="radio"/> PC chair <input type="radio"/> PC member <input type="radio"/> Not on the PC <input checked="" type="checkbox"/> Sysadmin <small>Sysadmins and PC chairs have full control over all site operations. chair).</small>	
Collaborators and other affiliations	<b>Program committee information</b> <small>Please list potential conflicts of interest. Please consult Chapter 4 in <a href="http://www.aito.org/resou">http://www.aito.org/resou</a> information when assigning reviews. For example: "Ping Yen Zhang (INRIA)" or, for a wh</small> <input type="text" value="Utah"/>	
Tags	<input type="text"/> <small>Example: "heavy". Separate tags by spaces; the "pc" tag is set automatically.  Tip: Use <a href="#">tag colors</a> to highlight subgroups in review lists.</small>	
<input type="button" value="Create account"/>		

## Preparing the site for submission

HotCRP is designed for papers, not artifacts. This wasn't a problem. We asked authors to:

1. Submit the preliminary version of the accepted research paper (this is crucial in the artifact evaluation process in order to check if artifacts live up to the expectations set in the papers). The standard submission form already contains fields for this. It would have been useful to customize the description text of built-in fields to better clarify, something HotCRP did not allow us to do at the time. For instance, I would have liked to clarify that the "Abstract" is not the paper's abstract, but rather the artifact's abstract.
2. Submit a link to a compressed archive file containing the artifact and the MD5 sum of the file to allow checking for file integrity. To do so, I just added two custom fields, to appear at the top of the submission page:
  - a. **Artifact download link:** "Please provide an HTTP or FTP link to a single compressed archive file (gz, zip) containing everything needed for supporting a full evaluation of the artifact. **<b>Artifacts will be downloaded by the AEC following the link provided here</b>**. A confirmation email will be sent to the contact author(s) when the artifact has been successfully downloaded."
  - b. **MD5 sum of the artifact:** "Please insert the MD5 sum of the submitted compressed archive (a 16-bytes hex code, e.g., 595f44fec1e92a71d3e9e77456ba80d1). The AEC will use this value to **<b>check the integrity of the file downloaded from the link provided above</b>**."

**Submission options**  
[Reviews](#)  
[Review form](#)  
[Tags & tracks](#)  
[Decisions](#)

Option name  
Artifact download link

Description  
Please provide an HTTP or FTP link to a single compressed archive file (gz, zip) containing everything needed for supporting a full evaluation of the artifact. <b>Artifacts</b> will be downloaded by the AEC following the link provided here</b>. A confirmation email will be sent to the contact author(s) when the artifact has been successfully downloaded.

Type: Text    Visibility: Visible to PC and reviewers    Form order: 1st    Display: Near submission

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Option name  
MD5 sum of the artifact

Description  
Please insert the MD5 sum of the submitted compressed archive (a 16-bytes hex code, e.g., 595f44fec1e92a71d3e9e77456ba80d1). The AEC will use this value to <b>check the integrity of the file downloaded from the link provided above</b>.

Type: Text    Visibility: Visible to PC and reviewers    Form order: 2nd    Display: Near submission

## Opening/closing submissions

The site was opened for submissions in the settings as follows:

[Conference information](#)  
[Accounts](#)  
[Messages](#)  
**Submissions**  
[Submission options](#)  
[Reviews](#)  
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[Decisions](#)

Save changes    Cancel

☒ **Open site for submissions**

**Blind submission:** Are author names hidden from reviewers?

☐ Yes—submissions are anonymous

☒ No—author names are visible to reviewers

☐ Blind until review—reviewers can see author names after submitting a review

☐ Depends—authors decide whether to expose their names

**Registration deadline**    N/A

Date examples: "now", "10 Dec 2006 11:59:59pm PST", "2014-10-31 00:00 UTC-1100" ([more examples](#))

**Submission deadline**    19 Mar 2015 6:59:59am EDT

**Grace period**    none

Example: "15 min"

☒ Collect authors' PC conflicts

☒ Collect PC conflict types ("Advisor/student," "Recent collaborator," etc.)

☐ Collect authors' other collaborators as text

☐ **Automated format checker**

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☒ **Authors can update submissions until the deadline**

☐ Authors must freeze the final version of each submission

"Authors can update submissions until the deadline" is usually the best choice. Freezing submissions can be useful when there is no

☒ PC can see *all registered papers* until submission deadline

Check this box if you want to collect review preferences *before* most papers are submitted. After the submission deadline, PC memt

After the submission deadline, I closed the submissions by unchecking the "Open site for submissions" flag.

## Bidding

[...]

## Assigning artifacts to AEC members

[...]

## Starting phase 1 (kick-the-tires)

- We prepared a review form (Settings->Review form) containing just the following 3 fields:
  - **Initial inspection comments (AEC only):** "Describe in a nutshell if the artifact initial inspection got thumbs up or down + anything you would like to be kept hidden from the authors"
  - **Kicking-the-tires outcome:** "Describe briefly what experiences you had with the artifact upon a brief initial inspection: I could make it work out of the box; there were minor issues, or there were show-stopping issues? If there are any questions for the authors, please add them here. Please ask the questions in such a manner that the authors can reproduce the situation that caused trouble for you. Be specific and right to the point."
  - **Computing platform(s) used for assessing the artifact:** "Provide a detailed description of the computing platform(s) you used to run the artifact, including hardware, operating system, and any relevant configuration details (e.g., VM version and settings), etc."

Conference information  
Accounts  
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Save changes Cancel

Field name  
**Initial inspection comments (AEC only)**

Form position Visibility  
1st Reviewers only

Description  
Describe in a nutshell if the artifact initial inspection got thumbs up or down + anything you would like to be kept hidden from the authors

Load field from library... Remove field from form

---

Field name  
**Kicking-the-tires outcome**

Form position Visibility  
2nd Authors & reviewers

Description  
Describe briefly what experiences you had with the artifact upon a brief initial inspection: I could make it work out of the box; there were minor issues, or there were show-stopping issues? If there are any questions for the authors, please add them here. Please ask the questions in such a manner that the authors can reproduce the situation that caused trouble for you. Be specific and right to the point.

Load field from library... Remove field from form

---

Field name  
**Computing platform(s) used for assessing the artifact**

Form position Visibility  
3rd Authors & reviewers

Description  
Provide a detailed description of the computing platform(s) you used to run the artifact, including hardware, operating system, and any relevant configuration details (e.g., VM version and settings), etc.

Load field from library... Remove field from form

- Then we opened the site for reviewing in Settings->Reviews:

Conference information  
Accounts  
Messages  
Submissions  
Submission options  
**Reviews**  
Review form  
Tags & tracks

Save changes Cancel

☒ Open site for reviewing

☒ Allow comments even if reviewing is closed

☒ PC members can review any submitted paper

Review anonymity: Are reviewer names hidden from authors?

☒ Yes—reviews are anonymous

☐ No—reviewer names are visible to authors

☐ Depends—reviewers decide whether to expose their names

☒ Notify PC chairs of newly submitted reviews by email

- We also created two rounds of reviewing in Settings->Reviews:
  - a. "KickTheTires": for phase 1
  - b. "Evaluation": for phase 2
 and set "KickTheTires" as current round:

- We made sure reviews and decisions are invisible to authors (Settings->Decisions):

## Opening/closing the site for author responses

- To open the site for author responses, we:
  1. set "Can authors see reviews and author-visible comments for their papers?" to Yes
  2. checked the "Collect authors' responses to the reviews" flag
  3. updated the instructions to: "The authors' response should address reviewer concerns, correct misunderstandings, and generally help the reviewers with problems that they encountered running the artifact.":

- At the end of the response period, we set flags back to their original status:

This is **\*\*\*very\*\*\*** important, otherwise authors are notified of reviews submitted in phase 2!

## Starting phase 2 (reviewing)

This was the most critical part of using HotCRP, as it required manual intervention by Eddie Kohler <kohler@seas.harvard.edu>. He "unsubmitted" all reviews (by performing a query on the HotCRP DB), essentially starting over a new reviewing process on the same set of artifacts. We wanted to make sure a reviewer cannot see the reviews written by other AEC members until he/she submits his/her own.

Before starting phase 2, we extended the review form with additional fields:

[...]

## Appointing discussion leaders (Apr 16)

Leaders were manually assigned taking into account different criteria (reviewer's confidence, quality of its review, previous reviewing load, etc.). After announcing assignments by email using HotCRP, I manually highlighted them using the "Discussion lead" attribute of each artifact:

I guess I could have appointed leaders using the "Review assignment" feature of HotCRP, too. As we did the assignment manually, it was probably faster this way.



## Setting up decision types

The only predefined decision types in HotCRP were "Accept" and "Reject". To support a more gradual approach, I introduced the "Proposed accept" and "Proposed reject" types, which were used to mark the decisions proposed by discussion leaders as a result of the reviewers' discussions. "Proposed accept" and "Proposed reject" were turned into "Accept" and "Reject" just before proceeding to author notification, allowing some time for everyone to speak up if he/she had any objections.

Conference information  
Accounts  
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Decisions

Save changes Cancel

Can authors see reviews and author-visible comments for their papers?

☒ No  
☐ Yes  
☐ Yes, for papers with any of these tags:

☐ Collect authors' responses to the reviews

Who can see paper decisions (accept/reject)?

☐ Only administrators  
☒ Reviewers and non-conflicted PC members  
☐ Reviewers and all PC members  
☐ Authors, reviewers, and all PC members (and reviewers can see accepted papers' au

Current decision types		
Proposed accept		Accept class
Accept		Accept class
Reject		Reject class
Proposed reject		Reject class

New decision type

Accept class

Examples: "Accepted as short paper", "Early reject"

## Closing the site for reviewing

At the end of the reviewing process, the site must be closed for reviewing (or authors won't be able submit the final version of their artifacts!). To do so, I unchecked the "Open site for reviewing" flag.

ECOOP 2015 Artifacts Settings

Changes saved.

Save changes Cancel

☐ Open site for reviewing  
☒ Allow comments even if reviewing is closed  
☒ PC members can review any submitted paper

Review anonymity: Are reviewer names hidden from authors?

☒ Yes—reviews are anonymous  
☐ No—reviewer names are visible to authors  
☐ Depends—reviewers decide whether to expose their names

☒ Notify PC chairs of newly submitted reviews by email



## Notifying authors and making reviews visible to them

[...]

## Collecting the final versions of the artifacts

- First, I revised the **submission form** by changing the descriptions of the custom fields and added an additional fields to allow authors to submit the LaTeX sources of the artifact description document:
  - **Artifact download link:** "Please provide an HTTP or FTP link to a single compressed archive file (gz, zip) containing the final artifact version that will be published on the DROPS server. <b>Artifacts will be downloaded following the link provided here</b>."
  - **MD5 sum of the artifact:** "Please insert the MD5 sum of the submitted compressed archive (a 16-bytes hex code, e.g., 595f44fec1e92a71d3e9e77456ba80d1). This value will be used to <b>check the integrity of the file downloaded from the link provided above</b>."
  - **LaTeX source files of the artifact description document:** "A single compressed archive file (gz, zip) containing everything needed to generate the artifact description document PDF."

**Submission options**

[Reviews](#)  
[Review form](#)  
[Tags & tracks](#)  
[Decisions](#)

**Option name**  
Artifact download link

**Description**  
Please provide an HTTP or FTP link to a single compressed archive file (gz, zip) containing the final artifact version that will be published on the DROPS server. <b>Artifacts will be downloaded following the link provided here</b>.

**Type** Text **Visibility** Visible to PC and reviewers **Form order** 1st **Display** Near submission

**Option name**  
MD5 sum of the artifact

**Description**  
Please insert the MD5 sum of the submitted compressed archive (a 16-bytes hex code, e.g., 595f44fec1e92a71d3e9e77456ba80d1). This value will be used to <b>check the integrity of the file downloaded from the link provided above</b>.

**Type** Text **Visibility** Visible to PC and reviewers **Form order** 2nd **Display** Near submission

**New option name**  
LaTeX source files of the artifact description document

**Description**  
A single compressed archive file (gz, zip) containing everything needed to generate the artifact description document PDF

**Type** Attachments **Visibility** Visible to PC and reviewers **Form order** 3rd **Display** Near submission

- Then, I set the deadline and opened the site for collecting the final versions in the "Decisions" settings<sup>1</sup>:

<sup>1</sup> Note that, as the deadline was the end of May 3 (Anywhere on Earth), I entered "3 May 2015 23:59:59 UTC-12" in the Deadline field, which was automatically changed to "4 May 2015 7:59:59am EDT" when I saved changes.

### Final versions

☒ **Collect final versions of accepted papers:**

Deadline

Hard deadline

Grace period

▼ Instructions (HTML allowed)

Congratulations! The artifact has been accepted. Update the artifact's final version here.  
%deadline% You may also edit artifact contacts, allowing others to view reviews and make changes.

- Finally, we sent authors of accepted artifacts instructions for preparing the final version of their artifacts.