



# C O N F I O U S

## C O N F E R E N C E M A N A G E M E N T S Y S T E M

<http://confious.ics.forth.gr>

Confious is a state-of-the-art conference management system that combines modern design, sophisticated algorithms and a powerful engine to efficiently support the submission and reviewing process of an academic conference or workshop and to help Program Committee Chairs and Members to effortlessly carry out complicated tasks.

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Most scientific communities have recently established policies and mechanisms to put into practice electronic conference management, mainly by exploiting the Internet as the communication and cooperation infrastructure. Their foremost objective is to minimize the organizational efforts and reduce the communication costs but to maintain high quality reviewing and to ensure the fairness of the evaluation. With the intention of supporting scientific committees to efficiently manage the submission and reviewing process of their academic conferences or workshops, we have designed and implemented Confious, a state-of-the-art conference management system. Confious provides mechanisms for efficient management of scientific data, intelligent identification and analysis of constraints during the reviewing process, enhanced monitoring and reporting of critical actions and better communication among users.

### 15 Simple Reasons to Get Better With Your Conference

- 1 No Need to Install Any Software
- 2 Accept Submissions Right Away
- 3 Let Reviewers Bid for Specific Papers
- 4 Identify Potential Conflicts of Interest
- 5 Assign Automatically Papers to Reviewers
- 6 Build Your Own Review Form
- 7 Maintain High Quality Reviewing
- 8 Ensure the Fairness of the Evaluation
- 9 Hold a Virtual PC Meeting
- 10 Make Correct Decisions Efficiently
- 11 Monitor All Critical Actions
- 12 Reduce the Communication Costs
- 13 Minimize the Organizational Efforts
- 14 Count on our Fast and Reliable Servers
- 15 Get 24/7 Technical Support via Email

### Main Features

#### ▣ Instant Conference Setup

Confious is provided as a web service, which means that it is able to support multiple conferences in parallel, transparent between each other. Moreover, there is no need for installations on the conference organizer side. Quite the opposite, a conference is hosted on server side, and it may accept submissions immediately after customization.

#### ▣ 100% Online, Role Based Collaboration

Confious distinguishes between four types of users:

- Program Committee Chair, which is in charge of the setup and management of the submission and reviewing process
- Meta-Reviewer, which supervises the reviewing process and makes recommendations for final decisions
- Reviewer, which evaluates the overall quality of a paper
- Contact Person, which submits documents of recent research

#### ❑ Intelligent Management of Conflicts of Interest

A conflict of interest is defined when a reviewer does not feel comfortable enough to review a paper because there is a kind of relationship with one or more of this paper's authors. Confious provides an easy way to effectively handle all conflicts of interest and therefore to avert certain assignments. Furthermore, Confious provides ways to intelligently identify potential conflicts of interest that arise when a reviewer and an author are members of the same institute or have co-authored some papers in the past.

#### ❑ Automatic Assignment of Papers to Reviewers

Program Committee Chair has the option to assign papers either automatically or manually. The most advantageous process includes an automatic assignment by the system followed by manual adjustment of assignments by the chair. The automatic assignment algorithm takes into consideration the following constraints

- Matches between paper topics and reviewer interests
- Bids of reviewers to specific papers
- Conflicts of interest between reviewers and papers
- Workload balance to ensure that papers are normally distributed to reviewers

#### ❑ Dynamic Construction of the Review Form

The Review Form is the online form that needs to be completed by reviewers during the reviewing process. Instead of using static review forms that have the same format, Confious provides to PC chair the option to construct or customize a review form. This is one of the most advantageous features of Confious since it is not supported by almost any other known conference management system and it enables high quality reviewing.

#### ❑ Hierarchical Reviewing Support

Distinction between reviewers and meta-reviewers enables a hierarchical reviewing process. This process ensures high quality reviewing by providing a mean of better control over the submitted reviews. In this two-tier reviewing model each paper is reviewed by a number of reviewers, while an additional meta-reviewer supervises the process. In cases where a reviewer's confidence is not very high, meta-reviewer may submit an additional review. On a more regular basis meta-reviewer provides a summary of the other reviewers' reviews.

#### ❑ Decision Making Based on Paper Classification

One of the most challenging, as well as time-consuming tasks that the PC chair is in charge of is to decide on the sets of papers that are going to be accepted or rejected. Actually, it is hard to reduce the results of several reviews into a single meaningful score. Moreover, the decisions are made even more efficiently if papers with comparable evaluations are grouped together and when conflicted evaluations are identified as early as possible. Confious classifies the papers in five (5) meaningful classes and then order the papers of each class according to the average score of their several individual overall evaluations. Due to the classification, a much more meaningful ordering occurs that evidently facilitates the decision making.

#### ❑ Workflow Management through Phases

The reviewing and submission process is divided into several phases that enable a more efficient management and monitoring of the tasks that are enabled at each moment.

#### ❑ Enhanced Monitoring, Reporting and Communication Service

Confious provides monitoring and reporting service that spans through the most essential tasks of the system. Furthermore, straightforward customization of emails enables better communication between PC chairs, reviewers and authors.

#### ❑ Transaction-based Operations

Data inconsistencies are very regular to web information systems as they may arise due to network instabilities, power cut-offs or other reasons and may result in serious conflicts during the reviewing process. Database operations in Confious are based on transaction to ensure that data remains always consistent.

#### ❑ Task-Oriented Design

Confious is based on a goal-oriented design that facilitates the management and administration of a conference, enhances productivity and advances creativity. Special concern is given to bring tasks to an end effortlessly, to provide quick responses to user requests and to permit access even from low speed connections.



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