The J.UCS Consortium Document

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Abstract: J.UCS – The Journal for Universal Computer Science (meaning: any paper related to some aspect of Computer Sciences fits into the scope of J.UCS) is unique in a variety of ways. This document is a revised version of earlier ones and specifies the most important aspects of J.UCS that are the basis of the consortium of research institutes responsible for J.UCS.

1. What makes J.UCS unique?

- (a) J.UCS was one of the earliest electronic journals (the test issue appeared in 1994, the first full volume in 1995)
- (b) It has appeared since then with at least 12 issues per year, and it is published also in printed form after the end of a year (the printed version has to be purchased at cost)
- (c) It is truly open access: both for publishing and reading the contributions on the Internet (or downloading contributions) there is no charge
- (d) Every paper is reviewed by at least 2, usually 3 or 4, referees. Only papers of high quality are accepted.
- (e) J.UCS is indexed by ISI Web of Science, Scopus and DBLP
- (f) J.UCS has an impact factor of 0.762 (2012), a five year citation factor close to 0.6
- (g) It has a readership exceeding 80.00 different readers and has over 600.000 down-loads a year. At, say, 100 papers a year this means that each paper is downloaded 6.000 time on the average, and downloaded only since title an abstract sounded appealing to the user. Hence the impact of a publication in J.UCS is significant.
- (h) Papers in J.UCS are searchable by author, title, keywords and in full-text, all this with a potential constraint on the period of interest.
- (i) J.UCS was the first electronic journal to offer the possibility of adding comments to any contribution, and the first one to introduce the notion of "links into the future". This basically means that if a paper A refers to a paper B, a pointer in B is created to alert readers that some further developments have taken place. Hence the terminology "links into the future" was introduced. If extended widely, this feature could replace citation indices to a large degree at some stage.

- (j) J.UCS provides and will continue to provide further functionalities. For instance, geographical mash-ups allow to determine from which area of the world papers in a certain field have been accepted during a specifiable interval of years, finding similar papers in other sources, identifying persons in related areas, etc.
- (k) The consortium running J.UCS is not only committed to further technical improvements and new features, but will also continue to support the philosophy expressed in above points, particularly (c) and (d).

2. History and governance of J.UCS

Planning of J.UCS was started by (in alphabetical order) Cris Calude from University of Auckland, Hermann Maurer from Graz University of Technology and Arto Salomaa from the University of Turku in 1993. Those three will be called the founders throughout. J.UCS was implemented (and still runs) on the so-called Hyperwave server in Graz. The founders felt that an electronic journal with a yearly archive version in print and incorporating the points (b) – (f) and (h) – (i), together with a new reviewing system, was possible and timely with the then emerging technologies.

It is important to understand the new reviewing system. The founders decided to invite a large number (more than 200) of high quality professionals to become member of the editorial board of J.UCS. Abstracts of papers submitted would be sent to all members of the editorial board (or all top researchers in a field closely related to the paper submitted) and the first 3 to 4 who would be willing to review would then get the full papers to write a report within 6 weeks. The main arguments for doing it this way, rather than handpicking the reviewers as is often done, were twofold: (i) papers would never be reviewed by persons not interested or knowledgeable in the field or temporarily unavailable, hence hopefully speeding up the refereeing process and (ii) it would make the job of the managing editor-in-chief handling the suspected avalanche of papers easier. It does not fit into this document to describe what measures have been taken to assure that papers are not reviewed by persons known to be friends of the author(s) of a paper, but it is worth mentioning that the expected avalanche of papers did indeed happen. In 2009, for instance, over 170 papers appeared in J.UCS. With an acceptance rate around 30% this meant that over 500 papers requiring a total of some 1.500 reviews had to be handled. Consequently, the editorial board has to continue to increase, hopefully doubling to 700 from the current 320 before too long.

It also means that the initial consortium of the founders underwent some changes. By mid-2011 the three institutes carrying the brunt of the workload were Graz University of Technology, the Austrian Competence Center for Knowledge Management and the Universiti Malaysia Sarawak.

This J.UCS consortium, as it will be called henceforth, has been expanded to 9 institutions at the beginning of 2012 and to 10 with the beginning of 2013 (see below). Each such institution contributes to J.UCS either financially in cash or kind, and is allowed to send one representative as Editor-in-Chief as a member of the board of the JUCS consortium. The founders are also members of this board: it is the board that is responsible for all major decisions.

Day-to-day decisions and matters are taken care of by the Managing Editor-in-Chief. He is member of the board and will be elected by the board for a period of three years (re-election is possible) as Managing Editor-in-Chief. To be member of the board is an honorary job with no pay, except for the rare support of attending a meeting of the board.

It is agreed that the Managing Editor-in-Chief should be chosen from the institution that runs the J.UCS server and houses the editorial assistant. In practical terms this will mean that at least 2012-2014 the Managing Editor in Chief will come from Graz University of Technology and the editorial assistant will also be in Graz.

3. Tasks and financing of J.UCS

The main expenses that are involved in the running of JUCS are:

- (a) Running, maintaining the J.UCS server and carrying out a professional back-up schedule
- (b) Work of the editorial assistant and Managing-Editor-in-Chief: finding additional referees when reviews diverge (which happens surprisingly often) and deciding the category of a paper. Categories are: Research paper, survey paper, short note, paper about features or such of J.UCS and papers about negative results (that e.g. a certain technique that was supposed to lead to a certain result is unsuitable)
- (c) Development of a new submission system: this is currently in its final stage and carried out by one of the new partners joining the consortium; it will also require maintenance and improvements over time
- (d) Production of the printed version. Since the printing of a volume of J.UCS (usually consisting of two or three very thick books) is expensive, the number of paying customers is quite small, yet Austrian laws (the ISSN and ISBN numbers will continue for some time to come from Austria) requires that six volumes are made available to the Austrian National Library, every member of the board is supposed to get one, i.e. of the small print run some 15 or so copies are given away free.
- (e) The Managing Editor-in-Chief will have to collect opinions from board members from time to time, or will try to arrange a meeting of (most) board members at some stage. It will also be up to him and the technical staff of other board members to decide if and when a migration of J.UCS to a new server might be necessary.
- (f) A minimal amount for a board meeting every 2-3 years and to produce a flyer for distribution at meetings is necessary.

Some members of the consortium contribute to J.UCS in cash, some in kind. To make sure that the institutions forming the consortium are not overtaxed, a further expansion of the consortium of up to 12 is considered possible.

4. The role of the Editors-in-Chief

The Managing Editor-in-Chief is the one who runs the "daily operation". The other Editors-in-Chief participate for one of the following reasons: (i) Prestige for the institution they represent;

(ii) The possibility to use data from J.UCS for research; (iii) The right (or to delegate this right) to edit one special issue per year free of charge (for which ordinarily €1.000 has to be paid: this is the only time when submissions are not entirely free. The reason for this is to avoid that J.UCS is overrun by requests for special issues); to uphold the quality of special

issue firm rules are in place, as can be found on the J.UCS server); (iv) The right that papers submitted by them are reviewed only by two and not three reviewers.

Editors-in-Chief are not expected to be deeply involved (unless their work with their assistants is in lieu of cash contributions). They are expected to advertise J.UCS where ever possible, to contribute or solicit high quality contributions, to review the odd paper (or delegate this to a capable person) and, very important, to solicit new members for the editorial board. Again, the quality of such members must be high: tenured associate professor or equivalent with a proven publication and research record is the lower limit.

Note that J.UCS has no particular area it emphasizes. However, each board member has quite an influence on the direction of J.UCS by soliciting editors and papers in certain areas. A shift of focus of J.UCS as a joint decision violates J.UCS philosophy, a gradual shift due to preferences of board members when choosing new members of the editorial board and by soliciting many top papers in some area is desirable and may well change the distribution of fields within J.UCS.

All major decisions are taken by the board on proposals submitted by board members. Proposals are accepted if a majority of the board is in favour of them. If votes happen to be equal, the editorial assistant has the decisive vote.

5. The Board and Managing Editor-in-Chief

As of January 2016, the J.UCS consortium consists as of nine research organisations, listed in what follows in alphabetical order with the delegated Editor-in-Chief and the main responsibility

Austrian Competence Center for Knowledge Management, Graz, Austria: Professor Dr. Stefanie Lindstaedt; Involvement as Editor-in-Chief and contribution towards the cost of the editorial assistant; also involved in research concerning J.UCS

Faculty of Computer Science and Mathematics, University of Passau, Germany: Professor Dr. Michael Granitzer; Involvement as Editor-in-Chief; modest contribution towards the cost of the editorial assistant; also involved in research concerning J.UCS

Galileo University, Guatemala City, Guatemala; Contact person: Rocael Hernández; Will solicit contributions from middle and South America; modes contribution towards the cost of editorial assistant in cash

Graz University of Technology, Graz, Austria: Dozent Dr. Christian Guetl; Involvement as Managing Editor-in-Chief and contribution towards the cost of the editorial assistant; also responsible for running the J.UCS server

Institute for Information Systems, RWTH Aachen University, Aachen, Germany: Professor Dr. Matthias Jarke; Involvement as Editor-in-Chief; modest contribution towards the cost of the editorial assistant; also involved in research concerning J.UCS

L3S Research Center Hannover, Hannover, Germany: Professor Dr. Tilo Balke; Involvement as Editor-in-Chief; a modest contribution towards the cost of the editorial assistant; also involved in research concerning J.UCS

Capital University of Science and Technology, Islamabad, Pakistan: Dr. Muhammad Tanvir Afzal; Involvement as Editor-in-Chief, responsible for the development and continued improvement of new submission system and development of new technical features.

National University, San Diego, USA: Professor Dr. Peter Serdiukov; Involvement as Editor-in-Chief and research on usability and advancement of J.UCS.

Leibniz Information Centre for Economics (ZBW, "Leibniz-Informationszentrum Wirtschaft"): Prof. Klaus Tochtermann; Involvement as Editor-in-Chief; contribution towards the cost of the editorial assistant; also involved in the wider promotion of J.UCS

An agreement with each of the mentioned organisations or board members has been concluded for the three years 2012-2014, with automatic prolongation year by year unless notice is given at least 6 month before end of period.

6. Presentation to the outside world

The entry page www.jucs.org will say:

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(a) J.UCS – The Journal of Universal Computer Science. J.UCS is run by the J.UCS consortium consisting of the following research institutions (in alphabetical order):

Austrian Competence Center for Knowledge Management, Graz, Austria
Faculty of Computer Science and Mathematics, University of Passau, Germany
Galileo University, Guatemala City, Guatemala
Graz University of Technology, Graz, Austria
Institute for Information Systems, RWTH Aachen University, Aachen, Germany
L3S Research Center Hannover, Hannover, Germany
Capital University of Science and Technology, Islamabad, Pakistan
National University, San Diego, USA
ZBW, Leibniz Information Centre for Economics, Kiel, Germany

(b) A version of the J.UCS Consortium Document appears on a Web page to which a link on the entry page www.jucs.org is provided.

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