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no 608806

Project duration:
October 2013 – September 2016

Coodinator:
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SINTEF
Norway

Strategic objective:
6.4 Optimizing Energy Systems for
Smart Cities

Website:
www.cossmic.eu

D7.2 Live Registry

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EDITOR

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CONTRIBUTING PARTNERS

All CoSSMic consortium partners

ABSTRACT

This document describes the live registry platform used to track the scientific publications and, more generally, all the materials produced throughout the CoSSMic project. Below is also the list of publications as of to date, expecting some more publications in the year after project and of articles under review and end-results to be published. The consortium, as of to date, has published 26 papers: 21 are Conference papers and the remaining are Journal papers. The average of published papers per year is 8 papers.

INTERNAL REVIEWER(S)

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CoSSMic consortium



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Document history

| VERSION | DATE | VERSION DESCRIPTION |
|---------|------------|---|
| 0.1 | | Ready for internal review |
| 1.0 | 2017-02-24 | External proposed |
| 1.1 | 2017-03-24 | External approved (addressing reviewers comments) |
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1. Introduction

1.1. Role of the deliverable

D7.2 This document describes the live registry platform used to track the scientific publications and it lists also all the publication produced as of to date.

1.2. Relationship to other CoSSMic deliverables

Within WP7, this deliverable was intended as one of the means to report the quantity and quality of the publications produced throughout the project.

1.3. Structure of this document

The structure of this document is fairly simple: it consists of an introduction chapter and a following chapter that describes the publication process using the eRoom platform and the list of publications as of to date.

2. eRoom

eRoom provides shared, secure workplaces on the Web for distributed project teams to do their work. eRoom enables your team to discuss ideas, share information, and make decisions, all within a central location. eRoom also offers built-in enterprise content management, thus enabling the integration of content and collaboration in your work process.

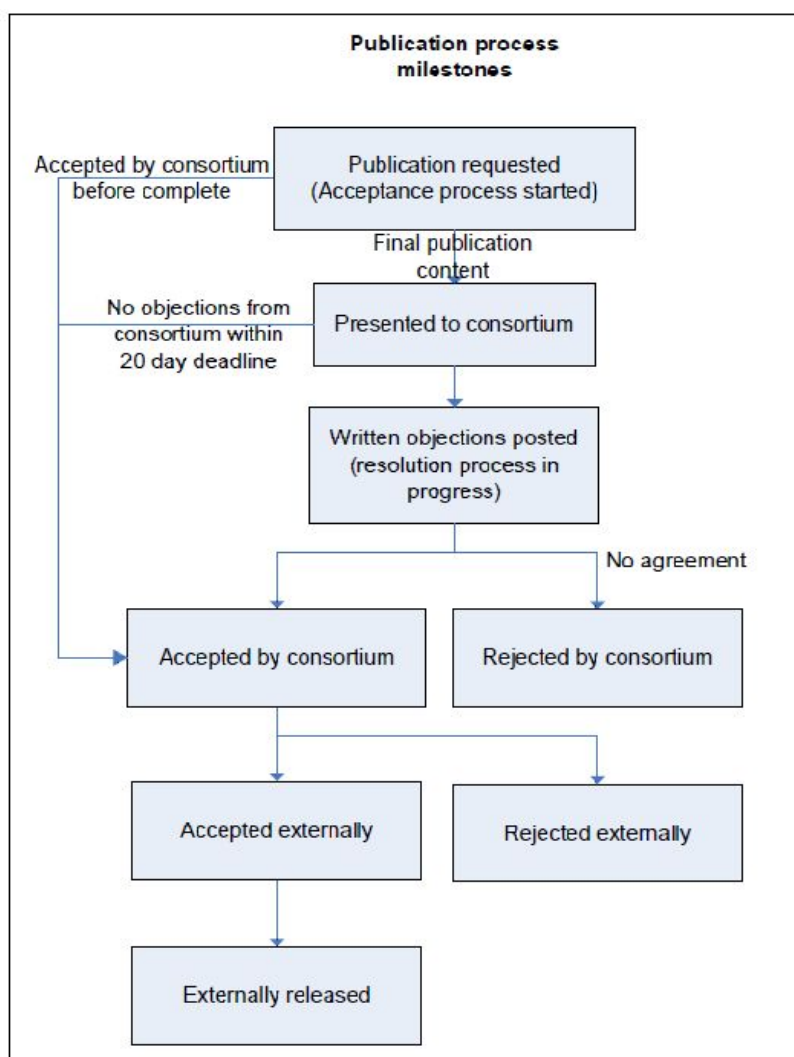
2.1. Where to store and how to track the publication release process

The database Project Publications in the Publications folder in the eRoom is for handling and tracking of the release process for Publications.

The responsibility for keeping this database updated is shared between the partners contributing to the process; e.g. the first partner to post a notification for objection in the database, should also change the database “status” field to “Objection notifications posted” according to the process description in the next section. The eRoom “change log” function keeps track of the process and reveals any discrepancies with respect to the process described here.

2.2. The release process and milestones

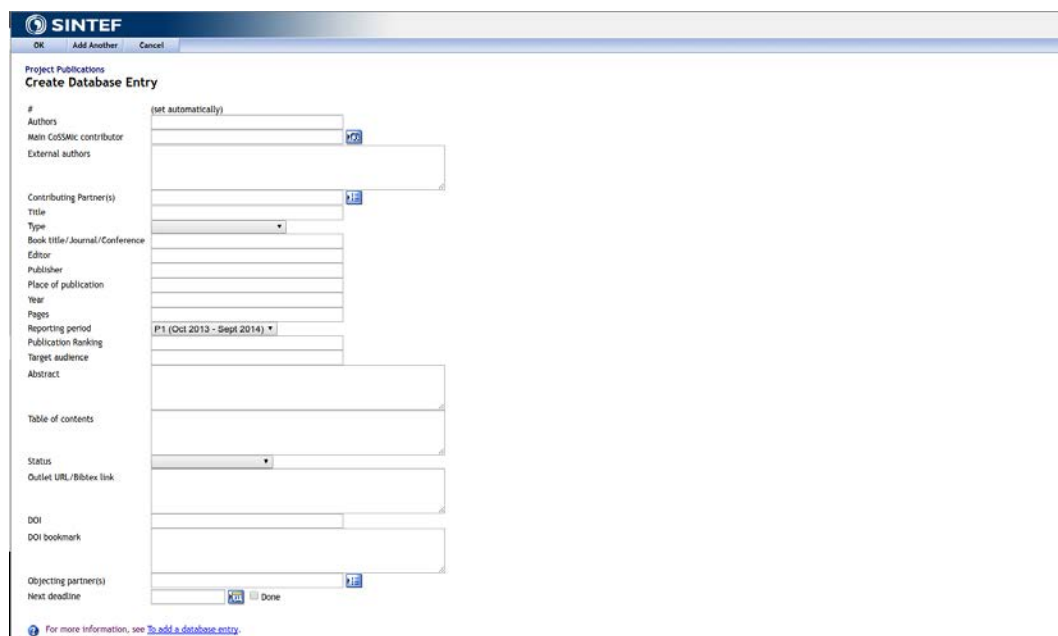
When one or several partners want to publish project-related information, the release process in the figure below must be followed. The process and milestones are described in details in the paragraph below also through some images taken from the eRoom platform itself.



2.3. Description of publication milestones and release process

Publication requested (Responsible: Publisher, i.e. the main author from (one of) the publishing partner(s)): Milestone reached when a request for publication is uploaded to the Project Publications database. The request for publication should contain an abstract and a table of contents. The publisher creates a Poll in the Project Publications database to give the partners the opportunity to accept (vote for) the publication, and thus speed up the process of consortium acceptance. The publisher informs the Official partner contacts via an eRoom alert that an Acceptance process has been initiated. Partners may choose to accept the publication at this stage by voting; if all partners vote in favor, milestone Accepted by consortium is reached. The publishing partner may choose to present the publication content at this stage, by uploading it to the Project Publications database (moving directly to milestone Presented to consortium).

To upload a new publication a form must be filled in with all the most relevant information about the scientific publication itself, e.g. Title, Authors, Objecting Partners, specification on whether it is a Journal or Conference publication. The form is shown in the image below.



The image shows a web-based form titled "SINTEF Project Publications Create Database Entry". The form is organized into several sections with labels on the left and input fields on the right. The fields include:

- # (set automatically)
- Authors
- Main CoSSMic contributor (with a dropdown arrow)
- External authors
- Contributing Partner(s) (with a dropdown arrow)
- Title
- Type (with a dropdown arrow)
- Book title/Journal/Conference
- Editor
- Publisher
- Place of publication
- Year
- Pages
- Reporting period (set to "P1 (Oct 2013 - Sept 2014)" with a dropdown arrow)
- Publication Ranking
- Target audience
- Abstract
- Table of contents
- Status (with a dropdown arrow)
- Outlet URL/Bibtex link
- DOI
- DOI bookmark
- Objecting partner(s) (with a dropdown arrow)
- Next deadline

 At the bottom of the form, there are buttons for "Add Another" and "Done". A small link at the bottom left says "For more information, see [To add a database entry.](#)"

The eRoom platform makes available all the publications inserted in the database and it gives also the possibility to modify, review and export all the information, as presented in the image below.

SINTEF
My eRecons - CoSSMic - Collaborating Smart Solar powered Micro-grids - 3 Dissemination and replication [WP7] - Publication process - Project Publications

Project Publications new entry

The Release process for publications is described in the Project Quality Handbook. Click on the blue icon next to an item to view more details.
To create a poll, copy the poll from the "example publication", and paste in the field "Documents and polls" which is found when opening the publication entry.
All (and only) externally accepted publications should specify in which reporting period they are published.

| # | Groups (none) | Authors | Main CoSSMic contributor | Contributing Partner(s) | Title | Type | Place of publication | Year | Pages / Reporting period | Status | (Objecting partner(s)) | Next deadline |
|----|---------------|--|--------------------------|------------------------------------|---|--------------------|----------------------|------|-----------------------------------|-----------------------|------------------------|---------------|
| 1 | | Leendert Wienhofen, Carmel Lindqvist, Matthias Hoebels | | 01 SINTEF, 02 ISC, 06 NTNU | User-centered design for smart solar-powered micro-grid communities | Paper - conference | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | ✓ 13 Apr 2014 |
| 2 | | Svein Hallstensen, Shanshan Jiang | Svein Hallstensen | 01 SINTEF | CoSSMic - Collaborating Smart Solar-powered Micro-grids | Presentation | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | ✓ |
| 3 | | Alba Amato, Beniamino Di Martino, Marco Scaldone and Salvatore Ventricicque | | 04 SUN | MULTI-AGENT NEGOTIATION OF DECENTRALIZED ENERGY PRODUCTION IN SMART MICRO-GRID | Paper - conference | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | 23 Apr 2014 |
| 4 | | Alba Amato, Beniamino Di Martino, Marco Scaldone, Salvatore Ventricicque | | 04 SUN | Towards a SLA for Collaborating Smart Solar-powered Micro-grids | Paper - conference | | 2014 | | Externally released | | 23 Apr 2014 |
| 5 | | Alba Amato, Beniamino Di Martino, Marco Scaldone and Salvatore Ventricicque | | 04 SUN | An Agent-based Approach for Smart Energy Grids | Paper - conference | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | ✓ |
| 6 | | Alba Amato, Rocco Averna, Beniamino Di Martino, Marco Scaldone, Salvatore Ventricicque, Svein Hallstensen, Geir Horn | | 01 SINTEF, 04 SUN, 09 UIO | Software Agents for Collaborating Smart Solar-powered Micro-grids | Paper - conference | | 2013 | 125-133 P1 (Oct 2013 - Sept 2014) | Externally released | | ✓ |
| 7 | | Luca Tasquer, Marco Scaldone, Rocco Averna, and Salvatore Ventricicque | Salvatore Ventricicque | 04 SUN | Agent based negotiation of decentralized energy production draft text: Norden | Paper - conference | | 2014 | 39-47 P1 (Oct 2013 - Sept 2014) | Externally released | | 23 Apr 2014 |
| 8 | | WP7 Dissemination | | | | Informal text | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | 7 Jun 2014 |
| 9 | | Alba Amato, Beniamino Di Martino, Salvatore Ventricicque, Svein Hallstensen, Shanshan Jiang | | 01 SINTEF, 04 SUN | A distributed system for smart energy negotiation | Paper - conference | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | 15 Jun 2014 |
| 10 | | Svein Hallstensen | Svein Hallstensen | | CoSSMic | Informal text | | 2014 | P1 (Oct 2013 - Sept 2014) | Externally released | | ✓ |
| 11 | | Alba Amato, Marco Scaldone, Salvatore Ventricicque | | 04 SUN | Reactive Optimization of Self Consumption | Paper - journal | | 2014 | | Under external review | | |
| 12 | | Joachim Glatz-Reichenbach, Thomas Vilarinho, Giuseppina Crivella, Carmel Lindqvist, Adrian Minde, Leendert W. M. Wienhofen | WP2 | 01 SINTEF, 02 ISC, 04 SUN, 06 NTNU | End User Centred Interactive Software Architecture and Design: The Creation of Communities for a Smart Energy Use | Paper - conference | | 2015 | P2 (Oct 2014 - Sept 2015) | Externally released | | ✓ 9 Jul 2015 |
| 13 | | Matthias Hoebels, Joachim Glatz-Reichenbach, Ahmed Mahran, Adrian Minde, Kristian Peter | WP3 | 02 ISC | Developing and investigating a smart solar powered energy system for increased PV self-consumption | Paper - conference | | 2015 | P2 (Oct 2014 - Sept 2015) | Accepted externally | | ✓ 17 Sep 2015 |
| 14 | | Geir Horn | Geir Horn | 09 UIO | Scheduling Time Variant Jobs on a Time Variant Resource | Paper - conference | | 2015 | P2 (Oct 2014 - Sept 2015) | Accepted externally | | 31 May 2015 |
| 15 | | Geir Horn, Salvatore Ventricicque, Alba Amato | | 04 SUN, 09 UIO | Inference Appliance Load Profiles From Measurements | Paper - conference | | 2015 | P2 (Oct 2014 - Sept 2015) | Externally released | | ✓ |
| 16 | | Shanshan Jiang, Salvatore Ventricicque, Geir Horn, Svein Hallstensen, Matthias Hoebels | | 01 SINTEF, 02 ISC, 04 SUN, 09 UIO | A DISTRIBUTED AGENT-BASED SYSTEM FOR COORDINATING SMART SOLAR-POWERED MICROGRIDS | Paper - conference | | 2014 | P3 (Oct 2013 -) | Externally released | | ✓ 11 Sep 2015 |
| 17 | | Simon Stabny, Babak A. Farschian, Thomas Vilarinho | | 01 SINTEF | Designing an Application Store for the Internet of Things | Paper - conference | | 2015 | P3 (Oct 2015 -) | Externally released | | 11 Nov 2015 |

For each publication a more detailed view is available, as shown in the image below.

SINTEF
My eRecons - CoSSMic - Collaborating Smart Solar powered Micro-grids - 3 Dissemination and replication [WP7] - Publication process - Project Publications - MULTI-AGENT NEGOTIATION OF DECENTRALIZED ENERGY PRODUCTION IN SMART MICRO-GRID

MULTI-AGENT NEGOTIATION OF DECENTRALIZED ENERGY PRODUCTION IN SMART MICRO-GRID new entry

a database entry created by Salvatore Ventricicque on 11 Apr 14

next | previous | summary

Authors: 3 Alba Amato, Beniamino Di Martino, Marco Scaldone and Salvatore Ventricicque

Main CoSSMic contributor: Salvatore Ventricicque

External authors: Salvatore Ventricicque

Contributing Partner(s): 04 SUN

Title: MULTI-AGENT NEGOTIATION OF DECENTRALIZED ENERGY PRODUCTION IN SMART MICRO-GRID

Type: Paper - conference

Book Title / Journal / Conference: 8th International Symposium on Intelligent Distributed Computing - IDC2014

Editor: Salvatore Ventricicque, Costin Bedica, Lars Braubach, David Camacho

Printer: Springer

Place of publication: Springer

Year: 2014

Pages: P1 (Oct 2013 - Sept 2014)

Reporting period: P1 (Oct 2013 - Sept 2014)

Publication link: Springer

Target audience: SmartGrid is an electricity network that can intelligently integrate the actions of all users connected to it in order to efficiently deliver sustainable, economic and secure electricity supplies. In this context the CoSSMic project aims at fostering a higher rate of self-consumption of decentralized renewable energy production, using innovative autonomous systems for management and control of power micro-grids on users behalf. To achieve this goal we have designed an ICT framework that integrates different appliances such as smart meters, solar panels, batteries, etc., providing a common platform to support sharing of information and negotiation of energy exchanges between power producers and storages in accordance with policies defined by owners, weather forecasts, and habits and plans of participants.

Table of contents: Documents and polls (1)

Documents and polls (1): paper.pdf

Status: Externally released

Output URL / Public link: DOI

DOI bookmark: Collecting partner(s): Other comments:

Next deadline: 25 Apr 2014

Log:

| date | member | field | change |
|-----------|------------------------|------------------|---|
| 13 Nov 15 | Marco Scaldone | Reporting period | P1 (Oct 2013 - Sept 2014) |
| 12 Nov 15 | Marco Scaldone | Status | Externally released |
| 12 Nov 15 | Shanshan Jiang | Abstract | ... in accordance with policies defined by owners, weather forecasts, and habits and plans of participants. |
| 12 Nov 15 | Marco Scaldone | added | paper.pdf |
| 11 Apr 14 | Salvatore Ventricicque | Next deadline | 25 Apr 14 |

(13 entries not shown)

Presented to consortium (Responsible: Publisher): Milestone reached when the final publication content is presented to the partners by uploading the publication content to the Project Publications database. Publisher sets a 20-day Resolution deadline. Partners may choose to accept the publication at this stage by voting. 20 days is allowed for consortium partners to provide objections to the publication in writing, counting from and including the date of setting this milestone. If no objection is raised within 20 days, milestone Accepted by consortium is reached.

Written objections posted (Responsible: Objecting partner(s)): Milestone reached when at least one written objection is posted in the Project Publications database (Vote and Objection comments/attachments). Objections can be raised on any of the following grounds: (i) that they consider that the protection of the objecting partner's Foreground would be adversely affected by the proposed publication, (ii) that the proposed publication includes the Confidential Information of the objecting partner, or (iii) the publication of such information would be contrary to the legitimate interests of the objecting partner. In the event that an objection is raised, either on the abstract and table of contents or on the final publication content, on any of the above defined grounds, the Publisher and the Objecting

partner(s) shall seek in good faith to agree on a solution on a timely basis whereby such objection is resolved.

Accepted by consortium (Responsible: Publisher): Milestone reached when EITHER: 20 days has passed since milestone Presented to consortium and no written objections have been raised, OR: An agreement has been reached by the consortium. This may be the result of partner voting, and/or due to resolution of conflict between Publisher and Objecting partner(s). The Project Publications database should contain the submitted version.

Rejected by consortium (Responsible: Publisher): Milestone reached when the Publisher and the Objecting partner(s) do not reach an agreement.

Accepted externally (Responsible: Publisher): Milestone reached when external publication process accepts the publication. The Project Publications database should contain the submitted version.

Rejected externally (Responsible: Publisher): Milestone reached when external publication process failed.

Externally released (Responsible: Publisher): Milestone reached when external publication process is completed. The Project Publications database should contain the final published version. The publication should be uploaded to the project website, unless copyright issues hinder this, in which case a DOI reference or similar should be provided instead. News of the publication's availability should be made on the web site.

2.4. Submission of a publication prior to acceptance

Publications can be submitted to acceptance at conferences, journals and similar before reaching the "Accepted by consortium" milestone. This requires that the author must withdraw the publication prior to external publication in cases where the paper is rejected by the consortium.

3. Scientific Dissemination

In this paragraph a series of report are shown that highlight the quantity and quality degree of the scientific dissemination obtained throughout the CoSSMic project.

3.1. Scientific Dissemination Ordered By Publication Year and Type

| | |
|---------------------------------------|---|
| Year: | 2013 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | Itais |
| Title: | Software Agents for Collaborating Smart Solar-powered Micro-grids |
| Authors: | Alba Amato, Rocco Aversa, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinquè, Svein Hallsteinsen, Geir Horn |
| Abstract: | Solar electricity is one of the options as innovative approach as primary energy use. It could be deployed decentralised into the urban areas, and could alleviate the carbonised electricity demand drastically. Information and communication technologies (ICT) could be exploited to provide real time information on energy consumption in a home or a building giving the possibility to citizens to take decisions in order to save energy. In this context CoSSMiC, an ICT European project, aims at fostering a higher rate of self-consumption of decentralised renewable energy production by innovative autonomic systems for management and control of power micro-grids on users behalf. The paper addresses these challenges and discusses related work dealing with the development of an ICT solution using software agents which collaborate in a neighborhood, and with the central power grid, over a peer-to-peer overlay. |

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|---------------------------------------|---|
| Year: | 2014 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | Proceedings of the 6th International Conference on Agents and Artificial Intelligence |
| Editor: | Beatrice Duval, Jaap van den Herik, Stephane Loiseau and Joaquim Filipe |
| Publisher: | SCITEPRESS - Science and Technology Publications |
| Title: | An Agent-based Approach for Smart Energy Grids |
| Authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone and Salvatore Venticinquè |
| Abstract: | The increasing demand for energy and the availability of several solutions of renewable energy sources has stimulated the formulation of plans aiming at expanding and upgrading existing power grids in several countries. |

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| | <p>According to NIST, smart grid will be one of the greatest achievements of the 21st century. By linking information technologies with the electric power grid to provide electricity with a brain, the smart grid promises many benefits, including increased energy efficiency, reduced carbon emissions, and improved power reliability.</p> <p>In this paper we present an agent based architecture for supporting collection and processing of information about local energy production and storage resources of neighborhoods of individual houses and to schedule the energy flows using negotiation protocols.</p> |
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|---------------------------------------|---|
| Year: | 2014 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | The 7th International Conference on Internet and Distributed Computing Systems (IDCS 2014) |
| Publisher: | Springer |
| Title: | A distributed system for smart energy negotiation |
| Authors: | Alba Amato, Beniamino Di Martino, Salvatore Venticinquè, Svein Hallsteinsen, Shanshan Jiang |
| Abstract: | <p>Distributed energy production by Solar Panels is really widespread today. However the mismatch between production and consumption during the day, and expensiveness of energy storages, limits an high rate of self-consumption. In fact the overall overproduction is currently reversed into the power grid and delivered to the energy provider. In this context the CoSSMic project aims at developing a distributed software architecture that allows for the collaboration among neighbors, both to schedule the consumptions and to exchange of energy, in order to maximize the self-consumption of micro grids. This paper focus on the architecture design, scouting of technology and preliminary demonstrator.</p> |

| | |
|---------------------------------------|--|
| Year: | 2014 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | 8th International Symposium on Intelligent Distributed Computing - IDC'2014 |
| Editor: | Ssalvatore Venticinquè, Costin Badica, Lars Braubach, David Camacho |
| Publisher: | Springer |
| Title: | Agent based negotiation of decentralized energy production |
| Authors: | Luca Tasquier, Marco Scialdone, Rocco Aversa, and Salvatore Venticinquè |
| Abstract: | <p>The increasing demand for energy has stimulated the formulation of plans aiming at shifting to renewable energies, not only to save money, but also for the responsibility that the present population has towards future generations. Within this scenario ICT solutions will help the citizens in saving energy: people of a community that have power's overproduction can take benefits in terms of gain by selling the excess energy to neighborhood instead of power suppliers due to the fees that they have</p> |

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| | to pay in the latter case. On the other hand citizens that need additional energy can buy it from sellers in the neighborhood at favorable prices. In this paper we present an agent-based framework that allows the collection of data about energy consumption in a neighborhood and the negotiation of the whole produced/consumed energy among the involved parties in order to maximize the profits of the community. |
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|---------------------------------------|--|
| Year: | 2014 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | 6-th International Conference on Intelligent Networking and Collaborative Systems INCoS-2014 |
| Publisher: | IEEE CPS |
| Title: | Towards a SLA for Collaborating Smart Solar-powered Micro-grids |
| Authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinqu |
| Abstract: | The mismatch between the decentralized renewable energy production from solar panels and the actual consumption during a day is an open issue. It is currently addressed by an exchange with power grid of the exceeding production and a consequent loss of energy. The usage of storage can help to foster a higher rate of self-consumption, but it is too much expensive for the user above all if it is dimensioned according to the peak of production For this reason the CoSSMic project aims at defining innovative autonomic systems for management and control of power micro-grids on users behalf. It will integrate the actions of all users connected to it - generators, consumers and those that do both in order to support the negotiation of energy exchange between peers of a neighborhood using distributed optimization models and multi-agent techniques. This paper focuses on the multi/agent architecture, interoperability issues and on a SLA based negotiation protocol to support a distributed optimization strategy. |

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|---------------------------------------|---|
| Year: | 2014 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | I4CS - Innovations for Community Services (http://i4cs-conference.org/) |
| Publisher: | IEEE |
| Title: | User-centered design for smart solar-powered micro-grid communities |
| Authors: | Leendert Wienhofen, Carmel Lindkvist, Mattias Noebels |
| Abstract: | CoSSMic (Collaborating Smart Solar powered Micro-grids) is an EU funded project aimed at developing a system for smart management and control of solar energy. The system must be relevant to a community of end-users and other stakeholders. Two processes are described here to contribute in meeting this aim, user-centered design and lean startup product design. We describe an |

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| | iterative approach to the design of the system which incorporates these two processes and the impact it has had on results. |
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|---------------------------------------|--|
| Year: | 2014 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | 8th International Symposium on Intelligent Distributed Computing - IDC'2014 |
| Editor: | Ssalvatore Venticinque, Costin Badica, Lars Braubach, David Camacho |
| Publisher: | Springer |
| Title: | MULTI-AGENT NEGOTIATION OF DECENTRALIZED ENERGY PRODUCTION IN SMART MICRO-GRID |
| Authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone and Salvatore Venticinque |
| Abstract: | SmartGrid is an electricity network that can intelligently integrate the actions of all users connected to it in order to efficiently deliver sustainable, economic and secure electricity supplies. In this context the CoSSMic project aims at fostering a higher rate of self-consumption of decentralized renewable energy production, using innovative autonomic systems for management and control of power micro-grids on users behalf. To achieve this goal we have designed an ICT framework that integrates different appliances such as smart meters, solar panels, batteries, etc., providing a common platform to support sharing of information and negotiation of energy exchanges between power producers and storages in accordance with policies defined by owners, weather forecasts, and habits and plans of participants. |

| | |
|---------------------------------------|---|
| Year: | 2014 |
| Type: | Paper - journal |
| Book title/Journal/Conference: | Journal of Telecommunications and Information Technology |
| Title: | An agent-based collaborative platform for the optimized trading of renewable energy within a community |
| Authors: | Luca Tasquier and Rocco Aversa |
| Abstract: | Cities are increasingly recognized for their ability to play a catalytic role in addressing climate and energy challenges using technologically innovative approaches. Since energy used in urban areas accounts for about 40% of total EU energy consumption, a change of direction towards renewable energy is necessary in order to alleviate the usage of carbonized electricity and also to save money. A combination of IT and telecommunication technologies is necessary to enable the energy and resources saving. ICT based solutions can be used to enable energy and money saving not only for a single building, but for the whole community of a neighborhood. In this paper a model for the energy cost minimization of a neighborhood together with an agent-based interaction model that reproduces the proposed formal representation is presented. Furthermore |

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| | the authors present a prototype implementation of this model and first experimental tests. |
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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | The 8th International Conference on. Internet and Distributed Computing Systems (IDCS 15) |
| Editor: | Giuseppe Di Fatta et al. |
| Publisher: | Springer LNCS |
| Title: | Inferring Appliance Load Profiles From Measurements |
| Authors: | Geir Horn, Salvatore Venticinque, Alba Amato |
| Abstract: | Good demand side management in smart grids does not only depend on the amount of energy consumed by various appliances, but also on the temporal characteristics of the consumption, i.e. the load profile of the appliances. Representative load profiles can be used for predicting future energy consumption. However, a load profile is hard to characterize as it often depends on the operational conditions of the appliance when the measurements were taken. For instance the load profile of a washing machine will depend on the amount of cloths and the inlet water temperature. This paper presents a methodology for empirically obtaining the load profile from an ensemble of event driven traces of a stochastically varying mode of an appliance. |

| | |
|---------------------------------------|---|
| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | Proceedings - 2015 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing, 3PGCIC 2015 |
| Editor: | Messina F.,Xhafa F.,Ogiela M.R.,Barolli L. |
| Publisher: | IEEE |
| Title: | A Virtual Market for Energy Negotiation and Brokering |
| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Abstract: | ICT has become a crucial element in supporting energy management. It allows for design and implementation of smart grids. In this paper we present a distributed solution for improving the efficiency for electricity distribution and for more rational use of energy, minimizing overloads and voltage variations. It is implemented by a Virtual Market that has been built according to a distributed approach over a P2P server-less overlay. In our prototype, RetroShare is used to implement a F2F (Friend-To-Friend) network where intelligent agents can broker and negotiate energy autonomously on user's behalf according to high level policies are discussed. |

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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | Multidisciplinary International Scheduling Conference (MISTA 2015) |
| Editor: | Zdenek Hanzalek, Graham Kendall, Barry McCollum, Premysl Sucha |
| Publisher: | http://www.schedulingconference.org |
| Title: | Scheduling Time Variant Jobs on a Time Variant Resource |
| Authors: | Geir Horn |

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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | CEUR Workshop Proceedings Volume 1382, 2015, Pages 11-18 16th Workshop on From Object to Agents, WOA 2015; Naples; Italy |
| Editor: | Rossi S., Staffa M., di Napoli C. |
| Publisher: | CEUR-WS |
| Title: | An application of learning agents to smart energy domains |
| Authors: | Authors of Document Amato, A., Scialdone, M., Venticinque, S. |
| Abstract: | <p>The main requirement for building an Internet of Things is the definition of smart objects in which it needs to put intelligence. The pervasive deployment of smart objects will add value to applications by capabilities of communication, negotiation, learning and distributed reasoning. In this paper we investigate how the paradigm shift from objects to agents is the driver for developing these capabilities by a case study in the context of Smart Energy application domain. In fact the paradigm shift we are seeing in these years is to consider the electricity network like an Internet of Energy, where each and every electrical device and generator will be connected in a network and able to communicate data and receive and react in real time to events and stimuli that arrive from other devices or from the grid: a scattered network of sensors, actuators, communication nodes, systems control and monitoring. Here we present the learning-based approach for power management in smart grids providing an agent-oriented modeling of the energy market. The main issue we focus on is a reasonable compromise between the resolution of the consuming profile representation and the performance and real time requirements of the system.</p> |

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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | Proceedings - 2015 9th International Conference on Complex, Intelligent, and Software Intensive Systems, CISIS 2015, Pages 527-534 |
| Publisher: | IEEE |
| Title: | A Negotiation Solution for Smart Grid Using a Fully Decentralized, P2P Approach |

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| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Abstract: | One of the biggest advantages introduced by the Smart Grid is the ability to efficiently and simply integrate renewable energy sources that appear to be intermittent because of their dependence on phenomena that are not constant but that are an important energy supply if properly exploited. The realization of a smart grid, however, requires an infrastructure able to handle almost instantaneous bidirectional communication between each node of the network. All this involves the management of huge data flows in terms of analysis and control, requiring a structure capable of handling responses in a very short time and an high level of global analysis to prevent or minimize problems. Successful negotiation and brokering on the Energy Market is an important prerequisite for achieving the advantages of Smart Grid. In this paper we present a Market for the sale of energy using a completely distributed approach based on P2P protocols and server-less technology, providing a greater level of security by exploiting the properties of this type of networks. We propose a scenario animated by three actors: Consumer, Producer and Market Manager. |

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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | AmI-15 |
| Title: | Designing an Application Store for the Internet of Things: Requirements and Challenges |
| Authors: | Simon Stastny, Babak A. Farshchian, Thomas Vilarinho |
| Abstract: | Although things in the Internet of Things contain considerable amounts of software, developers of such software have no standardized means of maintaining, improving and sharing this software as they can do, e.g., with applications on a smart phone. This limitation can hamper user-driven innovation. In this paper we evaluate the usefulness of the "app store" metaphor as a means of sharing and deploying Internet of Things software among makers. We did a set of interviews and a questionnaire-based survey with a sample of makers in various maker communities. We used this data to extract requirements for an application store, using the common "app store" metaphor as a starting point. The app store concept was developed as a proof of concept implementation, and evaluated through feasibility evaluation and focus group evaluation methods. Our findings show that although the app store metaphor is familiar and easy to grasp, there are some fundamental challenges when adapting the metaphor: 1) The difficulty of supporting the diversity in the software and hardware vendor market, 2) The tension between context awareness and the need for pre-configuration and pre-packaging, and 3) usability challenges related to the number of devices and apps. |

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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | 31st EU PVSEC |
| Title: | Developing and investigating a smart solar powered energy system for increased PV self-consumption |
| Authors: | Matthias Noebels, Joachim Glatz-Reichenbach, Ahmed Mahran, Adrian Minde, Kristian Peter |
| Abstract: | In order to have predictable power demand and supply, in accordance with increased self consumption of PV generated electrical energy, it is mandatory to coordinate installed PV units with consuming and storing devices inside a build-up local smart grid. By generating, storing and consuming power in one's own home but also by sharing between users in a neighbourhood, energy production and demand can be coordinated when it includes sharing of information for exchange excess power and storage capacity, inside smart neighbourhood grids and the external power grid. Consequently households are equipped with additional ICT based hardware for measuring, controlling and optimizing their energy consumption and generation. In order to test this underlying technology at real conditions, field tests with collaborating users are already started in Konstanz (Germany) and will continued at user sites in the Province of Caserta (Italy). |

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| Year: | 2015 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | I4CS - http://www.i4cs-conference.org/ |
| Publisher: | IEEE |
| Title: | End User Centred Interactive Software Architecture and Design: The Creation of Communities for a Smart Energy Use |
| Authors: | Joachim Glatz-Reichenbach, Thomas Vilarinho, Giuseppina Cretella, Carmel Lindkvist, Adrian Minde, Leendert W. M. Wienhofen |
| Abstract: | CoSSMic (Collaborating Smart Solar powered Micro-grids) is an EU funded project. It aims to develop both hardware and software which will include an ICT system for smart management and control of generated/consumed solar energy in neighbourhood communities. The creation process of energy monitoring and controlling of Graphical User Interfaces (GUIs) is described here. User Centred Design Workshops and face to face interviews were conducted with targeted neighbourhood communities in the Province of Caserta, Italy and the City of Konstanz, Germany. These workshops initiated the first part of the creation process and resulted in paper prototypes leading to functional and partially interactive hardware and software implementations. Thus linking the user to the technical development of the system. Furthermore a dedicated focus was set on the formation and sustainability of smart energy deploying user communities. |

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| Year: | 2016 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | NBiS 2016 - 19th International Conference on Network-Based Information Systems |
| Editor: | Khafa F., Enokido T., Barolli L., Takizawa M., Snasel V. |
| Publisher: | IEEE |
| Title: | A Cyber Physical System of Smart Micro-Grids |
| Authors: | Authors of Document Amato, A., Aversa, R., Di Martino, B., Venticinque, S. |
| Abstract: | Internet of Things and Big Data are characterizing more and more application scenarios and research fields such as Smart Cities, Smart Energies representing information. In fact smart objects represent a kind of producers and consumers of huge amount of heterogeneous data which increase at higher rate. In order to let them play the role of new actors in Cyber Physical Systems it need to enable the interactions among themselves and with humans, designing informationsystems whose architectural patterns allows for the effectivecommunication data management and processing. Here wepropose a case study that exploits big data technologies to builda Cyber Physical System composed of Smart Micro Grids. |

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| Year: | 2016 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | IEEE 30th International Conference on Advanced Information Networking and Applications Workshops, WAINA 2016 |
| Editor: | IEEE |
| Title: | CoSSMic smart grid migration in federated clouds |
| Authors: | Alba Amato, Rocco Aversa, Massimo Ficco, and Salvatore Venticinque |
| Abstract: | Cloud computing is probably the simplest and best fitted way for improving scalability and flexibility of a smart-grid, however, migrating such critical data-intensive applications to the cloud is not a trivial challenge. For such applications, high security, resilience, and performance are non-negotiable. Therefore, in order to successfully host critical smart-grid applications and workloads, new cloud paradigms and mechanisms should be adopted to support greater security, resilience, and performance. In this direction, an initiative by the Second University of Naples aims at ensuring the critical requirements of data-intensity applications in a highly distributed cloud federated environment, in which smart-grid applications represent a relevant case study. |

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| Year: | 2016 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | 32nd European Photovoltaic Solar Energy Conference and Exhibition |

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| Title: | OPTIMIZING THE SELF-CONSUMPTION OF SOLAR POWERED MICRO GRIDS |
| Authors: | A. Mahran, A. Minde, M. Noebels, K. Peter, J. Glatz-Reichenbach |
| Abstract: | Due to the continuous rise of retail electricity price and the falling remuneration of PV electricity feed-in tariffs, consumers who own PV installations are encouraged to increase their self-consumption. Furthermore, the intermittency of renewable energy resources (RES) hinders the exclusive reliance on RES as a sustainable energy source. Additionally, batteries have several technical and economic drawbacks when used to increase self-consumption. This research presents an approach to model a smart neighbourhood by using a multi-agent system (MAS). The model's consensus is to increase the self-consumption as well as PV-based self-generation of an overall smart grid community. Furthermore, updated PV yield forecast is used as an input to the MAS to invoke demand-side management and urge participants to exchange their excess energy. Applied dynamic weather forecast method will be optimized by the adaption of a certain adequate regarded historic time span as based for the prediction. Results show that single-user as well as entire communities self-consumptions – without using batteries – can exceed 60% with a potential to achieve even full-independency when supported by electrical storage. Moreover, community consumption can utilize all the electricity generated by PV |

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| Year: | 2016 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | 2016 Intl IEEE Conferences on Ubiquitous Intelligence & Computing, Advanced and Trusted Computing, Scalable Computing and Communications, Cloud and Big Data Computing, Internet of People, and Smart World Congress (UIC/ATC/ScalCom/CBDCCom/IoP/SmartWorld) |
| Publisher: | IEEE |
| Title: | Towards a IoT Framework for the Matchmaking of Sensors' Interfaces |
| Authors: | Beniamino Di Martino, Giuseppina Cretella, Antonio Esposito |
| Abstract: | With the diffusion of sensors, smart devices and the advances in connection technologies, the Internet of Things (IoT) has become a very popular topic. Because of the creation and expansion of new and existing sensor networks, the need to define a common standard for sensors' interfaces representation has arisen. Currently it is difficult to make different sensors, sensors' networks interoperate seamlessly, since their interfaces are not always well specified or are not ready to be adapted immediately to one another. In order to overcome the current lack of a shared standard, in this paper we propose an IoT framework which, by analysing sensors' APIs descriptions in C/C++ or Java (and potentially more languages),, expanding such analysis with that of RESTful interfaces exposed by smart-sensors, tries to integrate different sensors' interfaces into a common Aggregator. Such an Aggregator relies on wrappers, adapters, either automatically built or provided by experts, to make programming, using sensors from different providers completely |

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| | opaque to the users, who only sees a set of general, abstract functions available. Semantic technologies are used to support the creation of such wrappers, to easily discover, categorize new sensor types. |
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| Year: | 2016 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | SAI Computing Conferenece 2016 |
| Publisher: | IEEE |
| Title: | A DISTRIBUTED AGENT-BASED SYSTEM FOR COORDINATING SMART SOLAR-POWERED MICORGRIDS |
| Authors: | Shanshan Jiang, Salvatore Venticinqu, Geir Horn, Svein Hallsteinsen, Matthias Noebels |
| Abstract: | Renewable energy like solar power is crucial for the transition to more sustainable energy supply and use in the modern society. Buildings with rooftop solar panels form microgrids acting as prosumers and are usually not under the control of the regulated companies operating the public grids. Currently much work has focused on the self-consumption of individual microgrids. On the contrary, the CoSSMic system targets at a neighborhood of microgrids with the primary goal to maximize the self-consumption of the whole neighborhood by co-ordinating their energy use and storage. To address the challenge of the fluctuating and partly unpredictable nature of renewable energy, a novel hybrid control mechanism is proposed, where planning and scheduling based on predictions is supplemented by a reactive feedback loop to compensate the inability to predict accurately the rapid fluctuations in PV output due to passing clouds. To enable easy creation, evolution, and operation of the neighborhoods without the need for expensive central equipment and support, a Peer-to-Peer, multi agent, and negotiation based architecture has been designed and implemented to realize the control mechanism. Early evaluation has been based on user centered design and involvement, while final evaluation will be carried out using experiments and simulations based on one-year trials on two trial neighborhoods in Germany and Italy respectively. |

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| Year: | 2016 |
| Type: | Paper - conference |
| Book title/Journal/Conference: | The 12th International Conference on Intelligent Environments |
| Publisher: | IEEE |
| Title: | Combining Persuasive Computing and User Centered Design into an Energy Awareness System for Smart Houses |
| Authors: | Thomas Vilarinho, Babak Farshchian, Leendert W. M. Wienhofen |
| Abstract: | The environmental impacts of the usage of fossil fuels together with its limited supply has been pushing governments, industries and people to seek cleaner and renewable energy supplies and to adopt energy habits |

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| | <p>leading to a greater sustainability. While acquiring a Photo Voltaic solar panel (PV) is a big step in that direction, much can also be accomplished with changes in individual and collective energy consumption behavior. Moreover, both strategies can be used together.</p> <p>This paper presents a software prototype capable of increasing the awareness of the energy consumption in a smart house and supporting a behavior change towards greener consumption habits. The software was developed following the design science research methodology anchored by the application of User Centered Design and the theories of persuasive computing. The development of the User Interface (UI) was done following several iterations with both end-users and experts. In this work, we focus on the UI elements created in order to apply the concepts from different behavior change support methods and theories, such as Feedback, Gamification, and Social norm into energy savings and efficiency. The result was acclaimed during an expert evaluation and will now be trialed in two different trial neighborhoods.</p> |
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| Year: | 2016 |
| Type: | Paper - journal |
| Book title/Journal/Conference: | Energies - Special issue "Energy Efficient Building Design 2016" |
| Editor: | Prof. Dr. Nyuk Hien Wong |
| Publisher: | Energies Editorial Office |
| Title: | A review of systems and technologies for smart homes and smart grids |
| Authors: | Gabriele Lobaccaro, Salvatore Carlucci, Erica Löfström |
| Abstract: | <p>In the actual era of smart home and smart grid, advanced technological systems that allow the automation of domestic tasks are developing rapidly. There are numerous technologies and applications that can be installed in smart homes today. They enable communication between home appliances and users and enhance home appliances' automation, monitoring and remote control capabilities. This review paper, by introducing the concept of the smart home and the advent of the smart grid, investigates technologies for smart homes by organizing the technical descriptions of the systems, pointing out advantages and disadvantages of each technology and product that is on the market. Barriers, challenges, benefits and future trends regarding the technologies and the role of users in the field have been discussed.</p> |

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| Year: | 2016 |
| Type: | Paper - journal |
| Book title/Journal/Conference: | Computer Standards and Interfaces Volume 44,Pages 159-168 |
| Publisher: | Elsevier |
| Title: | Design and evaluation of P2P overlays for energy negotiation in smart micro-grid |

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| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Abstract: | The increasing availability of distributed renewable energy sources such as photo-voltaic (PV) panels has introduced new requirements for innovative power grid infrastructures. Information technologies provide new opportunities for developing techniques to optimize the energy usage by a new generation of smart-grids. Here we investigate an original solution that aims at maximizing the self-consumption within a neighborhood based on a collaborative approach. Distributed software agents plan and enforce the optimal schedule of consuming appliances according to the prediction of energy production by PV panels, the estimated energy profile of consuming devices and the user's preferences and constraints. Finally we focus on the performance evaluation of a negotiation protocol that allows agents to find a sub-optimal solution for the global schedule, comparing results obtained by a prototype implementation and experimenting different technologies |

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| Year: | 2016 |
| Type: | Paper - journal |
| Book title/Journal/Conference: | Concurrency Computation Volume 28, Issue 4, Pages 1275-1290 |
| Publisher: | John Wiley and Sons Ltd |
| Title: | Distributed architecture for agents-based energy negotiation in solar powered micro-grids |
| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Abstract: | The quota of renewable energy production from decentralized sources is increasing even more, affecting the management of current power grids. The lack of alignment between energy produced by photovoltaic panels and the consumption by user's appliances are the main issues that need to be addressed. The usage of energy storages is not yet feasible because of dimensioning problems and costs. The CoSSMic project is developing an innovative autonomic distributed platform that adopts a collaborative approach and distributed knowledge to schedule the usage of consuming devices according to user's preferences and constraints, monitoring data and predicted photovoltaic production. The main objective is the maximization of self-consumption in a neighborhood. Multi-agent systems are a good candidate for modeling and managing such kind of systems. In fact, smart grids are geographically distributed systems composed of autonomous and reactive entities among which some are pro-active and have social abilities. In this paper, we focus on the design and prototype implementation of the multi-agent systems, that is one of the pillars of the CoSSMic platform, aiming at implementing a distributed scheduler. |

3.2. Dissemination Channels

This table is provided by the eRoom platform and it is intended for keeping track of interesting dissemination channels.

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| Type: | Conference |
| Acronym: | AINA 2016 |
| Full name: | 30th IEEE International Conference on Advanced Information Networking and Applications |
| URL: | http://voyager.ce.fit.ac.jp/conf/aina/2016/ |
| Date for event: | 2016-03-22 |
| Short description of contribution: | Booth of Cossmic |

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|---|---|
| Type: | Conference |
| Acronym: | I4CS |
| Full name: | Innovations for Community Services |
| URL: | http://www.i4cs-conference.org/ |
| Submission deadline: | 2014-03-25 |
| Date for event: | 2014-06-04 |
| Suggested authors: | D2.1/D2.2 contributors |
| Short description of contribution: | Smart energy and home control/Social networks and open collaboration |

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|-----------------------------|---|
| Type: | Conference |
| Acronym: | IDC 2014 |
| Full name: | 8th International Symposium on Intelligent Distributed Computing |
| URL: | http://aida.ii.uam.es/IDC2014/ |
| Submission deadline: | 2014-03-01 |
| Date for event: | 2014-09-03 |
| Suggested authors: | WP4 contributors |

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|---|---|
| Type: | Journal |
| Acronym: | CPE |
| Full name: | Concurrency and Computation: Practice and Experience |
| Submission deadline: | 2015-01-31 |
| Suggested authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinque |
| Short description of contribution: | It is an invited contribution, extended version of IDC 2014. Contents from D4.1 |

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| Type: | Journal |
| Acronym: | CSI |
| Full name: | Computer Standards & Interfaces |



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|---|---|
| URL: | http://ees.elsevier.com/csi/ |
| Submission deadline: | 2015-01-31 |
| Suggested authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinque |
| Short description of contribution: | It is an invited contribution: an extended version of CCPI-2014 publication. It presents performance analysis about scalability of a prototype implementation of a negotiation protocol comparing technologies. |

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| Type: | Journal |
| Acronym: | IJAIHC |
| Full name: | Journal of Ambient Intelligence and Humanized Computing - Springer |
| URL: | http://www.springer.com/engineering/computational+intelligence+and+complexity/journal/12652 |
| Submission deadline: | 2016-12-31 |
| Short description of contribution: | User Interfaces and Interactions with Users |

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|---|---|
| Type: | Journal |
| Acronym: | IJCSE |
| Full name: | International Journal of Computational Science and Engineering - Inderscience |
| URL: | http://www.inderscience.com/jhome.php?jcode=ijcse |
| Submission deadline: | 2016-12-31 |
| Short description of contribution: | Paper on simulator |

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|---|---|
| Type: | Journal |
| Acronym: | IJHPCN |
| Full name: | International Journal of High Performance Computing and Networking - Inderscience |
| URL: | http://www.inderscience.com/jhome.php?jcode=ijhpcn |
| Submission deadline: | 2016-12-31 |
| Short description of contribution: | Paper on IT Platform |

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| Type: | Journal |
| Acronym: | JISA |
| Full name: | Special Issue on Software Engineering from a Social Network Perspective SpringerOpen Journal of Internet Services and Applications |
| URL: | http://www.jisajournal.com/manuscript |
| Submission deadline: | 2014-07-01 |
| Short description of contribution: | Socio-technical networks in software development |

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| Type: | Journal |
| Acronym: | JOCS |
| Full name: | Journal of Computational Science - Elsevier . Special Issue |
| URL: | http://www.journals.elsevier.com/journal-of-computational-science/call-for-papers/special-issue-on-optimization-in-distributed-information-sys |
| Submission deadline: | 2016-11-30 |
| Short description of contribution: | Paper on MultiAgent Optimization |

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|---|---|
| Type: | Workshop |
| Acronym: | CCPI'2014 |
| Full name: | Cloud Computing Projects and Initiatives |
| URL: | http://ccpi.unina2.it |
| Submission deadline: | 2014-05-20 |
| Date for event: | 2014-09-10 |
| Suggested authors: | all project members |
| Short description of contribution: | all activities related to or involving Cloud Usage |

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|---|--|
| Type: | Workshop |
| Acronym: | Computing Frontiers 2015 |
| Full name: | ACM International Conference on Computing Frontiers 2015 |
| URL: | http://www.computingfrontiers.org/2015/ |
| Submission deadline: | 2015-01-31 |
| Date for event: | 2015-05-21 |
| Suggested authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinque |
| Short description of contribution: | It is an alternative solution to the negotiation approach we are designed in cosmic based on brokering of the best collection of proposals and negotiation. Moreover it includes requirements and design for a communication layer implemented over the retroshare technology. |

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| Type: | Workshop |
| Acronym: | EASyCoSe 2014 |
| Full name: | Second International WorkShop on Energy-Aware Systems, Communications and Security |
| URL: | http://voyager.ce.fit.ac.jp/conf/incos/2014/ |
| Submission deadline: | 2014-04-01 |
| Date for event: | 2014-09-10 |
| Suggested authors: | WP3/WP4 Contributors |

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|-------------------|---|
| Type: | Workshop |
| Acronym: | WOA |
| Full name: | XVI WORKSHOP "DAGLI OGGETTI AGLI AGENTI |
| URL: | http://www.cogrobotics.unina.it/woa15/index.php |

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|---|---|
| Submission deadline: | 2015-03-27 |
| Date for event: | 2015-06-17 |
| Suggested authors: | Alba Amato, Marco Scialdone, Salvatore Venticinque |
| Short description of contribution: | An application of learning agents to smart energy domains |

3.3. Scientific Dissemination Citations

| | |
|-------------------|--|
| Title: | A Cyber Physical System of Smart Micro-Grids |
| Authors: | Authors of Document Amato, A., Aversa, R., Di Martino, B., Venticinque, S. |
| Citations: | 0 |

| | |
|-------------------|--|
| Title: | A DISTRIBUTED AGENT-BASED SYSTEM FOR COORDINATING SMART SOLAR-POWERED MICORGRIDS |
| Authors: | Shanshan Jiang, Salvatore Venticinque, Geir Horn, Svein Hallsteinsen, Matthias Noebels |
| Citations: | 0 |

| | |
|-------------------|--|
| Title: | A distributed system for smart energy negotiation |
| Authors: | Alba Amato, Beniamino Di Martino, Salvatore Venticinque, Svein Hallsteinsen , Shanshan Jiang |
| Citations: | 8 |

| | |
|-------------------|---|
| Title: | A Negotiation Solution for Smart Grid Using a Fully Decentralized, P2P Approach |
| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Citations: | 1 |

| | |
|-------------------|--|
| Title: | A review of systems and technologies for smart homes and smart grids |
| Authors: | Gabriele Lobaccaro, Salvatore Carlucci, Erica Löfström |
| Citations: | 6 |

| | |
|-------------------|---|
| Title: | A Virtual Market for Energy Negotiation and Brokering |
| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Citations: | 0 |

| | |
|-----------------|---|
| Title: | Agent based negotiation of decentralized energy production |
| Authors: | Luca Tasquier, Marco Scialdone, Rocco Aversa, and Salvatore Venticinque |

| | |
|-------------------|---|
| Citations: | 2 |
|-------------------|---|

| | |
|-------------------|---|
| Title: | An Agent-based Approach for Smart Energy Grids |
| Authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone and Salvatore Venticinque |
| Citations: | 4 |

| | |
|-------------------|--|
| Title: | An agent-based collaborative platform for the optimized trading of renewable energy within a community |
| Authors: | Luca Tasquier and Rocco Aversa |
| Citations: | 1 |

| | |
|-------------------|---|
| Title: | An application of learning agents to smart energy domains |
| Authors: | Authors of Document Amato, A., Scialdone, M., Venticinque, S. |
| Citations: | 0 |

| | |
|-------------------|--|
| Title: | Combining Persuasive Computing and User Centered Design into an Energy Awareness System for Smart Houses |
| Authors: | Thomas Vilarinho, Babak Farshchian, Leendert W. M. Wienhofen |
| Citations: | 0 |

| | |
|-------------------|--|
| Title: | CoSSMic smart grid migration in federated clouds |
| Authors: | Alba Amato, Rocco Aversa, Massimo Ficco, and Salvatore Venticinque |
| Citations: | 1 |

| | |
|-------------------|--|
| Title: | Design and evaluation of P2P overlays for energy negotiation in smart micro-grid |
| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Citations: | 3 |

| | |
|-------------------|--|
| Title: | Designing an Application Store for the Internet of Things: Requirements and Challenges |
| Authors: | Simon Stastny, Babak A. Farshchian, Thomas Vilarinho |
| Citations: | 0 |

| | |
|-------------------|--|
| Title: | Developing and investigating a smart solar powered energy system for increased PV self-consumption |
| Authors: | Matthias Noebels, Joachim Glatz-Reichenbach, Ahmed Mahran, Adrian Minde, Kristian Peter |
| Citations: | 0 |

| | |
|-------------------|---|
| Title: | Distributed architecture for agents-based energy negotiation in solar powered micro-grids |
| Authors: | Authors of Document Amato, A., Di Martino, B., Scialdone, M., Venticinque, S. |
| Citations: | 2 |

| | |
|-------------------|--|
| Title: | End User Centred Interactive Software Architecture and Design: The Creation of Communities for a Smart Energy Use |
| Authors: | Joachim Glatz-Reichenbach, Thomas Vilarinho, Giuseppina Cretella, Carmel Lindkvist, Adrian Minde, Leendert W. M. Wienhofen |
| Citations: | 3 |

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| Title: | Inferring Appliance Load Profiles From Measurements |
| Authors: | Geir Horn, Salvatore Venticinque, Alba Amato |
| Citations: | 2 |

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| Title: | MULTI-AGENT NEGOTIATION OF DECENTRALIZED ENERGY PRODUCTION IN SMART MICRO-GRID |
| Authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone and Salvatore Venticinque |
| Citations: | 6 |

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| Title: | OPTIMIZING THE SELF-CONSUMPTION OF SOLAR POWERED MICRO GRIDS |
| Authors: | A. Mahran, A. Minde, M. Noebels, K. Peter, J. Glatz-Reichenbach |
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| Title: | Scheduling Time Variant Jobs on a Time Variant Resource |
| Authors: | Geir Horn |
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| Title: | Software Agents for Collaborating Smart Solar-powered Micro-grids |
| Authors: | Alba Amato, Rocco Aversa, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinque, Svein Hallsteinsen, Geir Horn |
| Citations: | 8 |

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| Title: | Towards a IoT Framework for the Matchmaking of Sensors' Interfaces |
| Authors: | Beniamino Di Martino, Giuseppina Cretella, Antonio Esposito |
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| Title: | Towards a SLA for Collaborating Smart Solar-powered Micro-grids |
| Authors: | Alba Amato, Beniamino Di Martino, Marco Scialdone, Salvatore Venticinque |
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| Title: | User-centered design for smart solar-powered micro-grid communities |
| Authors: | Leendert Wienhofen, Carmel Lindkvist, Mattias Noebels |
| Citations: | 5 |