

Proposal for
A Working Group on Human-Agent Communications

Submitted to
IEEE FIPA Standards Committee

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Problem Statement:

The primary goal of the proposed Working Group (WG) on Human-Agent Communications is to produce one or more IEEE standards that extends the current FIPA performatives for human agent communications. Even though current FIPA agent communication language can be applied to human agent communications, they were not designed for communications in which agents assist human in various contexts (e.g., decision makings). An extended set of performatives for human agent communications can facilitate the application of agent technologies to domains that involve agents assisting human regarding decision makings.

Objective:

The goals of the proposed WG on Human-Agent Communications is to propose extensions (i.e., additional performatives) to FIPA agent communication language to facilitate agent communicating with human in general. Due to the wide variety of contexts in which agent collaborates with human, the effort of the first year will focus on human-agent communications in the context of decision makings. Other contexts of human-agent communications will be considered after the first year.

Participation:

A list serve will be established for the WG so that members of the WG can discuss using e-mail. We will also look into the possibility of setting up a Web-based discussion site for tracking comments on proposed performatives.

Documents Generated:

The working group is expected to generate a standard document regarding an additional set of FIPA performatives.

Technology:

The effort will be built upon published relevant research results regarding agent communication languages and their semantics.

Plan for Work and Milestones:

We list below the plan for the first year of the WG. Plan for future years, if the WG continues, will follow a similar schedule.

[1 month] Elect officers. Solicit proposed extensions (and their semantics) to FIPA ACL for human-agent communications.

[2 month] Distribute the set of proposed extensions to the WG for

Discussions, comments.

[3 month] The WG decides the set of performatives to be included in the proposal.

[4-5 months] The WG refines the semantics of the proposed performatives.

[6 month] The WG proposes to IEEE FIPA Standard Committee a set of performatives for human agent communications.

[7-8 month] The WG works with FIPA to address comments, decide to adopt “friendly amendments”.

[9 month] FIPA votes on the proposed standard.

[10-12 month] If approved by FIPA, the WG works with IEEE Standard Activities to provide relevant information or needed support to turn the document into an IEEE standard document,

[12 month] Solicit inputs from the WG regarding the direction for year 2 activities.

Dependencies:

The working group will collaborate with related standard activities such as Agentlink Technical Forum Group on "Towards a Standard Agent to Agent Argumentation Interchange Format". A complete list of these related activities will be established by collecting inputs from FIPA. The working group will contact each one of these activities to identify the way and frequency for information exchanges and updates. If close collaboration is needed with a group, we will identify a liaison person for each such group.

Contact Person:

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Participants (classification into submitters/supprters are tentative):

Submitters

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- Michael S. Kerstetter, The Boeing Company, USA
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Supporters

- Laurel Allender, Army Research Lab, USA
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