

FOUNDATION FOR INTELLIGENT PHYSICAL AGENTS

FIPA Subscribe Communicative Act Specification

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37 specifications and upcoming meetings may be found at <http://www.fipa.org/>.

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1 Scope

This document specifies the Subscribe communicative act that is compliant to [FIPA00037] requirements.

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2 Subscribe

Summary	The act of requesting a persistent intention to notify the sender of the value of a reference, and to notify again whenever the object identified by the reference changes.
Content	A descriptor (a referential expression).
Description	The <i>subscribe</i> act is a persistent version of the <i>query-ref</i> act (see [FIPA00054]), such that the agent receiving the <i>subscribe</i> will <i>inform</i> (see [FIPA00046]) the sender of the value of the reference, and will continue to send further <i>informs</i> if the object denoted by the description changes.
Formal Model	<div><i, subscribe(j, Ref x (x))> <i, request-whensoever(j, <j, inform-ref(i, Ref x (x))>, (y) B_j ((Ref x (x) = y)))> FP: B_i B_i (Bif_j Uif_j) RE: B_j</div> <div>Where:</div> <div> = I_i Done(<j, inform-ref(i, Ref x (x))>, (e) Enables(e, (y) B_j ((Ref x (x) = y)))</div> <div>Note: Ref x (x) is one of the referential expressions: x (x), any x (x) or all x (x).</div>
Example	<div>Agent i wishes to be updated on the exchange rate of Francs to Dollars, and makes a subscription agreement with j (an exchange rate server).</div> <div>(subscribe :sender i :receiver j :content (iota ?x (= ?x (xch-rate FFr USD))))</div>

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47 **3 References**

- 48 [FIPA00037] FIPA Communicative Act Library Specification. Foundation for Intelligent Physical Agents, 2000.
49 <http://www.fipa.org/specs/fipa00037/>
- 50 [FIPA00046] FIPA Inform Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.
51 <http://www.fipa.org/specs/fipa00046/>
- 52 [FIPA00054] FIPA Query Ref Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.
53 <http://www.fipa.org/specs/fipa00054/>