

# FOUNDATION FOR INTELLIGENT PHYSICAL AGENTS

## FIPA Request When Interaction Protocol Specification

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## Foreword

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# 1 FIPA Request When Interaction Protocol

The FIPA Request When Interaction Protocol (IP) provides a framework for the *request-when* communicative act (see [FIPA00058]). The initiator uses the *request-when* action to request that the participant do some action once a given precondition becomes true. If the requested agent understands the request and does not initially refuse, it will *agree* (see [FIPA00040]) and wait until the precondition occurs. Then, it will attempt to perform the action and notify the requester accordingly. If after the initial agreement the participant is no longer able to perform the action, it will send a *refuse* action (see [FIPA00055]) to the initiator.

The representation of this IP is given in *Figure 1*.

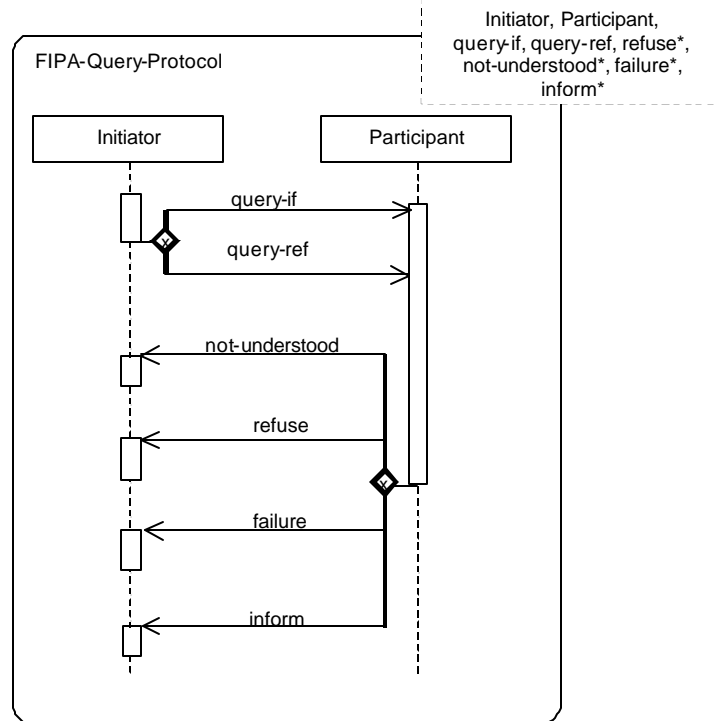


Figure 1: FIPA Query Interaction Protocol

## 1.1 Exceptions to Interaction Protocol Flow

This IP is a pattern for a simple interaction type. Elaboration on this pattern will almost certainly be necessary in order to specify all cases that might occur in an actual agent interaction. Real world issues of cancelling actions, asynchrony, abnormal or unexpected IP termination, nested IPs, and the like, are explicitly not addressed here.

## 2 References

- [FIPA00040] FIPA Agree Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.  
<http://www.fipa.org/specs/fipa00040/>
- [FIPA00055] FIPA Refuse Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.  
<http://www.fipa.org/specs/fipa00055/>
- [FIPA00058] FIPA Request When Communicative Act Specification. Foundation for Intelligent Physical Agents, 2000.  
<http://www.fipa.org/specs/fipa00058/>