This specification provides canonical documentation of the obsolete Agent Information namespace.
Note: This document has been superseded by XEP-0030: Service Discovery.
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1 Introduction

Over the years there have been three different protocols used in the Jabber community to discover information about other entities on the network. The most recent protocol, and the only one that is standards-track, is Service Discovery (XEP-0030) 1. The protocol prior to Service Discovery was Jabber Browsing (XEP-0011) 2. Before Jabber Browsing, there was the 'jabber:iq:agents' namespace. This specification provides historical documentation for the Agent Information protocol.

Note well that the Agent Information protocol is deprecated; applications desiring such functionality SHOULD implement Service Discovery. This specification is provided only in order to ensure complete documentation of earlier protocols.

2 Definition

The 'jabber:iq:agents' namespace was used to obtain a list of entities associated with another Jabber Entity; most commonly, the list of trusted services associated with a specific host. When 'jabber:iq:agents' is used, information about available agents properties is contained within a <query/> element that is scoped by the 'jabber:iq:agents' namespace. The reply to a request of type "get" in the 'jabber:iq:agents' namespace contains zero or more <agent/> elements. The <agent/> element has a required 'jid' attribute that contains the Jabber Identifier of each agent. The <agent/> element in turn may contain the following children:

- name - a natural-language name for the service
- description - a short phrase describing the service
- transport - inclusion of this empty element signals that the service is a gateway to a non-Jabber instant messaging system
- groupchat - inclusion of this empty element signals that the service is multi-user chat service
- service - the CDATA of this element specifies the type of gateway (aim, icq, irc, msn, yahoo), the type of conferencing service (public or private), or user directory (jud); these values were never standardized and are not registered with the XMPP Registrar
- register - inclusion of this empty element signals that the service supports registration
- search - inclusion of this empty element signals that the service supports searching

3 Examples

Listing 1: Request for Agents List

```xml
<iq id='agents1' type='get' to='shakespeare.lit'>
  <query xmlns='jabber:iq:agents'/>
</iq>
```

Listing 2: Reply Containing Agents List

```xml
<iq
  to='juliet@capulet.com/balcony'
  from='shakespeare.lit'
  type='result'
  id='agents1'>
  <query xmlns='jabber:iq:agents'>
    <agent jid='users.shakespeare.lit'>
      <name>Jabber User Directory</name>
      <service>jud</service>
      <search/>
      <register/>
    </agent>
    <agent jid='chat.shakespeare.lit'>
      <name>Conferencing Service</name>
      <service>public</service>
      <groupchat/>
    </agent>
  </query>
</iq>
```

4 Security Considerations

There are no security features or concerns related to this proposal.

5 IANA Considerations

This document requires no interaction with the Internet Assigned Numbers Authority (IANA) ¹.

¹The Internet Assigned Numbers Authority (IANA) is the central coordinator for the assignment of unique parameter values for Internet protocols, such as port numbers and URI schemes. For further information, see <http://www.iana.org/>.
6 XMPP Registrar Considerations

No action on the part of the XMPP Registrar is necessary as a result of this document, since 'jabber:iq:agents' is already a registered namespace.

7 XML Schema

```xml
<?xml version='1.0' encoding='UTF-8'?>
<xs:schema
  xmlns:xs='http://www.w3.org/2001/XMLSchema'
  targetNamespace='jabber:iq:agents'
  xmlns='jabber:iq:agents'
  elementFormDefault='qualified'>

<xs:element name='query'>
  <xs:complexType>
    <xs:sequence minOccurs='0' maxOccurs='unbounded'>
      <xs:element ref='agent' minOccurs='0' maxOccurs='unbounded'/> 
    </xs:sequence>
  </xs:complexType>
</xs:element>

<xs:element name='agent'>
  <xs:complexType>
    <xs:sequence>
      <xs:element ref='name' minOccurs='0' maxOccurs='1'/>
      <xs:element ref='description' minOccurs='0' maxOccurs='1'/>
      <xs:element ref='transport' minOccurs='0' maxOccurs='1'/>
      <xs:element ref='groupchat' minOccurs='0' maxOccurs='1'/>
      <xs:element ref='service' minOccurs='0' maxOccurs='1'/>
      <xs:element ref='register' minOccurs='0' maxOccurs='1'/>
      <xs:element ref='search' minOccurs='0' maxOccurs='1'/>
    </xs:sequence>
    <xs:attribute name='jid' type='xs:string' use='required'/>
  </xs:complexType>
</xs:element>

<xs:element name='name' type='xs:string'/>
<xs:element name='description' type='xs:string'/>
<xs:element name='transport'/>
<xs:element name='groupchat'/>
<xs:element name='service' type='xs:string'/>
</xs:schema>
```

4The XMPP Registrar maintains a list of reserved protocol namespaces as well as registries of parameters used in the context of XMPP extension protocols approved by the XMPP Standards Foundation. For further information, see <https://xmpp.org/registrar/>.
<xs:element name='register'/>
<xs:element name='search'/>
</xs:schema>