



XMPP

XEP-0379: Pre-Authenticated Roster Subscription

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This document defines a protocol and URI scheme for pre-authenticated roster links that allow a third party to automatically obtain the user's presence subscription. The goal of this is to make onboarding of new XMPP IM contacts as easy as possible.

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1 Introduction

Romeo is an active XMPP IM (Instant Messaging) user. He convinces Juliet (who doesn't have an XMPP account yet) to install a client and register with some server. Now, Romeo only needs to create a mutual presence subscription with her, without yet knowing her JID.

This specification allows Romeo to create an out-of-band link (URI) which, when opened in Juliet's (or another user's) client, will:

- Add Romeo to Juliet's roster (with a display name optionally specified by Romeo)
- Add Juliet to Romeo's roster (without a pre-defined display name)
- Establish a mutual presence subscription between Romeo and Juliet

The perceivable effect is that with a single click, Romeo and Juliet become "friends" in terms of XMPP presence subscription.

2 Requirements

This specification makes use of XMPP URIs. The basic URI scheme for XMPP is defined in [RFC 5122](#)¹ and extended in [XMPP URI Query Components \(XEP-0147\)](#)² to support different actions like "roster" for roster addition and "subscribe" for presence subscription.

3 Pre-Authenticated Roster Subscription

The process of mutual roster addition and subscription involves multiple steps:

1. Generation of invitation link
2. Out-of-band transmission and presentation of the link
3. Subscription request to the user by the link receiver (new contact)
4. Approval by the user and mutual subscription request
5. Approval by the new contact

The general idea of the protocol and the details of the individual steps are outlined in the following.

¹RFC 5122: Internationalized Resource Identifiers (IRIs) and Uniform Resource Identifiers (URIs) for the Extensible Messaging and Presence Protocol (XMPP) <<http://tools.ietf.org/html/rfc5122>>.

²XEP-0147: XMPP URI Query Components <<https://xmpp.org/extensions/xep-0147.html>>.

