



[Home](#) [Projects](#) [Community](#) [Contribute](#) [About](#) [Contact](#)

CAS

- [Community](#)
- [Download](#)
- [News & Events](#)
- [Client integration](#)
- [Server Deployment](#)
- [Developers](#)
 - [Roadmap](#)
 - [Source Repository](#)
 - [Public APIs](#)
 - [Using Maven](#)
 - [Protocol](#)
- [Support](#)
- [About](#)

Home » Projects » CAS » Developers » Protocol

CAS Protocol

Join the Discussion

- [All lists](#)
- [Jasig lists](#)
- [uPortal lists](#)
- [CAS lists](#)
- [Portlet lists](#)
- [Bedework lists](#)



Author: [Drew Mazurek](#)

Contributors:

- [Susan Bramhall](#)
- [Howard Gilbert](#)
- [Andy Newman](#)
- [Andrew Petro](#)

Version: 1.0

Release Date: May 4, 2005

Copyright © 2005, Yale University

1. Introduction

This is the official specification of the CAS 1.0 and 2.0 protocols. It is subject to change.

1.1. Conventions & Definitions

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119^[1].

- "Client" refers to the end user and/or the web browser.
- "Server" refers to the Central Authentication Service server.
- "Service" refers to the application the client is trying to access.
- "Back-end service" refers to the application a service is trying to access on behalf of a client. This can also be referred to as the "target service."
- <LF> is a bare line feed (ASCII value 0x0a).

2. CAS URIs

CAS is an HTTP^[2,3]-based protocol that requires each of its components to be accessible through specific URIs. This section will discuss each of the URIs.

2.1. /login as credential requestor

The /login URI operates with two behaviors: as a credential requestor, and as a credential acceptor. It responds to credentials by acting as a credential acceptor and otherwise acts as a credential requestor.

If the client has already established a single sign-on session with CAS, the web browser presents to CAS a secure cookie containing a string identifying a ticket-granting ticket. This cookie is called the ticket-granting cookie. If the ticket-granting cookie keys to a valid ticket-granting ticket, CAS may issue a service ticket provided all the other conditions in this specification are met. See Section 3.6 for more information on ticket-granting cookies.

2.1.1. parameters

The following HTTP request parameters may be passed to /login while it is acting as a credential requestor. They are all case-sensitive, and they all MUST be handled by /login.

- service [OPTIONAL] - the identifier of the application the client is trying to access. In almost all cases, this will be the URL of the application. Note that as an HTTP request parameter, this URL value MUST be URL-encoded as described in Section 2.2 of RFC 1738^[4]. If a service is not specified and a single sign-on session does not yet exist, CAS SHOULD request credentials from the user to initiate a single sign-on session. If a service is not specified and a single sign-on session already exists, CAS SHOULD display a message notifying the client that it is already logged in.
- renew [OPTIONAL] - if this parameter is set, single sign-on will be bypassed. In this case, CAS will require the client to present credentials regardless of the existence of a single sign-on session with CAS. This parameter is not compatible with the "gateway" parameter. Services redirecting to the /login URI and login form views posting to the /login URI SHOULD NOT set both the "renew" and "gateway" request parameters. Behavior is undefined if both are set. It is RECOMMENDED that CAS implementations ignore the "gateway" parameter if "renew" is set. It is RECOMMENDED that when the renew parameter is set its value be "true".
- gateway [OPTIONAL] - if this parameter is set, CAS will not ask the client for credentials. If the client has a pre-existing single sign-on session with CAS, or if a single sign-on session can be established through non-interactive means (i.e. trust authentication), CAS MAY

© 2009 Jasig. All rights reserved. | Design and hosting by WebChuck Web.