

Sharing M3 content with Partners

Contents

- [Introduction](#)
 - [Overview of Oauth 2.0 solution](#)
 - [Simplified Overview of Flow](#)
 - [Header/Footer \(optional\)](#)
 - [Reporting](#)
 - [Overview of signed URLs solution](#)
- [Oauth 2.0 Technical Implementation](#)
 - [Introduction](#)
 - [OAuth Authentication Flow](#)
 - [API Specification](#)
- [Signed URLs technical implementation](#)

Introduction

The purpose of this document is to outline two solutions for enabling M3 content to be shared with verified users of partner communities.

The two solutions are:

1. Oauth 2.0
2. Signed URLs

The first half of this document will give a general overview of the two solutions on offer which should be enough to decide which is most appropriate. The second half then gives detailed implementation details of each.

Overview of Oauth 2.0 solution

The first proposal is to utilise the Oauth 2.0 standard to share specific pieces of M3 content with users of a partner community in a way that is secure and enables M3 to accurately track engagement.

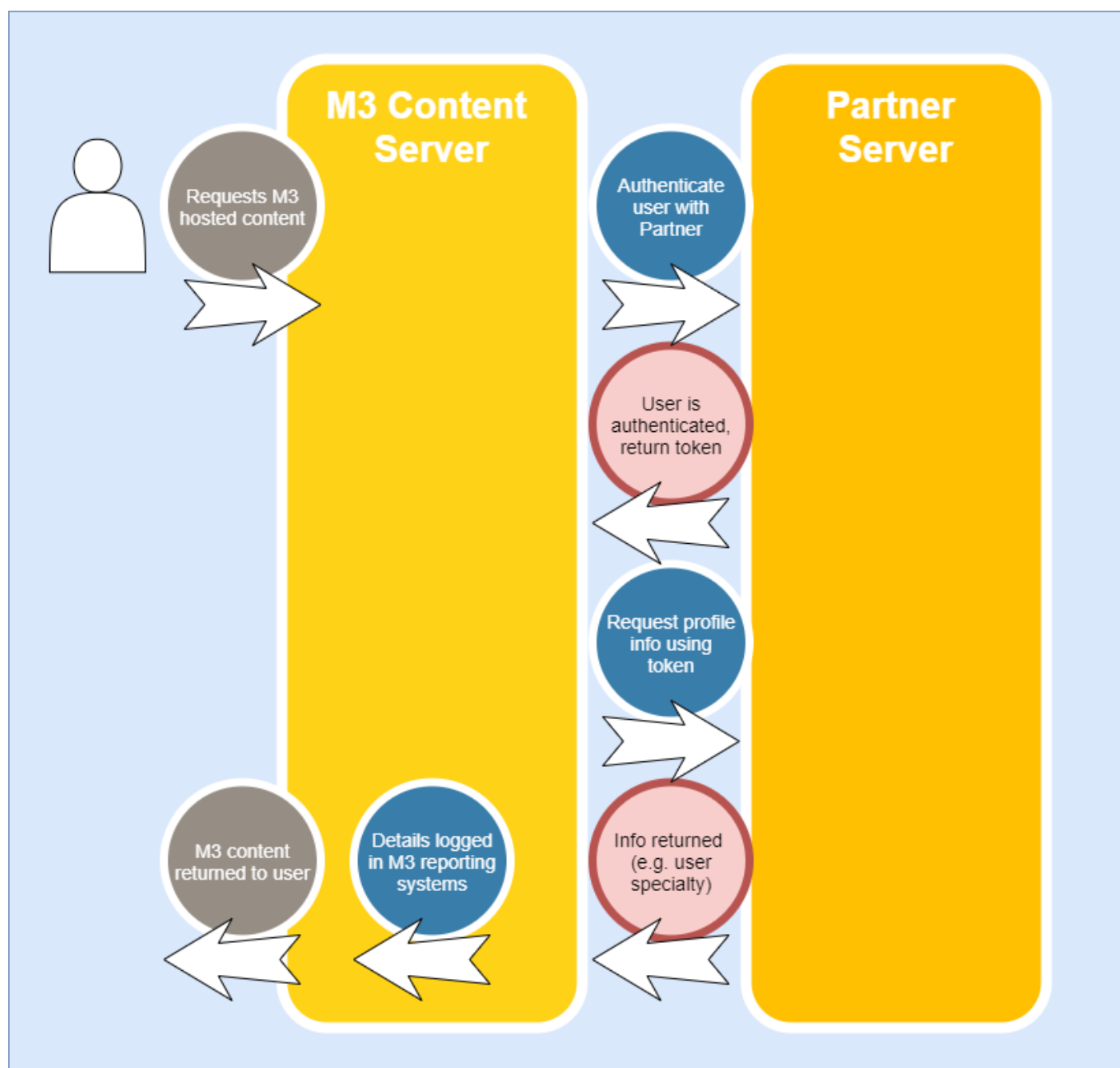
Principles of this approach:

- Partner members do not need to register with M3
- Partner members will only have access to specific agreed pieces of content, they are not granted access to M3 websites as a whole
- Agreed set of member profile information is shared with M3 for reporting purposes only, but never enough to personally identify a user

Simplified Overview of Flow

Detailed documentation of the Oauth flow and work needed to implement it can be found later in this document, but the below gives a simplified view of the flow.

If the partner member is already logged into the partner site the flow below will be invisible to the user and happen "behind the scenes". If not already logged in the member will be interrupted with the partner site login form after the first step.



Header/Footer (optional)

There is the option of wrapping the M3 content inside a partner header and footer. This gives the user the impression that they are moving to another area of the partner's site. To achieve this M3 requires the partner to provide separate API endpoints which return the HTML of the header or the footer as requested.

This also provides the member a means to get back to the partner website.

If the partner header/footer is static, i.e. has no personalisation and is the same for all members, the HTML can simply be provided to M3 by the partner prior to content being published (no API endpoints needed).

PARTNER SITE HEADER AND MENU

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HIGHLIGHTS FROM

EASD 2019

55th Annual Meeting of the European Association for the Study of Diabetes
Barcelona, Spain 16 - 20 September 2019

SCROLL TO ARTICLES

Professor Hertzel Gerstein (REWIND)

In this podcast, Professor Hertzel Gerstein, Endocrinologist at McMaster University, Canada discusses results from the REWIND trial, describing cardiovascular outcomes for patients with type 2 diabetes treated with dulaglutide and how these results compare with data from other GLP-1 receptor agonist cardiovascular outcome trials.

Professor Hertzel Gerstein's disclosures:
Research funding: Eli Lilly, AstraZeneca, Merck, Novo Nordisk, Sanofi.
Consulting/ advisory boards/ speaker: Abbott, AstraZeneca, Boehringer Ingelheim, Eli Lilly, Merck, Novo Nordisk, Janssen Pharmaceuticals, Sanofi, Kowa Pharmaceuticals, Cirus Therapeutics.

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PODCASTS

- ▶ Professor Hertzel Gerstein (REWIND)
- ▶ Dr Katarina Braune (digital apps)
- ▶ Professor Carol Pollock (CREDENCE)
- ▶ Professor Stephen Bain (PIONEER)

ARTICLES

Recent advances in diabetes management

Canagliflozin trial shows positive renal and cardiovascular outcomes

👍 2

Digital apps can reduce cognitive load for patients with diabetes

👍 2

Oral formulation of semaglutide proves effective across broad spectrum of patients with type 2 diabetes

👍 0

Dulaglutide reduces risk of CV and renal composite outcomes in patients with T2D

👍 1

Anti-CD3 monoclonal antibody teplizumab can delay the onset of type 1 diabetes

👍 1

Top image: © iStockPhoto: Kwangmoozaa

The content and interpretation of these conference highlights are the views and comments of the speakers/ authors.

PARTNER SITE FOOTER

Reporting

As a minimum M3 will report on total engagement (impressions and clicks) and unique member engagement, and the only requirement for this to be possible is for a unique ID to be sent for each member as part of the Oauth flow.

For more detailed reporting M3 requires extra information to be passed, these are known as "scopes". The below defines typical scopes that can be used:

Scope	Description
User ID	A unique ID per user, may be a string or number
Specialty	The user's medical specialty

Scope	Description
Seniority	The user's medical seniority
Country	
Doctor	True or False. Useful for distinguishing staff/test accounts for example
Groups	This allows an arbitrary list of tags to be assigned to a user. Can be useful if custom reporting is required that can't be satisfied by the above, for example by age groups

It is important that whatever info is transferred isn't enough to personally identify anyone. For example if postcode was passed in groups this may be fine on it's own, but in combination with user specialty it may become enough to find someone's identity.

Overview of signed URLs solution

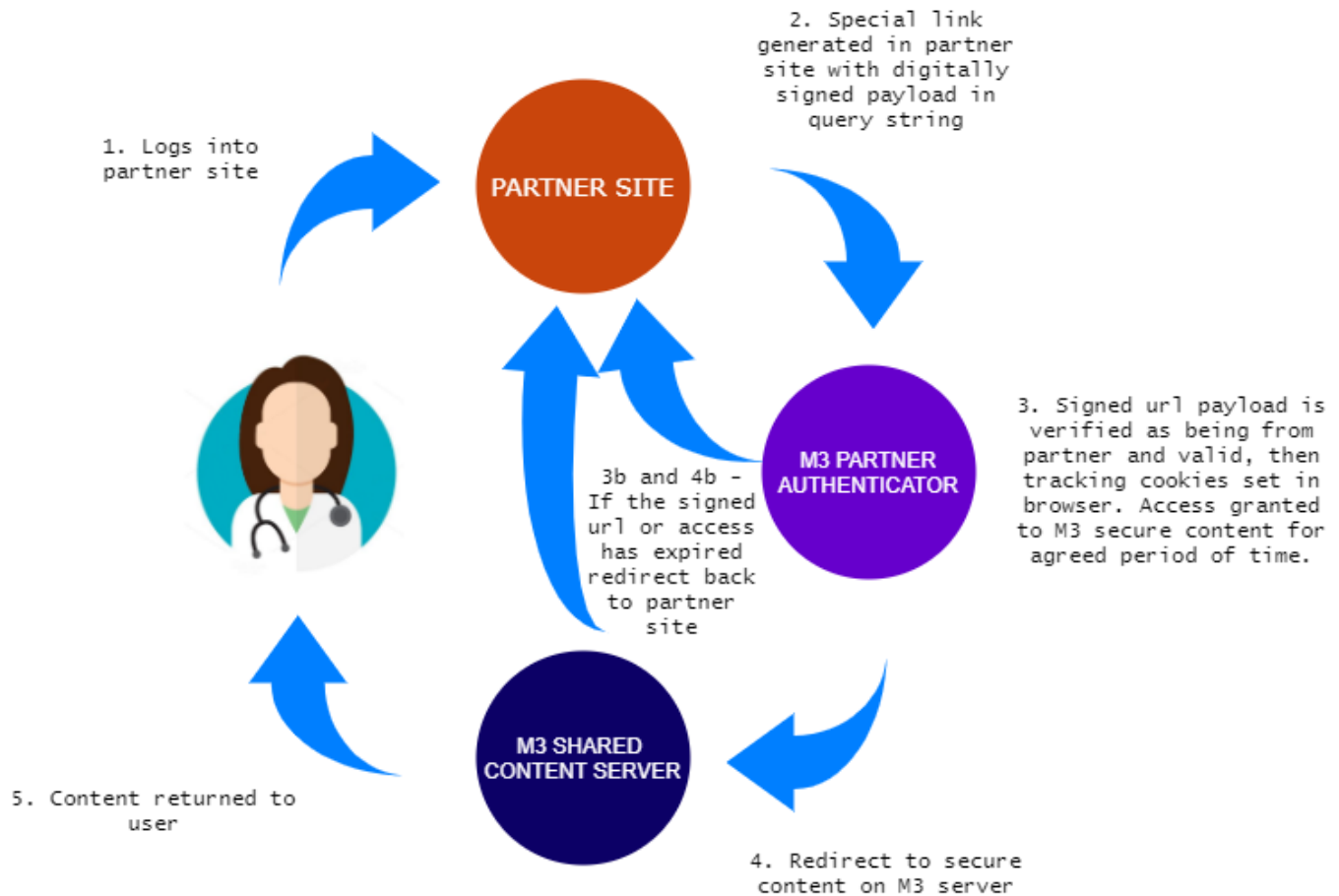
For partners that don't already have OAuth 2.0 capabilities it can be quite an undertaking to implement, therefore M3 offers signed URLs as a much simpler option.

In this approach the partner site generate links to the M3 content which have a special encrypted token in the URL for example: `https://content.m3medical.com/partnerauth?payload=ewoJIiBhcnRuZXIiOiJQVJUTkVSSUQiLAKJCQkJCQkJKiByZXF1=`

The payload part would be generated with a secret key provided by M3, meaning only M3 can decrypt it.

Each link would only be valid for a short period of time, which is designed to prevent users sharing links. If M3 receives an expired link, the user will be redirected back to the partner site where a fresh link can be generated.

An overview of this flow can be seen in the diagram below.



OAuth 2.0 Technical Implementation

Introduction

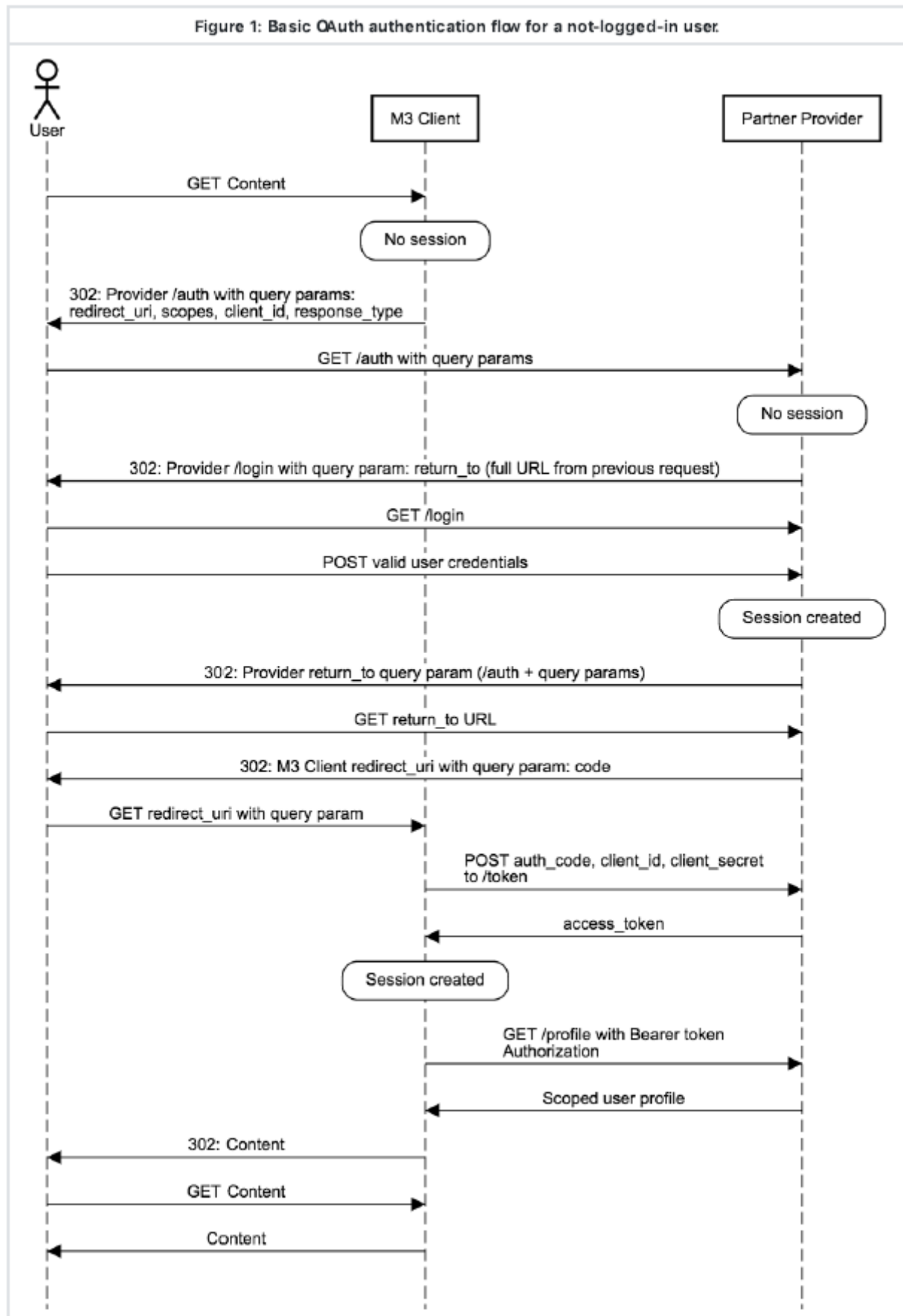
Authentication is handled using the OAuth 2.0 specification. OAuth is an open standard designed to enable users to authenticate themselves on site A using their existing account on site B. This is ideal for the scenario of sharing M3's content with partner communities.

The OAuth authentication flow uses a number of user-agent redirects, passing data using query parameters and a server-to-server request to establish a login session. Visualising the flow can be difficult, so below is a sequence diagram showing the full flow of a non-logged-in user landing on M3 content for the first time.

OAuth Authentication Flow

We will first consider the case where a user arrives without a session on the client. The steps required to establish a session on the M3 Client can be summarised by the following points:

1. Create a cookie-based session on the partner OAuth provider.
2. Pass an auth_code to the M3 OAuth Client from the Partner Provider via user-agent redirect.
3. Make a server-to-server request from the M3 OAuth Client to the provider to exchange the auth_code for an access_token .
4. Make a server-to-server request from the M3 OAuth Client to the provider to get the user profile using the access_token .
5. Create a cookie-based session on the M3 Client.



API Specification

To enable all of the above the Partner needs to implement the following API endpoints:

Method	Url	Description
GET	/oauth/auth	If the M3 client finds that the user has no valid session, then it will redirect the user to the PP Authorise endpoint.
POST	/oauth/token	After the PP has redirected the user to the M3OC callback endpoint, a server-to-server request will be made to exchange the provided auth_code for a valid access_token . The POST body will be sent with form encoding.
GET	/oauth/profile	Returns scoped profile information
GET	/api/header	(OPTIONAL) Serves the site header as a snippet of HTML that can be inserted into any page
GET	/api/footer	(OPTIONAL) Serves the site header as a snippet of HTML that can be inserted into any page

Signed URLs technical implementation