The Meteor Accounts system builds on top of the userId support in <u>publish</u> and <u>methods</u>. The core packages add the concept of user documents stored in the database, and additional packages add <u>secure password authentication</u>, <u>integration with third party login services</u>, and a <u>pre-built user interface</u>.

The basic Accounts system is in the accounts-base package, but applications typically include this automatically
by adding one of the login provider packages: accounts-password, accounts-facebook, accounts-weibo.

Read more about customizing user accounts in the Accounts article in the Meteor Guide.

```
{% apibox "Meteor.user" %}
```

Retrieves the user record for the current user from the Meteor.users collection.

On the client, the available fields will be those that are published from the server (other fields won't be available on the client). By default the server publishes username, emails, and profile (writable by user). See

Meteor.users for more on the fields used in user documents.

On the server, this will fetch the record from the database. To improve the latency of a method that uses the user document multiple times, save the returned record to a variable instead of re-calling Meteor.user().

Fetching the full user document can cause unnecessary database usage on the server and over-reactivity on the client, particularly if you store lots of custom data on it. Therefore it is recommended to use the options parameter to only fetch the fields you need:

```
const userName = Meteor.user({fields: {'profile.name': 1}}).profile.name;
```

{% apibox "Meteor.userId" %}

{% apibox "Meteor.users" %}

This collection contains one document per registered user. Here's an example user document:

```
{
 id: 'QwkSmTCZiw5KDx3L6', // Meteor.userId()
 username: 'cool kid 13', // Unique name
 emails: [
   // Each email address can only belong to one user.
   { address: 'cool@example.com', verified: true },
   { address: 'another@different.com', verified: false }
 createdAt: new Date('Wed Aug 21 2013 15:16:52 GMT-0700 (PDT)'),
   // The profile is writable by the user by default.
   name: 'Joe Schmoe'
 services: {
   facebook: {
     id: '709050', // Facebook ID
     accessToken: 'AAACCgdX7G2...AbV9AZDZD'
   },
   resume: {
     loginTokens: [
```

A user document can contain any data you want to store about a user. Meteor treats the following fields specially:

- username: a unique String identifying the user.
- emails: an Array of Objects with keys address and verified; an email address may belong to at
 most one user. verified is a Boolean which is true if the user has verified the address with a token sent
 over email.
- createdAt: the Date at which the user document was created.
- profile : an Object which the user can create and update with any data. Do not store anything on profile that you wouldn't want the user to edit unless you have a deny rule on the Meteor.users collection
- services: an Object containing data used by particular login services. For example, its reset field
 contains tokens used by <u>forgot password</u> links, and its resume field contains tokens used to keep you
 logged in between sessions.

Like all Mongo.Collections, you can access all documents on the server, but only those specifically published by the server are available on the client. You can also use all Collection methods, for instance Meteor.users.remove on the server to delete a user.

By default, the current user's username, emails and profile are published to the client. You can publish additional fields for the current user with:

```
// Server
Meteor.publish('userData', function () {
   if (this.userId) {
      return Meteor.users.find({ _id: this.userId }, {
        fields: { other: 1, things: 1 }
      });
   } else {
      this.ready();
   }
});
// Client
Meteor.subscribe('userData');
```

If the autopublish package is installed, information about all users on the system is published to all clients. This includes username, profile, and any fields in services that are meant to be public (eg services.facebook.id, services.twitter.screenName). Additionally, when using autopublish more information is published for the currently logged in user, including access tokens. This allows making API calls directly from the client for services that allow this.

Users are by default allowed to specify their own profile field with <u>Accounts.createUser</u> and modify it with Meteor.users.update . To allow users to edit additional fields, use <u>Meteor.users.allow</u> . To forbid users from making any modifications to their user document:

```
Meteor.users.deny({ update: () => true });
```

{% apibox "Meteor.loggingIn" %}

For example, the <u>accounts-ui</u> <u>package</u> uses this to display an animation while the login request is being processed.

{% apibox "Meteor.loggingOut" %}

{% apibox "Meteor.logout" %}

{% apibox "Meteor.logoutOtherClients" %}

For example, when called in a user's browser, connections in that browser remain logged in, but any other browsers or DDP clients logged in as that user will be logged out.

{% apibox "Meteor.loginWithPassword" %}

If there are multiple users with a username or email only differing in case, a case sensitive match is required. Although <code>createUser</code> won't let you create users with ambiguous usernames or emails, this could happen with existing databases or if you modify the users collection directly.

This method can fail throwing one of the following errors:

- "Unrecognized options for login request [400]" if user or password is undefined.
- "Match failed [400]" if user isn't an Object or String, or password isn't a String.
- "User not found [403]" if the email or username provided in user doesn't belong to a registered user.
- "Incorrect password [403]" if the password provided is incorrect.
- "User has no password set [403]" if user doesn't have a password.

This function is provided by the accounts-password package. See the Passwords section below.

{% apibox "Meteor.loginWith" %}

Available functions are:

- Meteor.loginWithMeteorDeveloperAccount
- Meteor.loginWithFacebook
 - o options may also include Facebook's auth type parameter
- Meteor.loginWithGithub
- Meteor.loginWithGoogle
 - o options may also include Google's additional URI parameters
- Meteor.loginWithMeetup
- Meteor.loginWithTwitter
 - o options may also include Twitter's force login parameter
- Meteor.loginWithWeibo

These functions initiate the login process with an external service (eg: Facebook, Google, etc), using OAuth. When called they open a new pop-up window that loads the provider's login page. Once the user has logged in with the provider, the pop-up window is closed and the Meteor client logs in to the Meteor server with the information provided by the external service.

Requesting Permissions

In addition to identifying the user to your application, some services have APIs that allow you to take action on behalf of the user. To request specific permissions from the user, pass the requestPermissions option the login function. This will cause the user to be presented with an additional page in the pop-up dialog to permit access to their data. The user's accessToken — with permissions to access the service's API — is stored in the services field of the user document. The supported values for requestPermissions differ for each login service and are documented on their respective developer sites:

- Facebook: http://developers.facebook.com/docs/authentication/permissions/
- GitHub: http://developer.github.com/v3/oauth/#scopes
- Google: https://developers.google.com/identity/protocols/googlescopes
- Meetup: http://www.meetup.com/meetup-api/auth/#oauth2-scopes
- Twitter, Weibo, Meteor developer accounts: requestPermissions currently not supported

External login services typically require registering and configuring your application before use. The easiest way to do this is with the accounts-ui package which presents a step-by-step guide to configuring each service. However, the data can be also be entered manually in the ServiceConfiguration.configurations collection, which is exported by the service-configuration package.

Configuring Services

First, add the service configuration package:

```
meteor add service-configuration
```

Then, in your app (this example is for the Weebo service):

```
ServiceConfiguration.configurations.upsert(
    { service: 'weibo' },
    {
        $set: {
            loginStyle: "popup",
            clientId: "1292962797", // See table below for correct property name!
            secret: "75a730b58f5691de5522789070c319bc"
        }
    }
}
```

Since Meteor 2.7 you no longer need to manually set the configuration and instead can use Meteor settings by setting your services under Meteor.settings.packages.service-configuration.<service> . All the properties can be set under the service and will be added to the database as is, so make sure that they are correct. For the example above, the settings would look like:

```
}
}
}
```

The correct property name to use for the API identifier (i.e. clientId in the above example) depends on the login service being used, so be sure to use the correct one:

Property Name	Services
appId	Facebook
clientId	Github, Google, Meetup, Meteor Developer Accounts, Weibo
consumerKey	Twitter

Additionally, each external service has its own login provider package and login function. For example, to support GitHub login, run the following in your terminal:

```
meteor add accounts-github
```

and use the Meteor.loginWithGithub function:

```
Meteor.loginWithGithub({
   requestPermissions: ['user', 'public_repo']
}, (error) => {
   if (error) {
      Session.set('errorMessage', error.reason || 'Unknown error');
   }
});
```

Login service configuration is sent from the server to the client over DDP when your app starts up; you may not call the login function until the configuration is loaded. The function <code>Accounts.loginServicesConfigured()</code> is a reactive data source that will return true once the login service is configured; you should not make login buttons visible or active until it is true.

Ensure that your \$ROOT_URL matches the authorized domain and callback URL that you configure with the external service (for instance, if you are running Meteor behind a proxy server, \$ROOT_URL should be the externally-accessible URL, not the URL inside your proxy).

Manual settings configuration

You can use Accounts.loginServiceConfiguration to view and edit the settings collection:

```
Accounts.loginServiceConfiguration.find();
```

Popup versus redirect flow

When configuring OAuth login with a provider (such as Facebook or Google), Meteor lets you choose a popup- or redirect-based flow. In a popup-based flow, when a user logs in, they will be prompted to login at the provider in a popup window. In a redirect-based flow, the user's whole browser window will be redirected to the login provider, and the window will redirect back to your app when the login is completed.

You can also pick which type of login to do by passing an option to <a href="Meteor.loginWith<ExternalService">Meteor.loginWith<ExternalService

Usually, the popup-based flow is preferable because the user will not have to reload your whole app at the end of the login flow. However, the popup-based flow requires browser features such as window.close and window.opener that are not available in all mobile environments. In particular, we recommend using

Meteor.loginWith<ExternalService>({ loginStyle: 'redirect' }) in the following environments:

- Inside UIWebViews (when your app is loaded inside a mobile app)
- In Safari on iOS8 (window.close is not supported due to a bug)

```
{% apibox "currentUser" %}
{% apibox "loggingIn" %}
{% apibox "Accounts.ui.config" %}
```

Example:

```
Accounts.ui.config({
  requestPermissions: {
    facebook: ['user_likes'],
     github: ['user', 'repo']
  },
  requestOfflineToken: {
    google: true
  },
  passwordSignupFields: 'USERNAME_AND_OPTIONAL_EMAIL'
});
```

Since Meteor 2.7 you can configure these in your Meteor settings under

Meteor.settings.public.packages.accounts-ui-unstyled.