WITHINGS
Quick Start Guide
App to app integration
1. **Scope & User Experience**
   Solutions

2. **Withings API environment**
   How to create API & request access

3. **Simplified Architecture**
   How app to app integration works

4. **Technical Overview**
   4 steps to handle app to app integration

5. **Timeline Overview**
   Typical duration to complete integration
1. Scope and User Experience
Scope and user experience - Health Solutions options

- **App to app solution**: Devices setup in the Withings app (Wi-Fi / BLE)
- **SDK solution**: Devices setup in partner app via Withings SDK (Wi-Fi/BLE)
- **Cellular solutions**: Virtually no device setup, no app required (Cellular network)
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Scope and user experience - Health Solutions options

**App to app solution**
- Devices setup in the Withings app (Wi-Fi / BLE)
- Data in partner app
- Withings app required for setup
- Withings API Integration

**SDK solution**
- Devices setup in partner app via Withings SDK (Wi-Fi/BLE)
- Data in partner app
- Withings app not required for setup
- Withings API & SDK integration

**Cellular solutions**
- Devices setup less, no app required (Cellular network)
- Data in partner app
- No app required for setup or sync
- Withings API integration

PATIENT / END USER EXPERIENCE
Scope and user experience - Device unboxing and setup

1. Member unboxes devices and reads instructions

2. Member downloads Healthmate (Withings app)

3. Member sets up the device from Withings app

4. Partner platform link to Withings account

5. Withings cloud notifies partner cloud when new data is recorded

6. Partner platform fetches data from partner cloud
2. Withings API App
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Withings API apps - Creation and permissions

1. **Create your Withings API app by following the online documentation here**
   ○ Enter a valid callback URL for each clientId you create.
   ○ Callback url must support POST and HEAD requests and reply in less than 2s. This callback url will be called by Withings server depending on the features you implement.

2. **Please share your clientId with Withings team to get permissions.**

**WELLNESS CLOUD BASE API URL**

https://wbsapi.withings.net
Withings API apps - Request engineering samples for your team

Withings will provide engineering devices with your target firmware before you start development.

Please contact your sales representative to order your development samples.
3. Simplified Architecture
Simplified architecture

A: Wi-Fi Sync

B: BLE sync*

C: User token sharing

D: Fetch data

E: Fetch data

Withings devices

Withings app

Partner app
iOS | Android

PARTNER CLOUD

WITHINGS

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4. Technical Overview
Oauth 2.0 Authentication

Read the online documentation available [here](#).

To start implementation, follow the [standard OAuth 2.0 authentication](#) application flow.
Oauth 2.0 Authentication

1. Generate a signature
   - Follow the signature generation documentation.

2. Partner calls the Authorize API
   - Partner calls Authorize API using signature from step 1 to get authorization code.
   - This method will construct a URL and redirect users to it. It will then ask the user for permissions.
   - The user will be able to sign in with an existing Withings account.
   - When the user has accepted, a redirect to your application occurs (using the redirect_uri) with the code and the state.

3. Partner calls the Oauth2 API
   - Partner calls Oauth2 API using the authorization code from step 2 to get access/refresh token for member.

4. Partner cloud
   - CardioLine records and maintains access/refresh tokens server-side.
Data / Measure API - Implementation recommendations

1. Read the online documentation available here.

2. Implement the Data Update Notification service between Withings Cloud and partner cloud.

3. Based on the data you are fetching, implement the right Data API (arrow B.). Fetch only new data.

4. Partner app polls only new data from partner cloud by maintaining a local anchor / timestamp (arrow C.)

TIPS
Avoid using cron to poll data from the Withings cloud. Instead, implement the Data Update Notification Service.
Data / Measure API - Implementation recommendations

1. **Subscribe to data update notif.**
   - Subscription must be performed once for each program member.
   - Callback url must be listed in Withings API portal.
   - Callback url must support HEAD and POST request and reply in less than 4s.

2. **Withings notifies partner cloud**
   - Withings notifies your callback url at each new measurement with userid.
   - Withings also includes time range where new measurements are recorded.

3. **Partner cloud calls the Data API**
   - Partner cloud calls Data API using timestamps returned in the notification from step 2.

4. **Partner cloud maintains the set of tokens**
   - Partner cloud records new measures.
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Logistics options

**Shipment Option 1**
Withings bulk ships devices to your warehouse.

**Shipment Option 2**
Withings drop-ships devices to your member via API.

**Shipment Option 3**
Withings drop-ships devices to your members via user list.

Contact sales team

Read the Logistics API doc

Use the createuserorder API

Contact sales team
Please have a look at our Sample code section to help you implement our APIs.
5. Timeline Overview
Timeline overview - typical duration 3-4 weeks

**Project**
- Scope alignment
- 1 week tech prototyping
- Environment setup
  - API apps permissions granted

**End-to-end testing**
- Progressive roll out

**API**
- API apps creation
- Measure API
- Member token renewal
- Data Update Notif. API
- Dropship API
- Authentication & Signature management
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