

AR FSM User Guide

1. Product Instruction

AR FSM is a smart glasses-based operation assistance system with LLVISION. It integrates with SAP FSM system, and aims to help complete remote guidance, work record, connection with the enterprise' s existing information-based system, helping enterprises improve operation and management efficiency.

2. Major Functions

Remote Cooperation

Share the audio and video from the first perspective to remote users via the smart glasses. Other functions such as voice, image-text communication, AR mark and document receiving and sending are also provided.

Guidance Record and History Management

Inquire the remote guidance record and review video and image-text message records.

3. System Requirements

Mobile: Supports Android 5.1 and above version

4. Preparation before Use

1. Purchase the smart glasses hardware and connect it with the compatible mobile phone or tablet.
2. Get a SAP FSM system account;
3. Open the URL or download the installation package. Download Link: <https://fsm.glxsslive.com/#/down>. The expert users may use the SAP FSM account to log in

directly. Front engineers cannot log in directly. There will be a jump entry for remote cooperation in the work order when engineers execute work order tasks.

5. System Roles

Expert:

Able to answer the call and invite other experts to join in the conversation, but unable to initiate a call. During the remote conversation, besides the audio and video interaction, users can also send IM messages and mark the front end with AR marks, as well as create frozen screen marks, etc. After the remote cooperation is complete, users can view their own workload record and the history and review the guidance video and IM message data.

Engineer:

Able to initiate a call in the work order task to seek remote guidance from online experts. During the remote conversation, besides the audio and video interaction, users can also send IM messages, view the AR marks and the frozen screen marks, etc. created by experts via the smart glasses.

6. Software Download and Installation

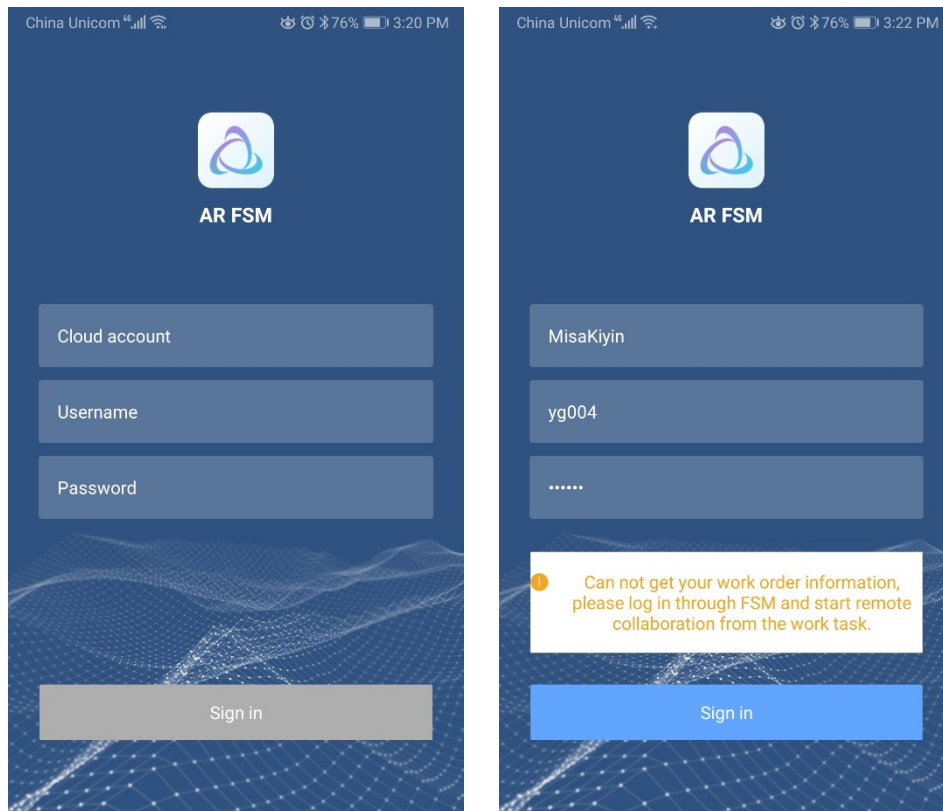
Click the Link: <https://fsm.glxsslive.com/#/down>. Download Android client, install it after downloading, and turn on corresponding permissions for the software according to the prompt; Search SAP Field Management in Huawei Mall, download and install.

Both engineers and experts need to ensure the installation of these two applications.



7. Login and Logout

Login: Open the app, experts can login directly with the SAP FSM account, but front engineer (hereinafter referred to as “engineers”) performing tasks cannot login directly (the hint is shown on the following figure). Engineers can enter directly by single sign on via the remote cooperation entry in the FSM work order.



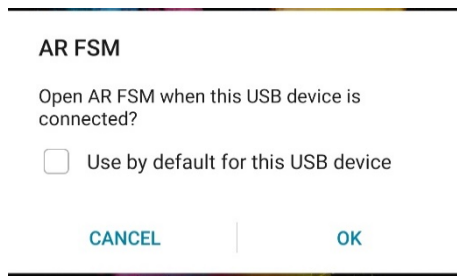
Logout: After entering the application, click the “set” button in the top right corner and click the “logout” to return to the login interface;

Close the App: Press the “return” button twice to exit and close the application.

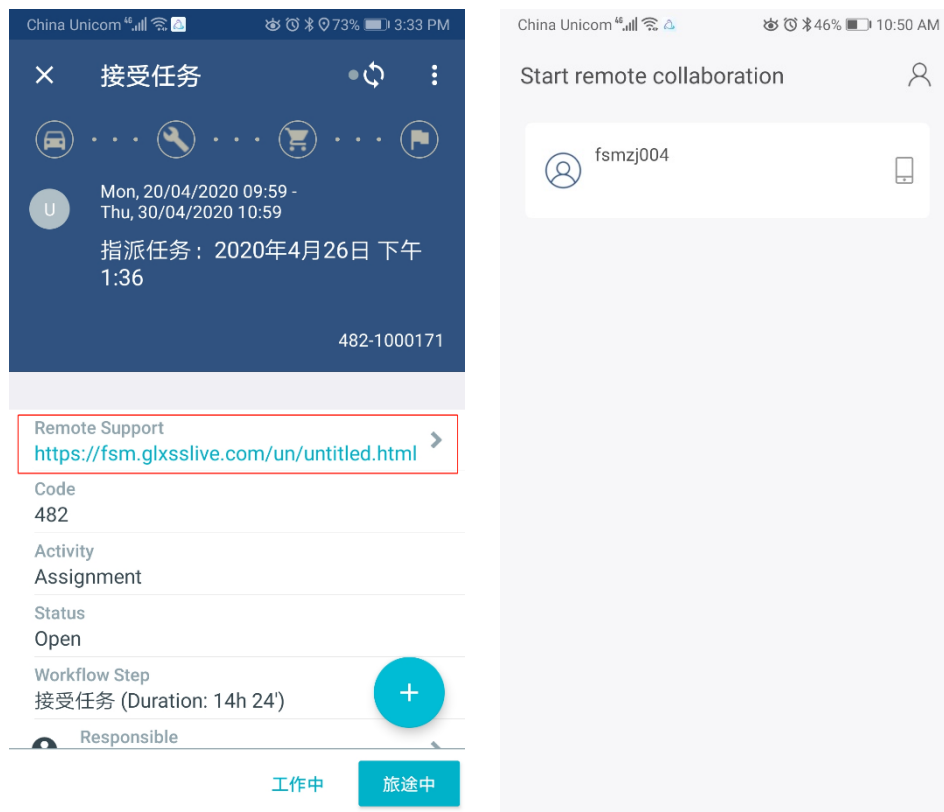
8. Remote Guidance - Engineer

Glasses Connection: When connecting the glasses with the android mobile phone via the own data cable of the glasses, a pop-up window will automatically pop up, then click the “OK” button to complete the glasses connection;

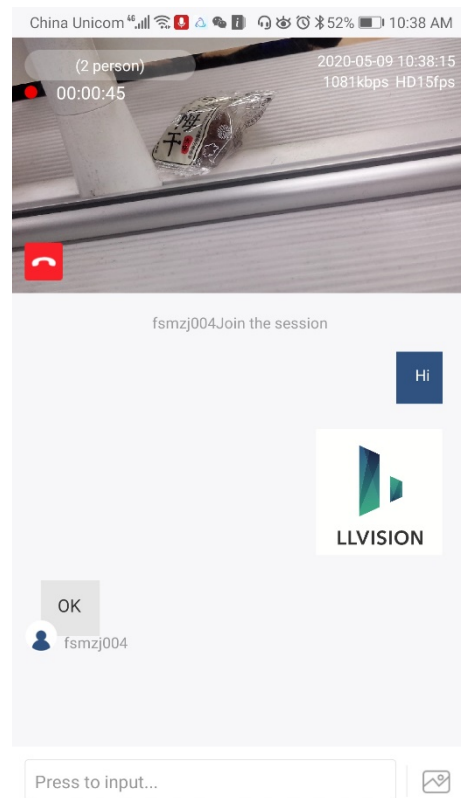
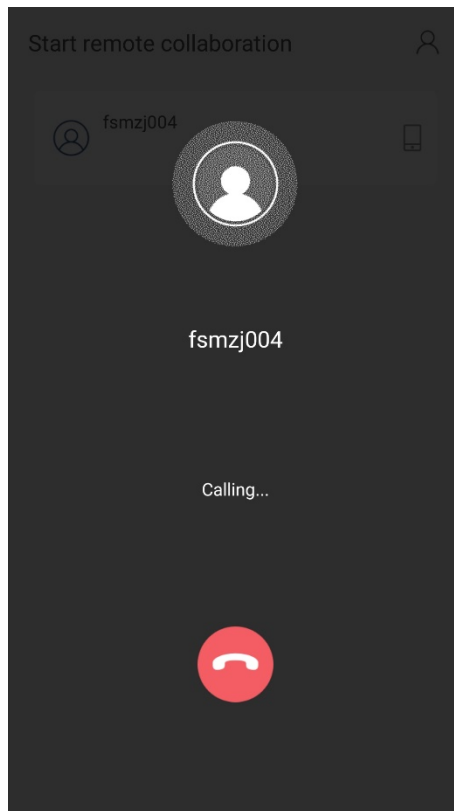




Call: In case of unsolvable problems during the task execution, click the link in the FSM work order to automatically jump an log in to AR FSM, and select an expert in the list to initiate a call; Please synchronize once or twice if you do not see a link in the FSM.

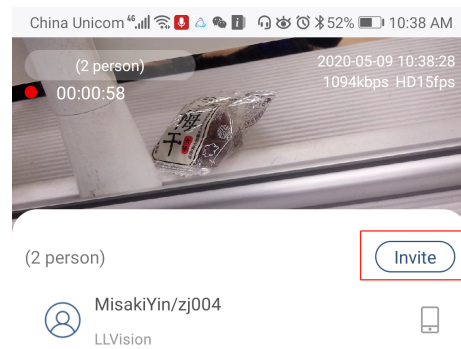
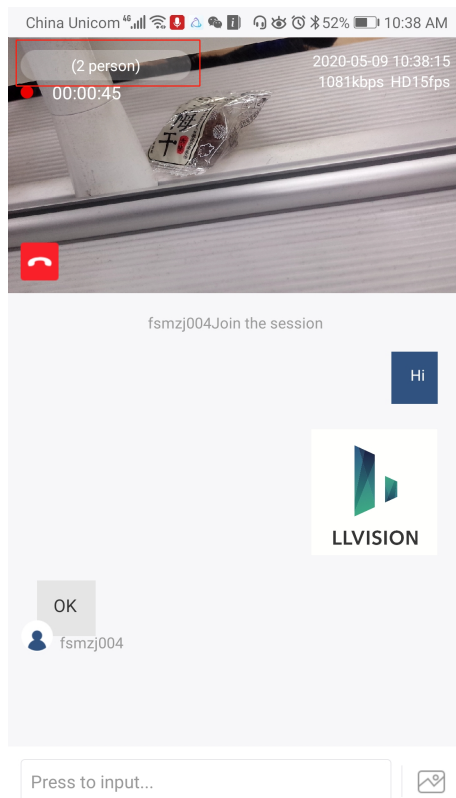


After the call is connected, users can start the remote audio and video interaction. In addition to the audio and video, the engineer can view the text message, pictures and AR marks, etc sent by the expert, and the engineer can also take a photo and send it to the expert by long-pressing the physical button of the glasses for 2 seconds;

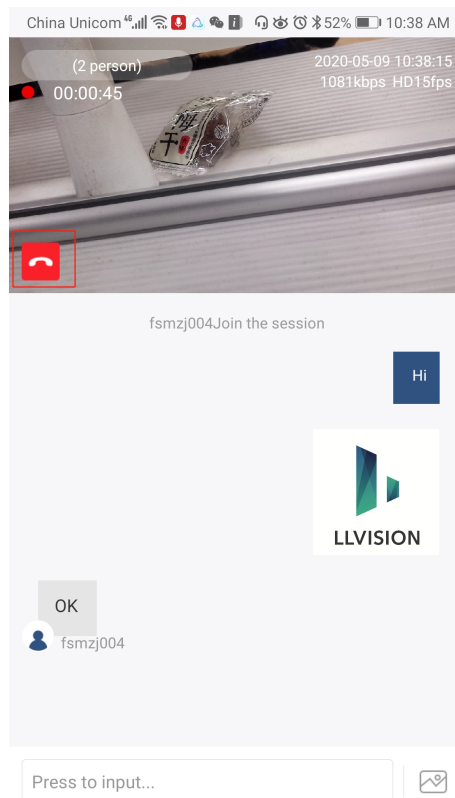


Invite: Click the button at the top of the screen to view the participants in the conversation, click the “invite” button to invite other experts, and return to the conversation interface after the invitation is successful. Whether the invitation was successfully will be broadcasted to the conversation in the form of a message notification.

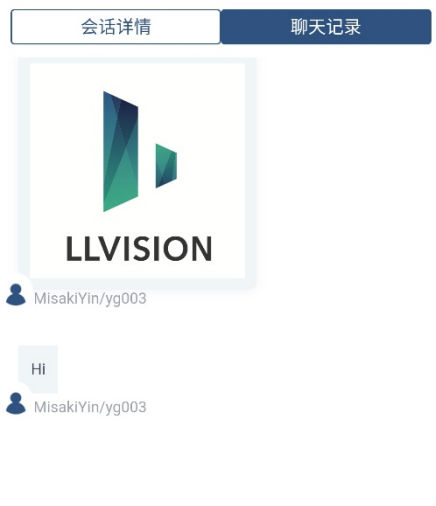
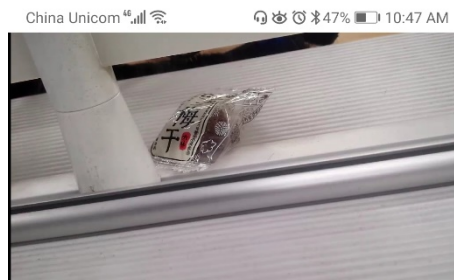
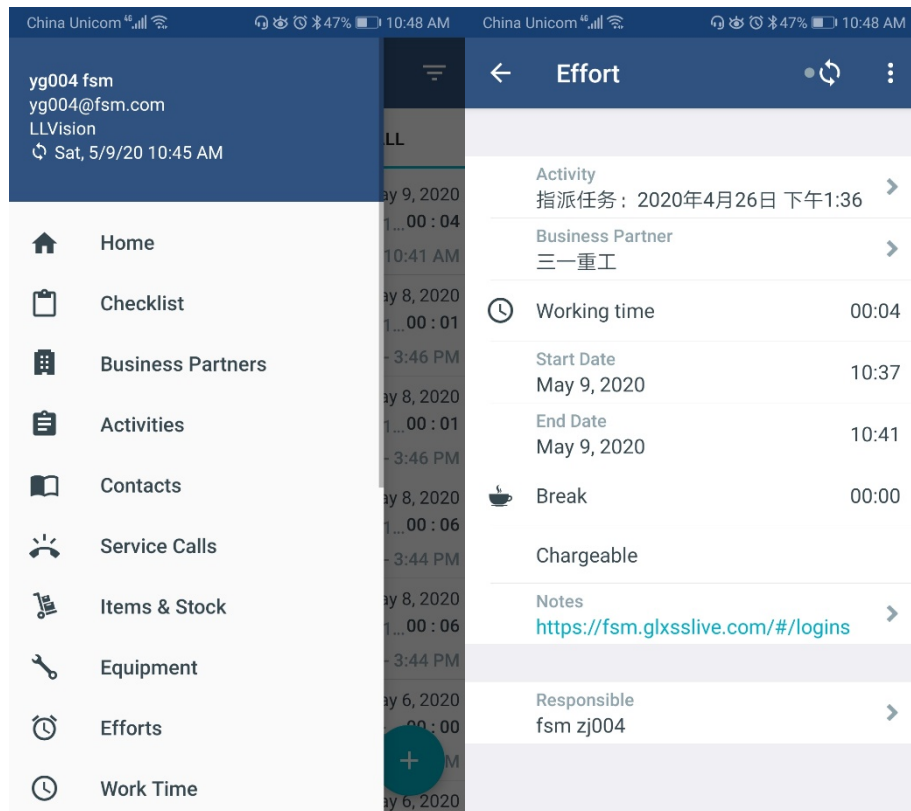
Note: Only one user can be invited at a time. When the previous invitation did not respond, the next user cannot be invited.



Exit: Click the android “return” button or the “hang-up” button on the screen to exit and finish. It will automatically jump back to FSM when finished, and the engineer can continue the task. Note: There will be no video streaming after the engineer’s glasses end exits, and the conversation will not formally end until all experts exit.

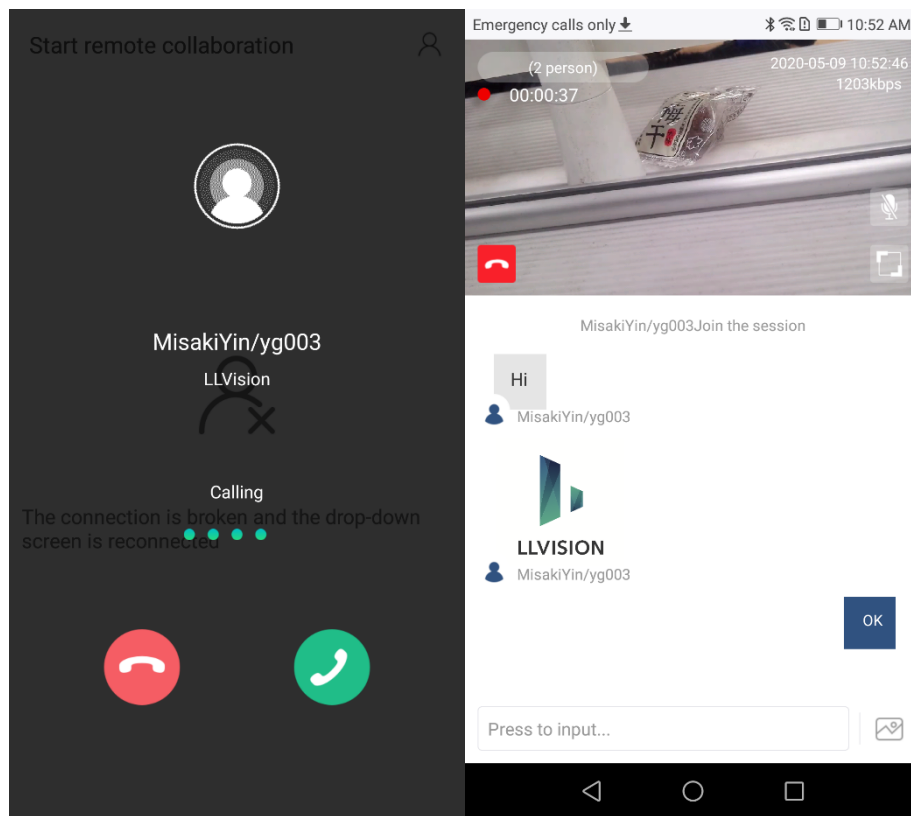


View the History: This workload record will be generated after each remote conversation ends, and users can view the workload and history in the FSM. After clicking on the URL in the remarks and logging in, users can see the whole process video and im message of this guidance.




9. Remote Guidance - Expert

Calling: The expert can receive the call from the engineer after logging in. Click the “answer” to enter the conversation guidance interface, and the videos pushed by the glasses end can be seen and the texts and images can be sent;



Click the  button to turn off your own microphone in a multi-user conversation.

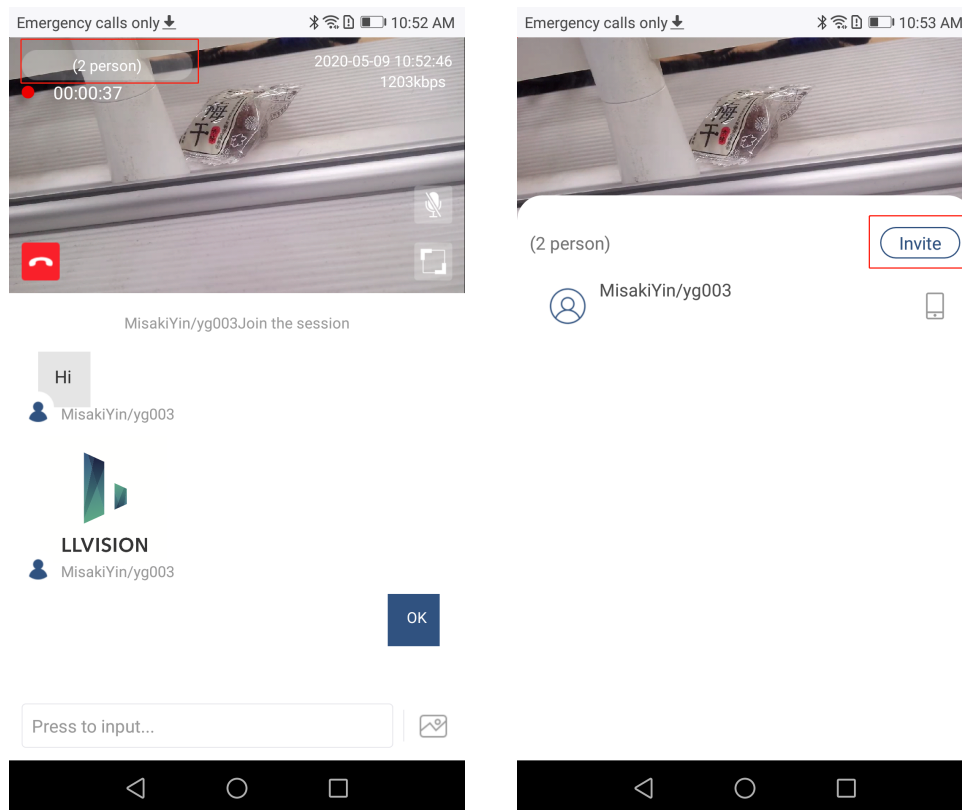
AR Mark: Click the  button or turn on the landscape mode(turn on the screen automatic rotation function) to watch video in full screen. When full screen, users can draw the traced box-shaped marks by hand;



And able to view all the online experts in the above-the-fold list. Users can invite other experts to join in after creating the conversation.


Invite: Click the button at the top of the screen to view the participants in the conversation, click the “invite” button to invite other experts, and return to the conversation interface after the invitation is successful. Whether the invitation was successfully will be broadcasted to the conversation in the form of a message notification.

Note: Only one user can be invited at a time. When the previous invitation did not respond, the next user can be invited 60 seconds later.



10.Settings



Click the  button on the top right corner of the above-the-fold to enter the Settings. The engineer can set the resolution and frame rate of the video, supporting super definition 1080p, high definition 720p and the standard definition 480p, and set the duration for images and texts to stay at the glasses end during remote cooperation, view the version and log out.

