



fusionar

VUZIX®

Fusion Augmented Reality Vx User Guide

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ABOUT THIS DOCUMENT

This User Guide explains the installation and operation of **Fusion Augmented Reality Vx V. 1.0** with **Vuzix M300/M300XL** headset. The device will be referred herein as Headset.



This icon represents a voice command

Available voice commands are active only on the screens that display them. To activate the Automatic Speech Recognizer (ASR), please say “**Hello Vuzix**”. The microphone icon on the top left corner of the screen will become active, signaling that the ASR is ready to interpret your next voice command. The ASR will remain active for 10 sec.

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TABLE OF CONTENTS

System Requirements.....	4
Fusion Augmented Reality Operation.....	4
Fusion Remote Operation on the Vuzix M300	5
How to Prepare Skype for Business User's Credentials for Use with Fusion Remote	6
How to Launch Fusion Remote on the Vuzix M300.....	8
How to Acquire User's Skype for Business Credentials	9
How to Authenticate on Microsoft Online Skype for Business Server	10
How to Operate the Contact List	11
How to Initiate a Meeting.....	12
Live Call – How to Use the Instant Messaging	13
Live Call – How to Capture and Share an Image	14
WorkLogic.....	15
WorkLogic detail Features/command list.....	27
Fusion AR (Monitor Mode)	34
Annotation Tool (web base)	35
Annotation Tool (Mobile-based) Companion App.....	36
Voice Commands	39
Available Commands	40
Skype for Business Desktop Operation.....	43
How to place a call to Fusion Remote on Windows	44
How to Place a Call to Fusion Remote on Mac	45
Using Instant Messaging on Windows.....	46
Using Instant Messaging on a Mac	46
Image/File Sharing	48
Technical Support and Additional Resources	49

SYSTEM REQUIREMENTS

Application	
Operating System	Android 6.0 Marshmallow
Skype for Business online	Microsoft Skype for Business Online 2015 Server
Connectivity	WiFi (2.4GHz/5GHz) or cellular hotspot connectivity (3G/4G)
Supported Device	Vuzix M300 or M300XL

FUSION AUGMENTED REALITY OPERATION

Fusion AR is consistent with three major parts:

Fusion Remote

WorkLogic

Fusion AR.

ACRONYMS

Term	Definition
FR	Fusion Remote
FWL	Fusion WorkLogic
FAR	Fusion Augmented Reality

FUSION REMOTE OPERATION ON THE VUZIX M300

- A How to Prepare Skype for Business User's Credentials for Use with Fusion Remote
- B How to Launch Fusion Remote on the Vuzix M300
- C How to Acquire User's Skype for Business Credentials
- D How to Authenticate on Microsoft Online Skype for Business Server
- E How to Operate the Contact list
- F How to Initiate a Meeting
- G Live Call – How to Use the Instant Messaging
- H Live Call – How to Capture and Share an Image



HOW TO PREPARE SKYPE FOR BUSINESS USER'S CREDENTIALS FOR USE WITH FUSION REMOTE

ONLINE SKYPE FOR BUSINESS ORGANIZATION

- Step 1: Generate the QR Code*¹ corresponding to your SfB username and password, using the following web service: <https://fusionremote.YourDomain.com/>.
For POC and Trials, please access the page at <https://fusionremote.jujotech.com>
- Step 2: On the web page, select the button “Skype for Business Credentials”
- Step 3: If you have an Online Skype for Business Organization, select “Online Skype for Business” on the top dropdown-box
- Step 4: Enter your Skype for Business Username and Password and hit Encrypt
- Step 4: Save or Print the displayed AES encrypted QR Code
- Step 5: After launching Fusion Remote, say “Scan QR Code” to scan the QR code you have generated and proceed with authentication

FusionRemote - Skype for Business Credentials



¹ *QR Code: Quick Response Code used to store textual information, which can be decoded using image recognition software

ON-PREMISES SKYPE FOR BUSINESS ORGANIZATION

Step 1: Generate the QR Code*² corresponding to your SfB username and password, using the following web service: <https://fusionremote.YourDomain.com/>.

For POC and Trials, please access the page at <https://fusionremote.jujotech.com>

Step 2: On the web page, select the button “Skype for Business Credentials”

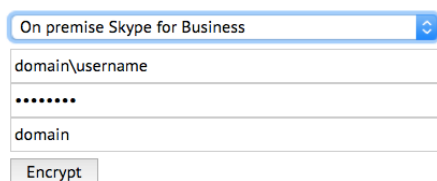
Step 3: If you have an On-premises Skype for Business Organization, select “On-Premises Skype for Business” on the top dropdown-box

Step4: Enter your Skype for Business Username, Password, and Domain (domain\username) information; hit Encrypt

Step 4: Save or Print the displayed AES encrypted QR Code

Step 5: After launching Fusion Remote, say “Scan QR Code” to scan the QR code you have generated and proceed with authentication


FusionRemote - Skype for Business Credentials



² *QR Code: Quick Response Code used to store textual information, which can be decoded using image recognition software



HOW TO LAUNCH FUSION REMOTE ON THE VUZIX M300

- Step 1 Long press (approx. 1 sec) on the **center button** to access the “Home Screen (*Figure 1*)
- Step 2 Short press the **front** or **center button** to scroll through the apps available (*Figure 2*)
- Step 3 Locate the Fusion Remote  icon on the HEADSET Application Screen (*Figure 2*)
- Step 4 Short press the **back button** to start the application

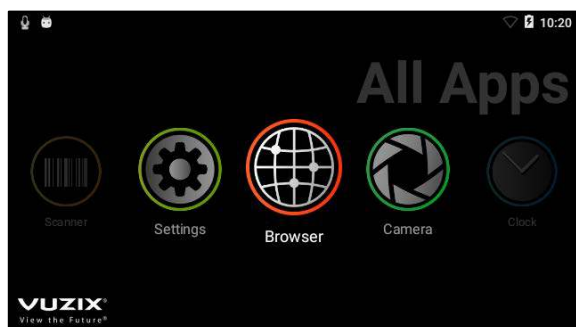


Figure 1

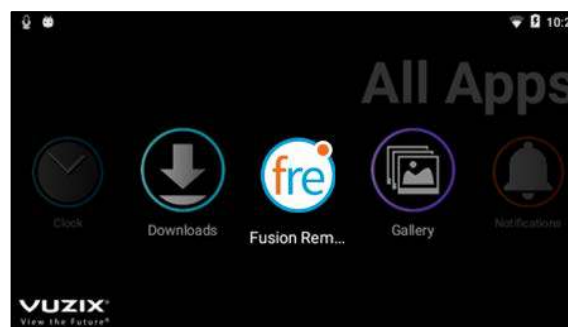


Figure 2



Voice commands highlighted in blue



HOW TO ACQUIRE USER'S SKYPE FOR BUSINESS CREDENTIALS

Once Fusion Remote has launched for the first time, the Scan QR Code Panel is displayed, as shown in *Figure 1*

- Step 1: **“Scan QR Code”** or short press the **front** or **center button** to select the button and open the integrated Barcode Scanner, as shown in *Figure 1*
- Step 2: Focus the target are on the QR Code and wait for the HEADSET feedback sound, as shown in *Figure 2*
- Step 3: Once the QR Code is acquired and credentials verified, the username is displayed in Microsoft Skype for Business Login screen.

For On-Premises Skype for Business Organizations, authentication will immediately follow Step 3 and the user will be presented with the Contact List Screen on successful authentication. Please proceed with Section E “How to operate the Contact List” in this case.

For Online Skype for Business Organizations, authentication will follow the steps described in Section D “How to Authenticate on Microsoft Online Skype for Business Organization”.



Figure 1

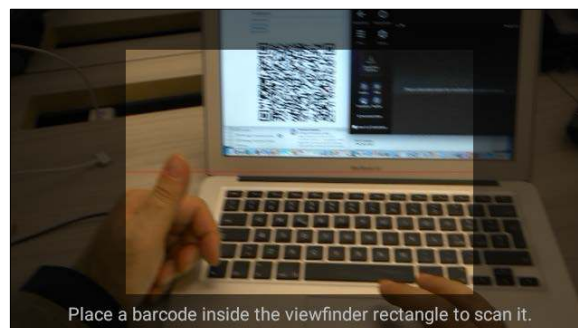


Figure 2



Voice commands highlighted in blue



HOW TO AUTHENTICATE ON MICROSOFT ONLINE SKYPE FOR BUSINESS SERVER

Once Fusion Remote has launched for the first time, the Scan QR Code Panel is displayed, as shown in *Figure 1*. For each of the following steps, either use the voice command or the **front/center buttons** to navigate the corresponding button and then the **back button** to click that button. To activate voice command feature you must say “**Hello VUZIX**” before each command.

- Step 1: “**Enter Username**” fills in the username field
- Step 2: “**Next Step**” proceeds to step 3
- Step 3: “**Set Password**” fills in the password field
- Step 4: “**Next Step**” executes authentication. If successful, proceeds to step 5; otherwise reenter password (Step 4) or restart from Step 1, as instructed
- Step 5: “**Yes**” maintains authentication after exiting Fusion Remote and proceeds to step 6
“**No**” requires authentication after exiting Fusion Remote and to proceeds to step 6
- Step 6: “**Accept Terms**” completes process and proceeds to Contact List
“**Decline Terms**” cancels the process and returns to Step 1

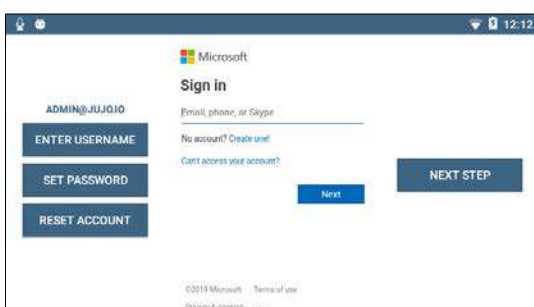


Figure 1. Initial Microsoft Login Screen



Figure 2. EULA Acceptance Screen

Note: In case a step fails, say “**Navigate Back**” and repeat the step



Voice commands highlighted in blue



HOW TO OPERATE THE CONTACT LIST

Upon successful authentication, the user's list of SfB contacts will be displayed, along with user's presence and login info (upper right corner in *Figure 1*) and actions

Contact list can be filtered using the following voice commands or selecting the corresponding button using the **front/center buttons** to navigate and then the **back button** to click that button. To activate voice command feature you must say **"Hello VUZIX"** before each command.

- "ONLINE CONTACTS"** **online** contact ordered alphabetically
- "RECENT CONTACTS"** **recent** contact ordered alphabetically
- "CONTACT NAMES"** **all contact** ordered alphabetically
- "CONTACTS WITH <letter>"** to scroll the list to the first name starting by <letter>
- "PAGE UP/DOWN"** to scroll up/down a long list of contacts

A contact name can be selected even if not in the visible portion of the Contact List by using the corresponding voice command.

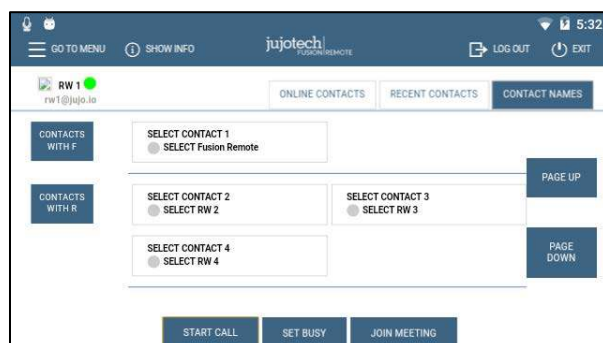


Figure 1. List of Contacts

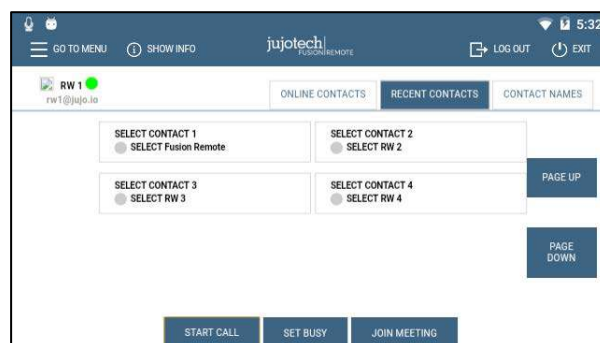


Figure 2. Ordered List of Contacts



Voice commands highlighted in blue



HOW TO INITIATE A MEETING

To activate voice command feature you must say **“Hello VUZIX”** before each command.

Step 1: **“SELECT <contact full name>”** or **“SELECT contact <number>”** starts a call (Figure 1).

In case of selection error, simply repeat. The selected contact will be highlighted

Step 2: **“START CALL”** initiates a call with the selected contact

The interface during a live call (Figure 2) offers the following commands. These commands are only available via the push buttons. Use the **front/center buttons** to loop through the commands available in the view. The selected command will be highlighted in **red**. Then execute the command by clicking on the **back button**.

“STOP/START AUDIO” manages the HEADSET microphone

“STOP/START STREAM” manages the PIP Stream

“SELECT MY STREAM” selects the HEADSET stream to full screen (not available in this version)

“SHOW INFO” displays Information Panel

“SHOW/HIDE CHAT” shows/hides the Instant Messaging panel

“STOP CALL” stops the call

“SHOW PARTICIPANTS” shows Participants Panel

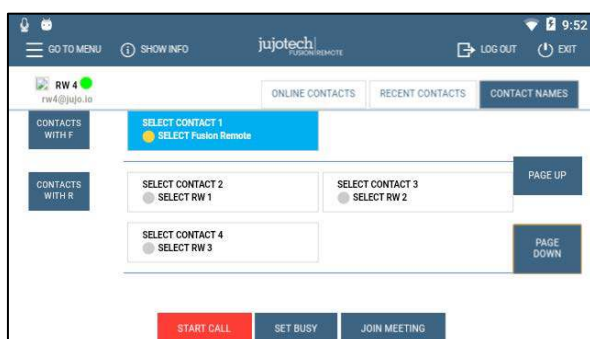


Figure 1. Call initiation



Figure 2. Participants selection during multicast



Voice commands highlighted in blue



LIVE CALL – HOW TO USE THE INSTANT MESSAGING

Text messages and files can be received from the Remote Expert and the Fusion Remote user using the integrated Instant messaging panel (chat). The following commands are available via the push buttons. Use the **front/center buttons** to loop through the commands available in the view. The selected command will be highlighted in **red**. Then execute the command by clicking on the **back button**.

To activate voice command feature you must say “**Hello VUZIX**” before each command.

Step 1: “**Show Chat**” opens the Instant Messaging panel

Step 2: “**Download Image <number>**” downloads the corresponding image into the M300

Step 3: “**Save/Delete photo**” saves/deletes the downloaded photo into the M300

Step 4: “**Hide Chat**” hides the Instant Messaging panel

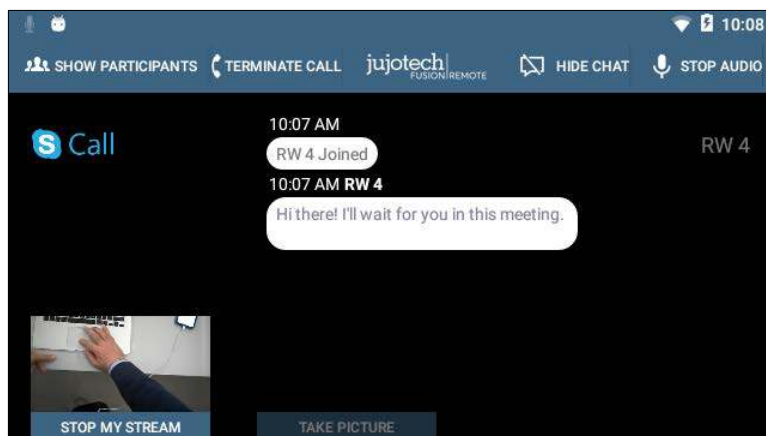


Figure 1. Instant messaging



Voice commands highlighted in blue



LIVE CALL – HOW TO CAPTURE AND SHARE AN IMAGE

Images can be captured and exchanged between the Remote Expert and the Fusion Remote user using the following commands. These commands are only available via the push buttons. Use the **front/center buttons** to loop through the commands available in the view. The selected command will be highlighted in **red**. Then execute the command by clicking on the **back button**.

To activate voice command feature you must say “**Hello VUZIX**” before each command.

Step 1: “**Open Camera**” opens the HD camera (*Figure 1*). This command is also available in the Chat Panel

Step 3: “**Take Photo**” captures a still image (*Figure 2*). The image is immediately uploaded and a URL is placed on the meeting chat for downloading. Multiple images may be captured and uploaded

Step 4: “**Record Video**” records a video clip. Maximum duration can be selected in the Settings Panel and the default length is set to 15 seconds. Multiple video clips can be recorded and uploaded

Step 5: “**Close Camera**” closes the Camera Panel

Additional commands:

“**Show Settings**” opens camera settings panel. This command is also available in the Main Menu panel (from Contact List/Go to Menu)

“**Zoom Level <number 1-5>**” executes the desired zoom level on the camera image



Figure 1. Camera Panel



Figure 2. Record Video Clip



Voice commands highlighted in blue

WORKLOGIC

Jujotech WorkLogic enables full enterprise integration of existing actionable workflows and actionable IoT via open API ingestion. WorkLogic provides rich media annotation at the edge with workflow accomplishment. Best in class voice control for hands free workflow:

- Step by step instructions
- Checklist & forms
- Troubleshooting decision trees
- Standard operating procedures

Tasks and troubleshooting activities are optimized, reducing human error and significantly increasing overall efficiencies.

Jujotech WorkLogic loads XML workflow files that must be compliant with the following specific rules set forth in this document under the heading of “validator”.

The type of workflow is customer specific and the format is depended on the customer choice on the workflow editor. There are some editors in the market that have a capability of generating the work flow in XML format. In the cases that the customer does not have the capability of translating the workflow to XML format, Jujotech offers this service of generating XML files from any format of workflow. Additionally, Jujotech offers an XML “validator” to ensure the XML file is in the correct format for WorkLogic consumption.

All the commands are presented as the use cases in an effort to help in the training of user and helping them in understanding the system.

Validator

The Validator is located in the (<https://fusionremote.jujotech.com/validator.php>). Prior to uploading the Workflows, one needs to ensure the compliance of the XML file to WorkLogic system.

To implement a workflow in WorkLogic framework it needs to be written in XML format with a predefined schema.

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<keywords>
  <keyword>workflow example</keyword>
  <keyword>workflow demonstration</keyword>
</keywords>
  <step n="1" level="0">
    <text>Image</text>
    <image type="local">image.png</image>
  </step>
  <step n="2" level="0">
    <text>Video</text>
    <video type="local">wildlife.wmv</video>
  </step>
  <step n="3" level="0">
```

```
<text>Audio</text>
<audio type="local">audio.mp3</audio>
</step>
</workflow>
```

The following tags needed in the **workflow** definition.

- Id attribute, unique for all workflows, a best practice to build unique workflow is to use organization name and workflow identification inside organization: orname_workflowid;
- **Version** attribute;
- **Title** attribute;

Each workflow tag could have:

- **steplist** attribute in order to:
 - show it with true value;
 - not show it with false value;
- **mentors** list attribute.
- **enable** attribute in order to:
 - enable the workflow with true value;
 - disable the workflow with false value.

Example:

```
<workflow id="JUJO_Example_001" version="1" title="Workflow title"
steplist="true" enable="true" mentor="mentor_1@jujo.com,mentor_2@jujo.com">
```

The **workflow** children tag may be:

- enable_wf_list (optional)
- keyword (optional)
- step (at least one step)
- wf_checklist (optional)

Element order is a constraint.

Example:

```
<workflow id="demo_wor_steplist" version="1" title="Demo workflow steplist"
enable="true" steplist="true">
  <enable_wf_list>
    <wf_to_enable>demo_AWE_checklist_case</wf_to_enable>
  </enable_wf_list>
  <keywords>
    <keyword>workflow example</keyword>
    <keyword>workflow demonstration</keyword>
  </keywords>
  <step n="1" level="0">
    <text>Image</text>
    <image type="local" num="1">system_image.png</image>
  </step>
```


Workflow Connections:

To create a connection between workflows, in each workflow could be present a list of workflows to enable when the current workflow is done. The workflow tag has a child **enable_wf_list** tag with several child **wf_to_enable** tags, each for every workflow to enable.

Example:

```
<workflow id="JUJO_Example_001" version="1" title="Workflow title"
steplist="true" mentor="mentor_1@jujo.com,mentor_2@jujo.com">
<enable_wf_list>
  <wf_to_enable>id1</wf_to_enable>
  <wf_to_enable>id2</wf_to_enable>
  <wf_to_enable>id3</wf_to_enable>
  <wf_to_enable>id4</wf_to_enable>
</enable_wf_list>
```

To search a workflow with keywords, it's possible to add **keywords** tag as a child of workflow with several child **keyword** tags.

Example:

```
<workflow id="Example_001" version="1" title="Workflow title" steplist="true"
mentor="mentor_1@jujo.com,mentor_2@jujo.com">
<keywords>
<keyword>demo</keyword>
<keyword>JUJO TECH</keyword>
<keyword>example</keyword>
<keyword>worklogic</keyword>
</keywords>
```

Each workflow is composed by several steps, it's possible to add **steps** tags as a child of workflow with:

- **n** attribute to define which is the step,
- **level** optional attribute to assign a level of criticality for the step (level=0 Normal, level=1 Critical, and so on).

You have to add at least one step.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>Image</text>
  <image type="local">image.png</image>
</step>
<step n="2" level="0">
  <text>Video</text>
  <video type="local">wildlife.wmv</video>
</step>
<step n="3" level="0">
  <text>Audio</text>
```

```

    <audio type="local">audio.mp3</audio>
  </step>
</workflow>

```

Each step is composed by several optional children:

- text
- warning
- image
- video
- audio
- pdf
- schema
- choice
- step_checklist

Element order is a constraint.

Example:

```

<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>Image</text>
  <image type="local">image.png</image>
</step>
<step n="2" level="0">
  <text>Video</text>
  <video type="local">wildlife.wmv</video>
</step>
<step n="3" level="0">
  <text>Audio</text>
  <audio type="local">audio.mp3</audio>
</step>
</workflow>

```

To display text during a step, the step tag has a child **text** tag.

Example:

```

<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>Hello world!</text>
</step>
</workflow>

```

To add alerts in each step, the step tag has a child **warning** tag with the alert message.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
    <text>Demo</text>
    <warning>Please pay attention</warning>
</workflow>
```

To display image assets during a step, the step tag has several children **image** tags with the name of the image and:

- **num** attribute with the order number;
- **type** attribute with local or remote value;
- **Title** optional attribute.

You can add more than one image in each step.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
    <text>Image</text>
    <image num="1" type="local">image_1.png</image>
    <image num="2" type="local">image_2.png</image>
</step>
<step n="2" level="0">
    <text>Image</text>
    <image num="1" type="remote">www.jujotech.com/
image.png</image>
</step>
</workflow>
```

To play audio assets during a step, the step tag has a child **audio** tag with the name of the audio and:

- **attribute** type, local or remote.

You can add only one audio in each step.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
    <text>Audio</text>
    <audio type="local">audio.mp3</audio>
</step>
<step n="2" level="0">
    <text>Audio</text>
    <audio type="remote">www.jujotech.com/
audio.mp3</audio>
</step>
</workflow>
```

To play video assets during a step, the step tag has a child **video** tag with the name of the video and:

- **attribute** type, local or remote.

You can add only one video in each step.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>Video</text>
  <video type="local">wildlife.wmv</video>
</step>
<step n="2" level="0">
  <text>Video</text>
  <video type="remote">www.jujotech.com/
video.wmv</video>
</step>
</workflow>
```

To display PDF assets during a step, the step tag has a child **pdf** tag with the name of the PDF and:

- **attribute** type, local or remote.

You can add only one PDF in each step.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>PDF</text>
  <pdf type="local">document.pdf</pdf>
</step>
<step n="2" level="0">
  <text>Video</text>
  <pdf type="remote">www.jujotech.com/
document.pdf</pdf>
</step>
</workflow>
```

To display schema assets during a step, the step tag has a child **schema** tag with the name of the schema and:

- **attribute** type, local or remote.

You can add only one schema in each step.

Example:

```
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>PDF</text>
  <schema type="local">schema.png</schema>
```

```

    </step>
<step n="2" level="0">
  <text>Video</text>
  <schema type="remote">www.jujotech.com/
    schema.png</schema>
</step>
</workflow>

```

To navigate conditional instructions, the step tag has a child **choice** tag with the following child tags:

- a question,
- several answers to go to in another step, each answer is in **when** tag (minimum 2) with:
 - **select** attribute with the position of the answer;
 - **step** attribute with the step number where you want to go if the user chooses this answer.

Element order is a constraint.

Example:

```

<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>Choice</text>
  <choice>
    <question>Low fluid level Clogged
    filter?</question>
    <when select="1" step="14">Yes</when>
    <when select="2" step="15">No</when>
  </choice>
</step>
</workflow>

```

To fill a checklist, during each step, the step tag has a **step_checklist** child with the following child:

- checklist_description
- several **items** with **id** attribute and with the following child:
 - item_title
 - item_description
 - **status**, with several child **enum** tag, where are enumerate different status.

Element order is a constraint.

Example:

```

<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
  <text>Checklist</text>
  <step_checklist>
    <checklist_description>Inspect cooling system check
    list</checklist_description>
    <item id="1">

```

```

        <item_title>Check water temperature</item_title>
        <item_description>Check as Alarm if water temperature
above 85°F</item_description>
        <status>
            <enum>Check as Done</enum>
            <enum>Check as Alarm</enum>
        </status>
    </item>
    <item id="2">
        <item_title>Check cooling water flow </item_title>
        <item_description>Check as Alarm if water flow is
            insufficient</item_description>
        <status>
            <enum>Check as Done</enum>
            <enum>Check as Alarm</enum>
        </status>
    </item>
</step_checklist >
</workflow>

```

A workflow can have a **general checklist**, valid the entire work session, in this case it's not possible to have checklist during each step, the general checklist has the same structure of step checklist with the **wf_checklist** tag.

Example:

```

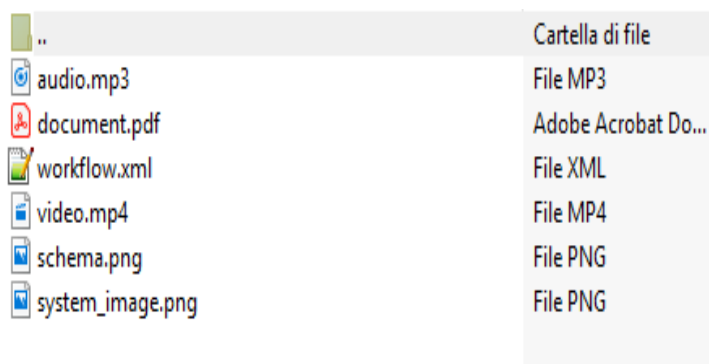
<?xml version="1.0" encoding="UTF-8"?>
<workflow id="JUJO_Example_001" version="1" title="Demo workflow" >
<step n="1" level="0">
    <text>General checlist</text>
    <wf_checklist>
        <checklist_description>Inspect cooling system check
list</checklist_description>
        <item id="1">
            <item_title>Check water temperature</item_title>
            <item_description>Check as Alarm if water temperature
is above 85°F</item_description>
            <status>
                <enum>Check as Done</enum>
                <enum>Check as Alarm</enum>
            </status>
        </item>
        <item id="2">
            <item_title>Check cooling water flow </item_title>
            <item_description>Check as Alarm if water flow is
                insufficient</item_description>
            <status>
                <enum>Check as Done</enum>
                <enum>Check as Alarm</enum>
            </status>
        </item>
    </wf_checklist>
</step>
</workflow>

```

XML Workflow and asset files must be compressed in a ZIP file.

This zip file must have the following properties:

- All files must be inside the root folder
- No subfolders are allowed
- Audio format must be mp3
- Video format must be mp4
- Image and schema format must be jpg or png
- Document format must be pdf



To browse workflow using Jujotech WorkLogic, user has to load ZIP file in One Drive space.

ZIP files must be stored in WORKLOGIC_WS folder inside the root of One Drive space.



USERS OF THE SYSTEM

The field worker is the principal users of the WL. It is intended for performing the Standard Operating Procedure (SOP) on the field.

WORKLOGIC FLOW/STEPS

(all commands and activities are performed by Voice command)


1. AUTHENTICATION (FIELD WORKER)/ LOGGING IN

1. The field worker Logs-in using QR Code. Access to the OneDrive.

The QR code can Load the all relevant WorkFlows for the current SOP.

1. Generated by System Admin based on the Microsoft credentials and access to the One Drive or on premises repository.
2. Generated by field worker through [FusionRemote](#) website. “generate QR code”

Fusion Remote - Solution



Jujotech Fusion Remote

Fusion Remote delivers a collaborative environment with two-way audio and video for facilitating collaborative troubleshooting, assessment and rapid resolution of field issues with the help of remote experts. The Fusion Remote vocal user interface enables fully hands-free operation for user ease and efficiency.

Features

- Enables delivery of industry standard remote mentoring services
- Provides a collaborative environment with audio, video, and instant messaging
- Increases workflow efficiencies over 30% through a fully hand-free vocal user interface

Skype for Business Credentials (FR v1.1)

Skype for Business Credentials (FR v1.2)

Skype for Business File Upload

Annotation Tool

QR Code Generator

2. The field worker Logs-in with Skype For Business (SfB) credentials.

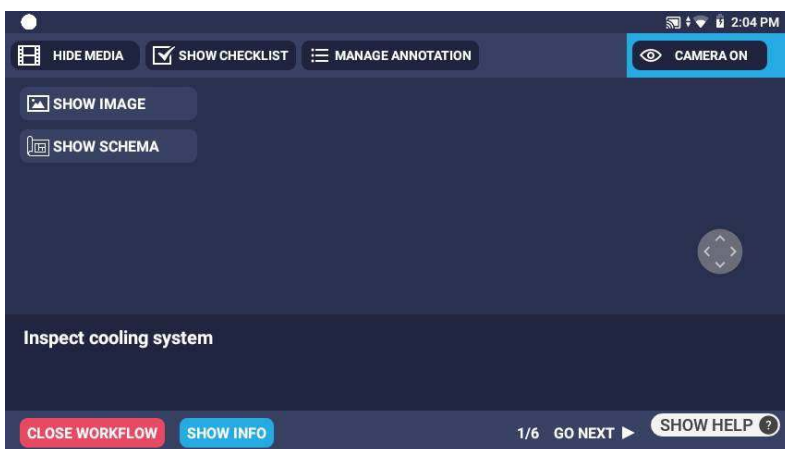
This feature is required for connecting to remote mentor. (process described in detail at **Fusion Remote** section)

2. DASHBOARD “SAY, WORKLOGIC”

1. List of available workflows for the SOP for the assigned task.
2. Sync Workflow. Identifies all the available workflow per user credentials.
3. Submit workflow. Completing the Work Flow.
4. Download a workflow with QR code. (Described in Authentication section above)
5. Search a key word in available workflows on the device.



3. WF - EXECUTION (AVAILABLE FUNCTIONALITIES) SAY, “SELECT WORKFLOW X” ADD IMAGE



1. WF can display all available rich media in any steps.

2. Fill Checklists/Forms during each step
3. Add Media Rich assets during a step
 - Add Image, Video, and Audio
 - Add Timestamp during a step
4. Save a workflow
5. Activate a Remote Assist with FR
6. Activate AR

4. THE WL SERVER

1. Manages the Media Repository Connection.
2. Manage the One Drive and One cloud repository.
3. The System API is to provide Workflow to a specific Account
4. The WL Server API to save assets connected to the workflow execution in the Media Repository
5. The WL Server API to provide Workflow connected to a specific QR
6. The System API to provide Information on assets connected to a specific QR

5. THE IOT SERVER

The System API to provide Information connected to a specific QR

WORKLOGIC DETAIL FEATURES/COMMAND LIST

START WORKFLOW BY QR

Actor:	Field Worker, WL Server.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "SCAN QR CODE". 2. The system will present the screen QR Code reader. 3. The Field Worker will frame the QR. 4. The system will decode WF URI encrypted in QR Code and sends a request to WL Server. 5. WL Server will respond with WF xml file and related asset URL. 6. The Field Worker Say, "START WORKFLOW". 7. The system will start workflow execution.
Exception:	Connection Down.

SETTING UP THE IMAGE QUALITY

Actor:	Field Worker
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "GO TO SETTINGS". 2. The system shows settings page. 3. The Field Worker Say, "MEDIA SETTING". 4. The Field Worker Say, "IMAGE <VALUE>".
Exit conditions:	The system will set image quality to <value>, so when worker will take a picture, its quality will be set to <value>.

SETTING UP THE VIDEO QUALITY

Actor:	Field Worker.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "GO TO SETTINGS". 2. The system will show settings page. 3. The Field Worker Say, "MEDIA SETTING". 4. The Field Worker Say, "VIDEO <VALUE>".

Exit conditions:	The system will set video quality to <value>, so when worker will record a video, its quality will be medium.
------------------	---

SETTING UP THE ONE DRIVE CONNECTION AND FOLDER SET UP

Actor:	Field Worker, One Drive Server.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "GO TO SETTINGS". 2. The system will show settings page. 3. The Field Worker Say, "ONE DRIVE OPTIONS". 4. The system will present One Drive Options page. 5. The Field Worker Say, "TEST CONNECTION". 6. The system performs a test to connect to One Drive Server. 7. One Drive Server get the connection status.
Exit conditions:	The system will visualize the connection status.
Exception:	Connection Down, One Drive Connection Error.

FOLDER SETUP

Actor:	Field Worker, One Drive Server.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "GO TO SETTINGS". 2. The system will show settings page. 3. The Field Worker Say, "ONE DRIVE OPTIONS". 4. The system will present One Drive Options page. 5. The Field Worker Say, "CHOOSE REMOTE FOLDER". 6. The system will interrogate One Drive Server to have folder list. 7. One Drive Server will get the folder list. 8. The system will present remote folder list. 9. The Field Worker Say, "SELECT FOLDER 3".
Exit conditions:	The system selects remote folder WORKLOGIC to upload WL assets.
Exception:	Connection Down, One Drive Connection Error.

LIST AVAILABLE WORKFLOWS

Actor:	Field Worker, WL Server.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "SHOW WORKFLOW LIST". 2. The system will request WF list to WL Server. 3. WL Server will return WF list.
Exit conditions:	The system will present the Workflow list.
Exception:	Connection Down.

START A WORKFLOW

Actor:	Field Worker, WL Server.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "SHOW WORKFLOW LIST". 2. The system will request WF list to WL Server. 3. WL Server will return WF list 4. The system will present the Workflow List. 5. The Field Worker Say, "SELECT WORKFLOW 2".
Exit conditions:	The system will start workflow 1 execution.
Exception:	Connection Down

SUBMIT A WORKFLOW

Actor:	Field Worker, WL Server.
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "SHOW SAVED WORKFLOW". 2. The system will present the Saved Workflow List. 3. The Field Worker Say, "SELECT WORKFLOW 3" 4. The system will show a WF preview with personal additional content. 5. The Field Worker Say, "SUBMIT WORKFLOW". 6. The system will present the following confirm popup: <i>Are you sure to submit this workflow?</i> 7. The Field Worker Say, "YES". 8. The system will submit WF to WL Server. 9. WL Server will perform the saving.

Exit conditions:	The system will show submit response and will delete the WF from the device.
Exception:	Connection Down.

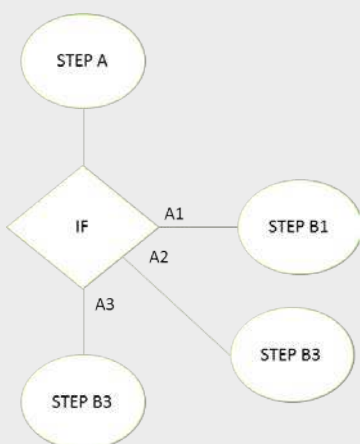
SEARCH THE “KEYWORD” IN WORKFLOWS LOADED ON HMT

Actor:	Field Worker, WL Server
Entry conditions:	Field Worker will be authenticated, and the system will present the WF Dashboard.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, “SHOW WORKFLOW LIST”. 2. WL Server will return WF list. 3. The Field Worker Say, “SEARCH WORKFLOW”. 4. The system will show search box. 5. The Field Worker Say, “DICTATION”. 6. The system will present voice input box. 7. The Field Worker Say, “<any search word>”. 8. The system will insert “<any search word>” inside input box. 9. The Field Worker Say, “OK”.
Exit conditions:	The system will show workflows that match with searched words.
Special Requirements:	None
Exception:	Connection Down.

SEQUENTIAL AND CONDITIONAL WORKFLOW

Actor:	Field Worker
Entry conditions:	The system will show information for the step A execution.
Flow of events:	1. The Field Worker Say, “ GO NEXT ”.
Exit conditions:	The system will show information for the step B execution.

CONDITIONAL

Actor:	Field Worker
Entry conditions:	The system will show information for the step A execution.
Flow of events:	<p>1. The system will ask the Field Worker to select between a list of condition (i.e. A1, A2 and A3).</p>  <pre> graph TD A([STEP A]) --> IF{IF} IF -- A1 --> B1([STEP B1]) IF -- A2 --> B3_1([STEP B3]) IF -- A3 --> B3_2([STEP B3]) </pre> <p>2. The Field Worker Say, “SELECT <A1> CONDITION”.</p> <p>3. The Field Worker Say, “GO NEXT”.</p>
Exit conditions:	The system will show information for the step B1 execution.
Exception:	None.

MANAGING RICH MEDIA (PHOTO, VIDEO, AUDIO, TEXT, AND DOCUMENTS)

Actor:	Field Worker
Entry conditions:	The system will show information for the step A.
Flow of events:	<p>1. The Field Worker Say, the command for Media Navigation (SHOW PICTURE, PLAY VIDEO, PLAY AUDIO).</p> <p>2. The system will open the selected media.</p> <p>3. The Field Worker will use command related to the navigation of the selected media:</p> <ul style="list-style-type: none"> - PICTURE: ZOOM LEVEL <1-5> - AUDIO/VIDEO: STOP, PAUSE, PLAY. <p>4. The Field Worker will close the Media navigation mode Say, “NAVIGATE BACK”.</p>
Exit conditions:	The system will show information for the step A execution.

DOCUMENTS

Actor:	Field Worker
Entry conditions:	The system will show information for the step A.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, “OPEN TECHNICAL DOCUMENT”. 2. The system will open the Technical Document. 3. SEE APPENDIX A: pdf reader (page 54) 4. The Field Worker will close the Technical Document Say, “NAVIGATE BACK”.
Exit conditions:	The system will show information for the step A execution.

CHECK LIST

Actor:	Field Worker
Entry conditions:	The system will show information for the step A.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, “OPEN CHECK LIST”. 2. The system will show all the elements in the checklist. 3. The Field Worker will select performed task: “TASK <N> DONE” 4. The Field Worker Say, “CLOSE CHECK LIST.” 5. The Field Worker Say, “GO NEXT”.
Exit conditions:	The system will show information for the step A execution.
Exception:	Check List not filled.

Actor:	Field Worker
Entry conditions:	The system will show information for the step A.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, “RECORD VIDEO, RECORD AUDIO, ADD TIMESTAMP, TAKE PICTURE”. 2. The system will provide tool to manage the acquisition of selected media. 3. The Field Worker will manage the acquisition and receive feedback. 4. The system will show feedback about acquisition of Media.
Exit conditions:	The system will show information for the step A execution.

SHOW INFORMATION / ADD INFORMATION

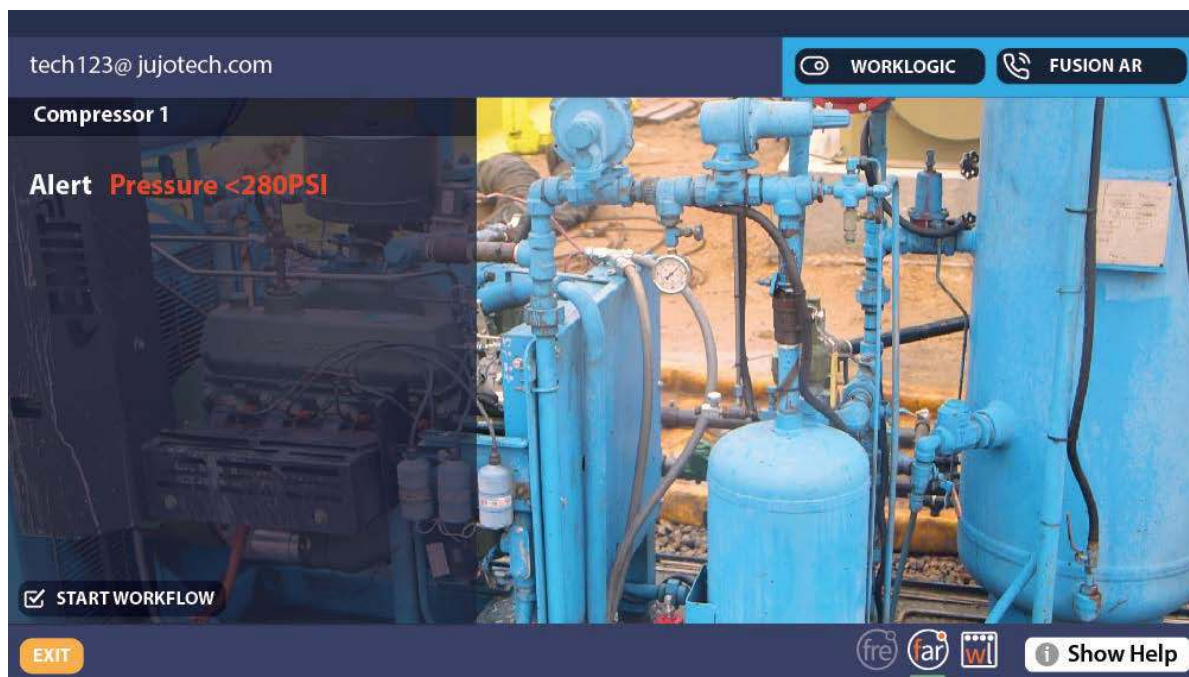
Actor:	Field Worker
Entry conditions:	The system will show information for the step A.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "SHOW ADDED INFO". 2. The system will provide the list of added info. 3. The Field Worker Say, command to navigate the INFO: <ul style="list-style-type: none"> - SHOW IMAGE - PLAY VIDEO - PLAY AUDIO - SHOW TIME STAMP. 4. The Field Worker close the Media Say, "NAVIGATE BACK". 5. The Field Worker close the Added Info List Say, "NAVIGATE BACK".
Exit conditions:	The system will show information for the step A execution.

CALLING REMOTE MENTOR (FUSION REMOTE)

Actor:	Field Worker, SfB Server
Entry conditions:	The system will show information for the step A.
Flow of events:	<ol style="list-style-type: none"> 1. The Field Worker Say, "CALL REMOTE SUPPORT". 2. The system will start a SfB meeting with SfB email contact connected to the workflow. 3. The Field Worker will close the Call Say, "NAVIGATE BACK/TERMINATE CALL".
Exit conditions:	The system will show information for the step A execution.
Exception:	Connection Down.

FUSION AR (MONITOR MODE)

The Fusion AR is an open API Augmented Reality (AR) interface for the connected worker. The Fusion AR provides full integration of existing IIoT (Industrial Internet of Things) alerts and analytics via open API ingestion. Fusion AR can improve KPI's with instant equipment alerts and it is fully integrated with Fusion Remote for maintenance assist.

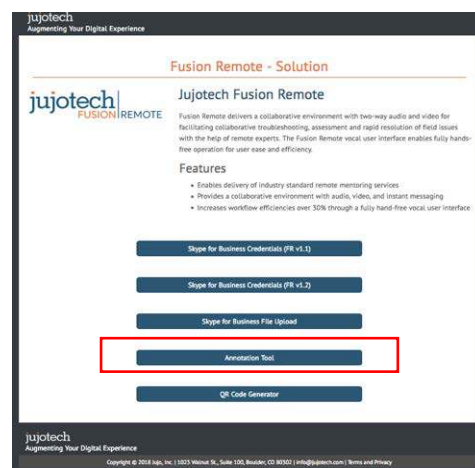


FEATURES:

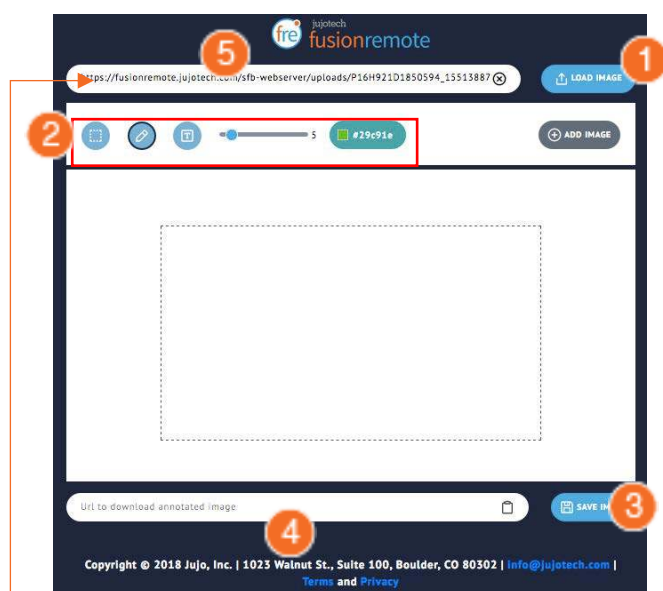
- Real-time hands-free OnDemand training
- Reduction in equipment downtime
- Actionable Workflow tied to IIoT analytics and information visualization
- Equipment service status and point of failure information
- Overlay of the documentation on the point of failure
- Annotation capabilities for the remote mentor
- Annotation capability for connected worker with use of Companion APP (Available separately for iOS and Android tablets and smartphones)
- Fully integrated with Fusion Remote for expert support

ANNOTATION TOOL (WEB BASE)

During a Skype for Business meeting, the instant messaging panel (chat) is used for exchanging images and video clips. While the meeting is in session, images stored on FusionRemote service can be annotated with text, hand-drawing, or PiP (Picture in Picture). The annotation Tool is available in the [FusionRemote](#) webpage. This tool is designed to be used by “Remote Mentor”.

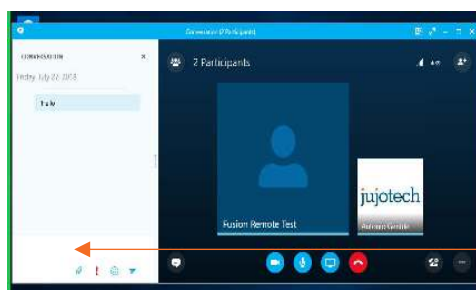


STEPS:

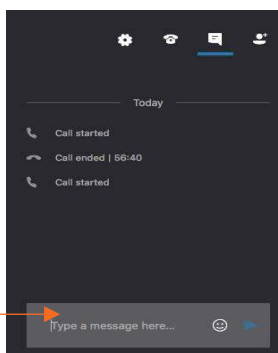


1. Load an image from the FusionRemote Server
2. Annotate the image
 - A. Add text
 - B. Add free-hand drawings
 - C. Add another image (Picture in Picture)
3. Save the image on the server
4. Copy the image URL on clipboard
5. Paste the URL on the Skype for Business Chat

Here paste the URL from the meeting chats



Chat on Skype for Business for Windows



Chat on Skype for Business for Mac

ANNOTATION TOOL (MOBILE-BASED) COMPANION APP

While the meeting is in session, images captured with FusionRemote on a smart headset can be annotated with text, hand-drawing, or PiP (Picture in Picture) using the companion app. (*Available in App Store and Google Play*)

USE CASE A (TAKING PICTURE THEN ANNOTATE).



- Say, **“Open Camera”** on HMT then Say, **“Take Photo”**
- Say, **“Annotate Photo”**
 1. Pair the HMT with the Fusion Remote Companion app, by framing the QR displayed on the smartphone screen (only if devices aren’t yet paired)
 2. On the smartphone, after pairing, accept the photo
 3. Annotate the photo
 4. Send the photo back to the HMT
- Download the new image, now available both on the HMT and to all participants to the meeting via chat.

USE CASE B (DOWNLOAD THE PICTURE FROM CHAT LINK THEN ANNOTATE).

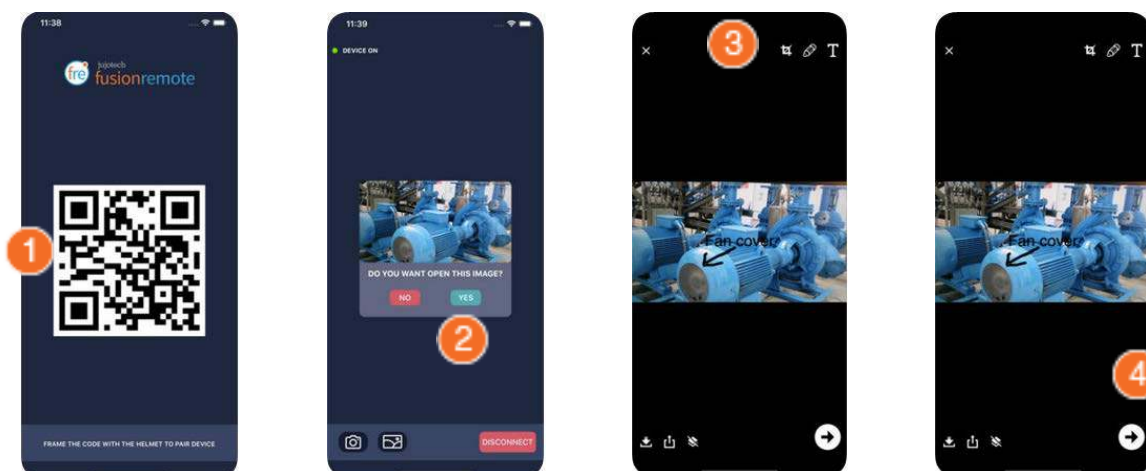


- Say, **“Show Chat”** on HMT then Say, **“Download Image <n>”**
- Say, **“Annotate Image”**
 5. Pair the HMT with the Fusion Remote Companion app, by framing the QR displayed on the smartphone screen (only if devices aren’t yet paired)

6. On the smartphone, after pairing, accept the photo
 7. Annotate the photo
 8. Send the photo back to the HMT
- Download the new image, now available both on the HMT and to all participants to the meeting via chat

OPERATIONS

- **"Annotate photo" or "Annotate Image"**
 1. Pair the HMT with the Fusion Remote Companion app, by framing the QR displayed on the smartphone screen (only if devices aren't yet paired)
 2. On the smartphone, after pairing, accept the photo
 3. Annotate the photo
 4. Send the photo back to the HMT
- Download the new image, now available both on the HMT and to all participants to the



COMPANION APP TOOLS DESCRIPTION



ANNOTATION TOOLS

1. Resize
2. Free Drawing
3. Text



SHARING TOOLS

1. Save on Album
2. Share
3. Remove Annotation
4. Send back to HMT



Reference Section: List of Available Commands

VOICE COMMANDS

USER'S SKYPE FOR BUSINESS CREDENTIALS ACQUISITION

Voice Command	Action
"Scan QR Code"	Scans an encrypted QR Code with User's SfB Credentials
"Reset Account"	Deletes stored credentials and open the Barcode Reader to scan a new QR Code
"Login"	Accesses the Microsoft Online SfB Authentication Page
"Show Info"	Opens Built-in Diagnostics Panel

USER'S SKYPE FOR BUSINESS ONLINE AUTHENTICATION AND TERMS OF USE ACCEPTANCE

Voice Command	Action
"Enter Username"	Fills in the username field using the Username information stored in the app
"Set Password"	Fills in the password field using the Password information stored in the app
"Reset Account"	Deletes stored user's credentials and open the Bar Reader to scan a new credential QR Code
"Next Step"	Proceeds to the next step
"Cancel"	Cancels the operation
"Accept Terms"	Accepts the app Terms of Use
"Decline Terms"	Declines Terms of Use. Logout from SfB

Note: Available voice commands are active only on the screens that display them



Voice commands highlighted in blue

AVAILABLE COMMANDS

LIST OF CONTACTS OPERATION

Voice Command	Action
"Online Contacts"	Shows online contacts ordered alphabetically
"Recent Contacts"	Shows recent called contacts ordered alphabetically
"Contact Names"	Shows all contacts ordered alphabetically
"Contacts with <letter>"	Scrolls the contact list to the selected letter
"Select <contact full name>" "Select contact <number>"	Selects a contact to call. The selected contact is highlighted in blue. In case of wrong selection, repeat the vocal prompt
"Set busy/online"	Sets the HEADSET User presence state, as shown in the upper left corner in green, orange
"Scroll Up" "Scroll Down"	Scrolls the contact page up or down

LIST OF MAIN OPERATION AND CALL INITIATION/ANSWERING

Voice Command	Action
"Go to menu"	Navigates to the Menu Page
"Start Call"	Initiates a call with the selected contact. During the call, the selected contact is referred to as Remote Expert
"Join Meeting"	Initiates a call using a meeting link provided as a QR.
"Exit"	Dismisses the app. Does not logout from SfB
"Logout"	Logs out from SfB and dismiss the app
"Accept call" "Decline call"	Accepts an incoming call Declines the incoming call
"Show Info"	Opens Built-in Diagnostics Panel



Voice commands highlighted in blue

LIST OF MENU PAGE OPERATION

Voice Command	Action
"Reset Account"	Deletes stored credentials and open the Barcode Reader to scan a new QR Code
"Login"	Accesses the Microsoft Online Sfb Authentication Page
"Show Info"	Opens the Built-in Diagnostics Panel

LIVE AUDIO/VIDEO COLLABORATION AND INSTANT MESSAGING OPERATION

These commands are only available via the push buttons. Use the **front/center buttons** to loop through the commands available in the view. The selected command will be highlighted in **red**. The execute the command by clicking on the **back button**.

Voice Command	Action
"Terminate Call"	Stops the current call and exit the meeting
"Start/Stop Audio"	Activates/Deactivates the device microphone. Incoming audio cannot be deactivated
"Start/Stop My Stream"	Shows/Hides the device own video stream, visible as Picture in Picture (PiP)
"Select My Stream"	Select the device own video stream to full screen (Not available in current version)
"Participant <number>"	Sets the stream <number> full screen
"Show/Hide participants"	Shows/Hides the Participants Panel and all participants stream
"Show/Hide Chat"	Shows/Hides the instant messaging chat panel
"Write Message"	Opens the vocal keyboard to dictate messages using the HEADSET-1 speech-to-text processor
"Open Camera"	Opens the HEADSET HD Camera and captures an image or record a video clip. Images/Video clips are uploaded immediately after the capture. The corresponding URL is sent via chat to the Remote Expert.
"Show Info"	Opens Built-in Diagnostics Panel



Voice commands highlighted in blue

CAMERA OPERATION

These commands are only available via the push buttons. Use the **front/center buttons** to loop through the commands available in the view. The selected command will be highlighted in **red**.

Then execute the command by clicking on the **back button**.

Voice Command	Action
"Close Camera"	Closes the camera panel
"Show Settings"	Opens the Camera Settings Panel
"Take photo"	Captures a still image. The image is immediately uploaded and a URL is placed on the meeting chat for downloading. Multiple images may be captured and uploaded
"Record Video"	Records a video clip. Maximum duration can be selected in the Settings Panel and the default length is set to 15 seconds. Multiple video clips can be recorded and uploaded
"Zoom Level <number 1-5"	Executes the desired zoom level on the camera image

CAMERA SETTINGS OPERATION

These commands are only available via the push buttons. Use the **front/center buttons** to loop through the commands available in the view. The selected command will be highlighted in **red**.

Then execute the command by clicking on the **back button**.

Voice Command	Action
"Hide Settings"	Close the Camera Settings Panel
"3 seconds 5 seconds 7 seconds"	Timer duration for remote image capture. Current selection is shown in green
"15 seconds 30 seconds 1 minute"	Video clip duration. Current selection is shown in green
"Video Low Video Medium Video High"	Video quality settings. Current selection is shown in green
"Image Low Image Medium Image High"	Image quality settings. Current selection is shown in green



Voice commands highlighted in blue

SKYPE FOR BUSINESS DESKTOP OPERATION

A Skype for Business desktop or mobile client can be used to place and receive calls to/from Fusion Remote running on a HEADSET

Key Features

- Audio/video live communication

- Instant messaging

- Image/File sharing

- Remote image capture

HOW TO PLACE A CALL TO FUSION REMOTE ON WINDOWS

- Step 1: To start a meeting with an HEADSET click on the “Meet Now” command in the “Conversations” Menu (*Figure 1*)
- Step 2: Click on the “People” icon (*Figure 2*)
- Step 3: Search the HEADSET contact name among the contacts using the “Invite more people” search box (*Figure 2*)
- Step 4: Double click on the desired contact name shown in the result list. Repeat to add more HEADSET contacts to the call

The meeting is now live.

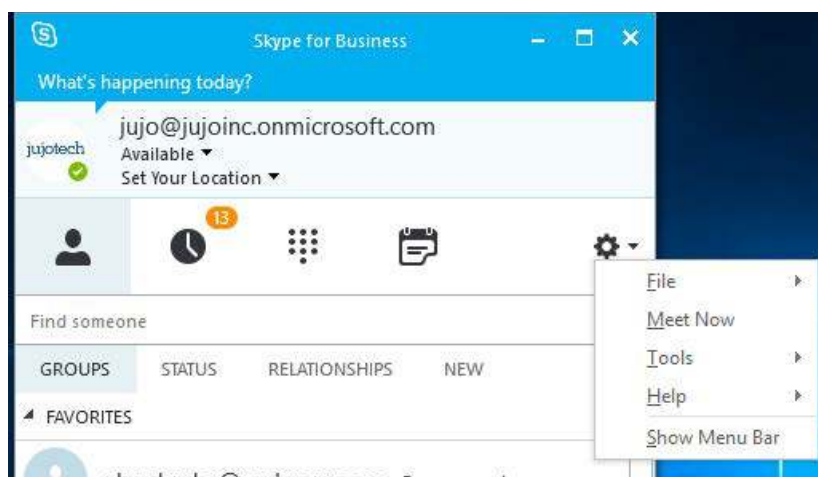


Figure 1

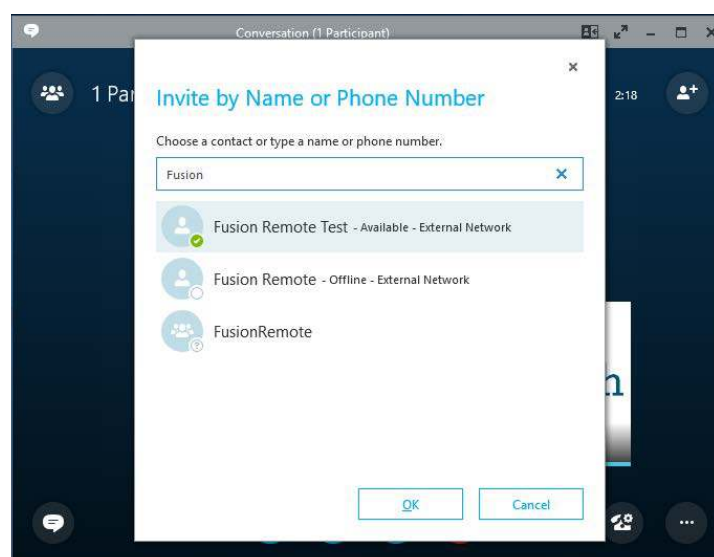


Figure 2

HOW TO PLACE A CALL TO FUSION REMOTE ON MAC

- Step 1: To start a meeting with a HEADSET click on the “Meet Now” command in the “Conversations” Menu (*Figure 1*)
- Step 2: Click on the “People” icon (*Figure 2*)
- Step 3: Search the HEADSET contact name among the contacts using the “Invite more people” search box (*Figure 2*)
- Step 4: Double click on the desired contact name shown in the result list. Repeat to add more HEADSET contacts to the call

The meeting is now live.

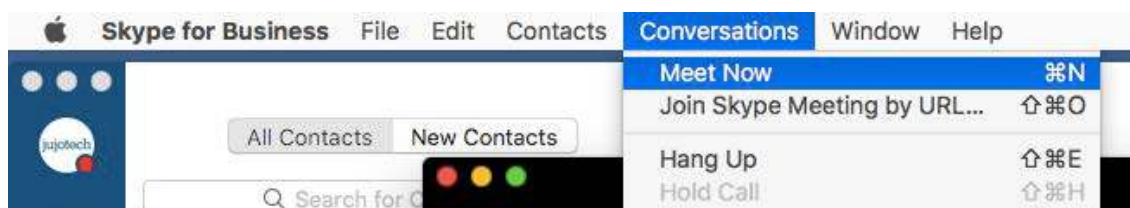


Figure 1

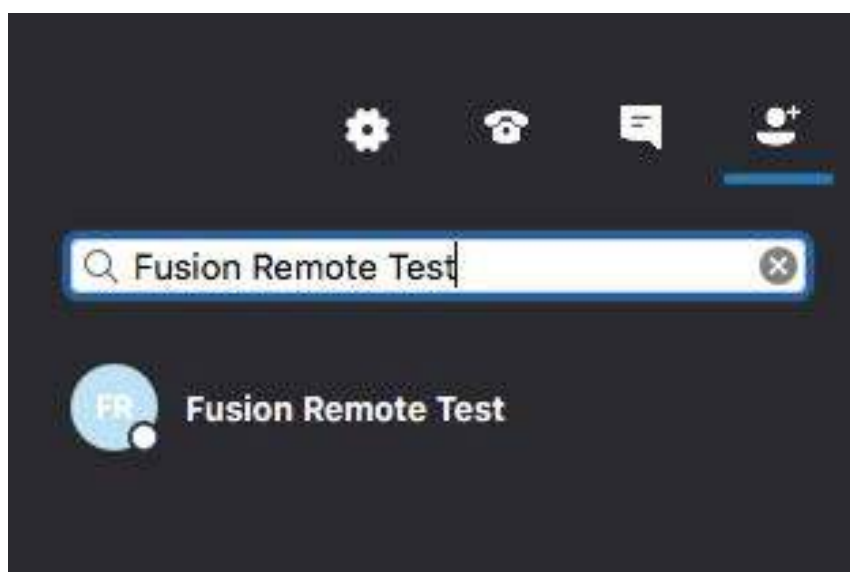


Figure 2

USING INSTANT MESSAGING ON WINDOWS

Step 1: Click on the “Messages” icon to start a instant messaging session with everybody on a meeting (*Figure 1*)

Step 2: Use the text box provided to send and receive text messages

REMOTE IMAGE CAPTURE

An HD still image can be captured on the HEADSET without the user intervention

Step 1: Write the command “**take photo**” in the chat. The HEADSET will capture an image and send it as URL on the chat

Step 2: Access the image by clicking on the URL link provided

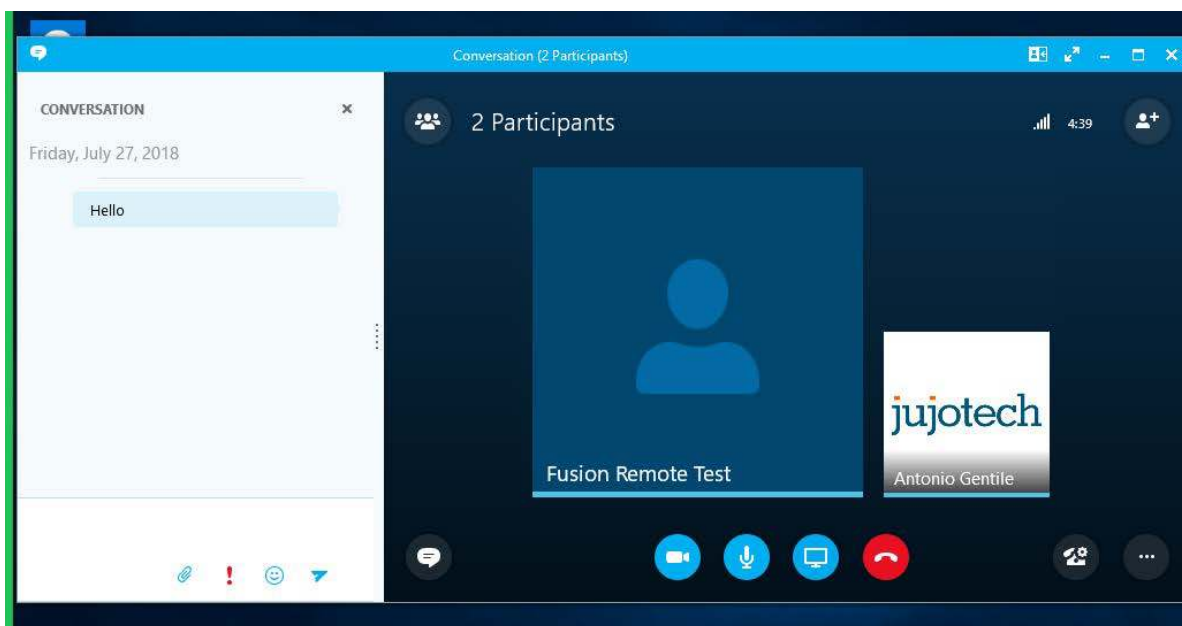


Figure 1

USING INSTANT MESSAGING ON A MAC

Step 1: Click on the “Messages” icon to start a instant messaging session with everybody on a meeting (*Figure 1*)

Step 2: Use the text box provided to send and receive text messages

REMOTE IMAGE CAPTURE

An HD still image can be captured on the HEADSET without the user intervention

Step 1: Write the command “**take photo**” in the chat. The HEADSET will capture an image and send it as URL on the chat

Step 2: Access the image by clicking on the URL link provided

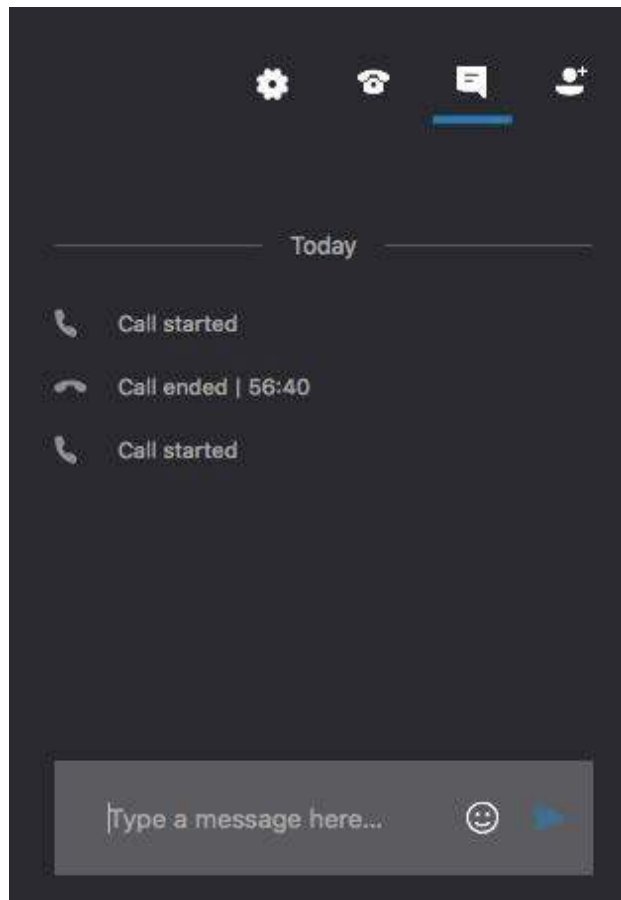



Figure 1

IMAGE/FILE SHARING

- Step 1: Clicking the **“Skype for Business File Upload”** button on the Fusion Remote service page at <https://fusionremote.YourDomain.com> to share files/images with the HEADSET. For POC or Trials, a temporary service is offered at the following URL: <http://fusionremote.jujotech.com>
- Step 2: Click the **“Browse”** button on the Fusion Remote service page to search for the file/image to share
- Step 3: Click the **“Upload”** button on the Fusion Remote service page to upload the file/image on the service
- Step 4: Click on the **“Copy to clipboard”** button to copy the generated URL on the clipboard
- Step 5: Paste the URL into the message box to share it with the meeting participants.


Augmenting Your Digital Experience


FusionRemote - Skype for Business File Upload

Select file* (Max file size 5MB | Valid extensions .jpg .jpeg .png .pdf)

FR_20182002_182028.jpg

File uploaded!

File URL


Augmenting Your Digital Experience
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TECHNICAL SUPPORT AND ADDITIONAL RESOURCES

For additional technical support, please contact your Jujotech representative or write to:
support@jujotech.com.

ADDITIONAL RESOURCES:

Vuzix M300 User Guide and Support page: <https://www.vuzix.com/support/M300-smart-glasses>

Skype for Business Meeting setup help page: <https://support.office.com/en-us/article/set-up-a-skype-for-business-meeting-in-outlook-b8305620-d16e-4667-989d-4a977aad6556>.