

# AADHAAR ENABLED BIOMETRIC ATTENDANCE SYSTEM (AEBAS)

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**An Introduction**

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- Biometric Attendance System based on Aadhaar Authentication
- Attendance System with real time monitoring
- Comprehensive MIS
- Lightweight System- Does not requires any special hardware or algorithm
- Works on multiple platforms (Windows, Android, etc.) and form factors(Desktop and Tablets, etc.)
- Robust System- Self sustained for small power cuts
- Time taken to Record Attendance:
  - 1-2 Seconds on WiFi
  - 8-11 Seconds on GPRS (SIM)

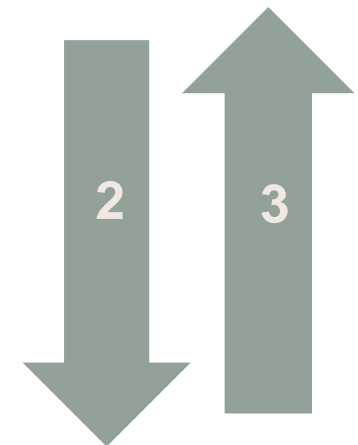
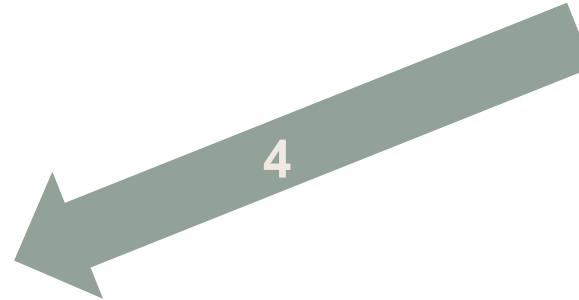
# AEBAS: Features

- Simple to Deploy : No hardware locking
  - Any Tablet/PC on any OS
  - Fingerprint/Iris Scanner Device
  - Ready to use software ( installs within seconds)
  - Connectivity
  - Package Box
- Affordable ( Total cost per device is less than Rs.10,000)
- Portable and easily re-locatable
- Fallback options for internet
  - Works on WiFi as well as GPRS, WiFi being the primary. In case of WiFi failure the system automatically switches to GPRS mode.
  - Remembers multiple WiFi's.
- Multiple Access Points : Employee marks attendance from any location/Office. A person working in State Office can mark his attendance in a District/Block Office
- Online Self Registration requiring only Aadhaar, a scanned photograph and a working mobile number.
- SMS Alerts to employees in case of absence, late coming, early leaving or not closing their attendance.

# How it Works



Centralized Attendance Server



Aadhaar Authentication Server

1. Attendance Request originated from the system to a centralized attendance server with fingerprint, User ID.
2. Aadhaar mapped against the ID and fingerprint, sent to the Aadhaar Authentication Server
3. Authentication response received on the centralized attendance server. On valid authentication, attendance record stored on the server.
4. Client Response from the attendance server (Success/Failed)

# Price Comparison Of Various Biometric Based Attendance Systems

- Cost of Local Area Network (LAN) based Attendance management System- **Rs.16,500/- or more.**
- Cost of GPRS (SIM) based Attendance management system- **Around Rs. 20,000/-**
- Both types are proprietary in terms of Hardware and Software, thus creates dependency on the vendor
- Cost of AEBAS
  - **Rs.8,000- Rs.10,000** for tablet version
  - **Rs.3,000** for desktop computer version (excluding PC)
  - Can be installed on any android tablet.
  - Can be used with a number of biometric scanners (both finger and iris)
  - Thus no vendor dependency
  - Software is freely available

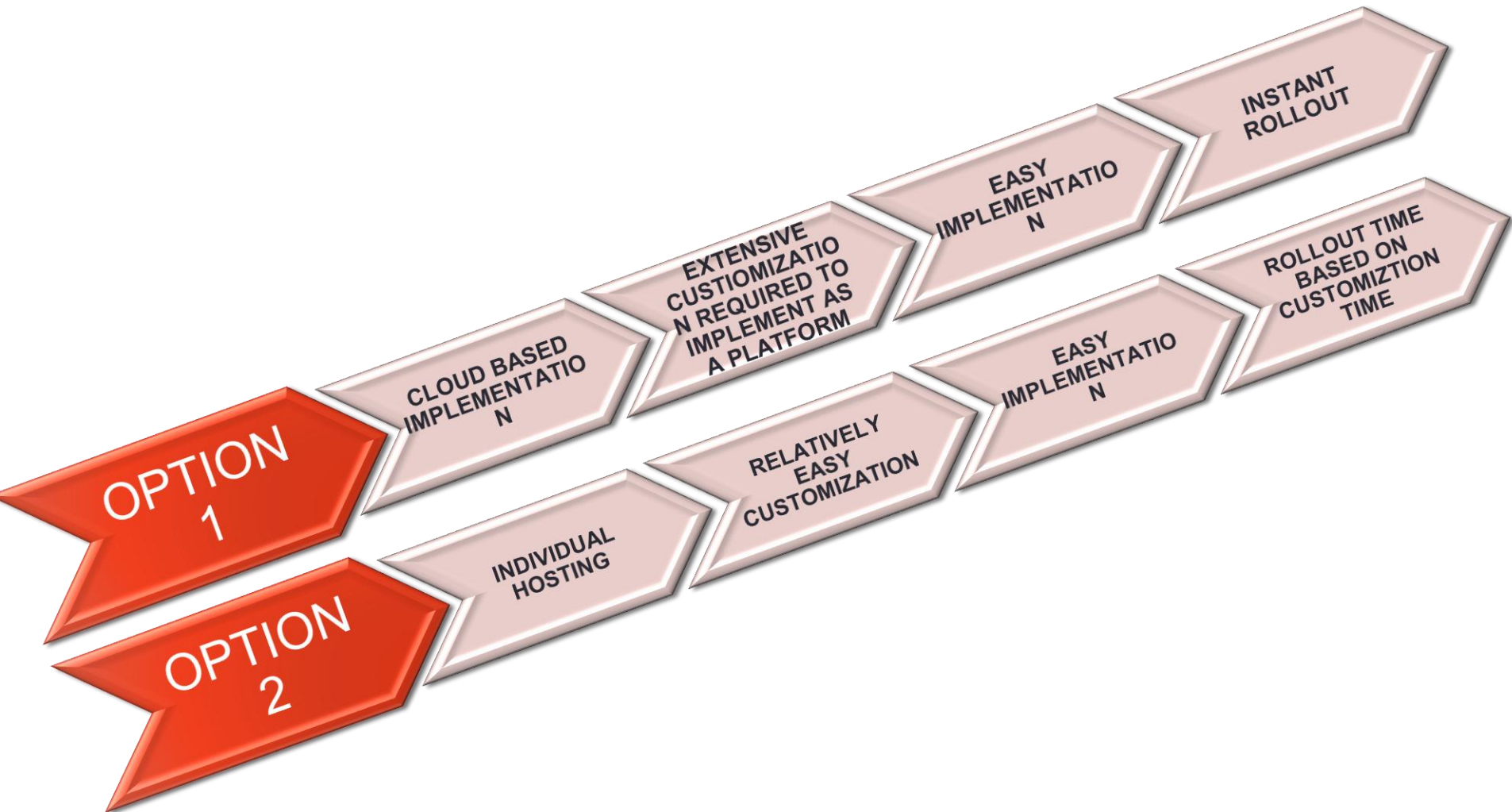
# Advantages of AEBAS

- Low cost – easily deployable
- Will ensure attendance recording in remote areas with mobile connectivity
- No attendance registers required
- No cards or other tokens required
- Comprehensive MIS
- Employee cannot
  - Mark attendance in back-date
  - Mark someone else's attendance
- Can be used for live test of our pensioners
- Tracks time of entry, exit hence MIS can track hours spent in office.
- **The whole AEBAS software is highly scalable.**

# Constraints


- Dependency on Availability of Connectivity
- Users should have Aadhaar number


# Replication Strategy






# Replication Requirements

- 
- Complete Code and Implementation Support shall be provided
  - System is available as a package ready to be deployed with comprehensive MIS

- 
- Support team needed at implementation point
  - Support team may consist of Project Manager, DB Expert, Network cum System Administrator, Data Entry Operators cum Helpdesk Personnel

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- SMS Gateway and AUA services need to be arranged.
  - Recipient Team should visit and interact with UID Team at Ranchi for understanding features and implementation approach



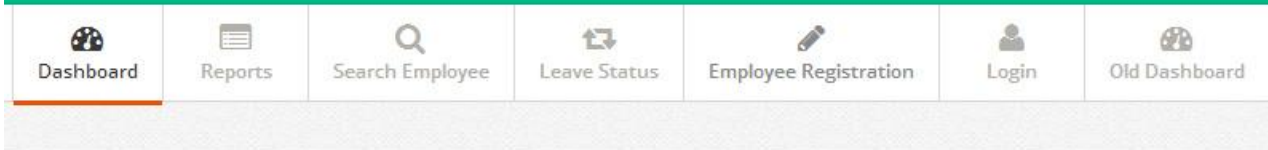
# AEBAS Services- Online Registration

## Self Online Registration



Government of Jharkhand

Aadhaar Biometric Attendance System



Three easy steps to **REGISTER** yourself

- Step 1** Provide your personal, official details and upload photo
- Step 2** Validate your mobile number by entering the OTP
- Step 3** Write down your temporary registration number

Proceed To Next Step



# AEBAS Services- Live MIS Dashboard

JUNE 06, 2014



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## Today's Attendance Summary

Registered Users

29852

Active Users

11352

Active Today

8229

Active Device


298

Avg. In Time

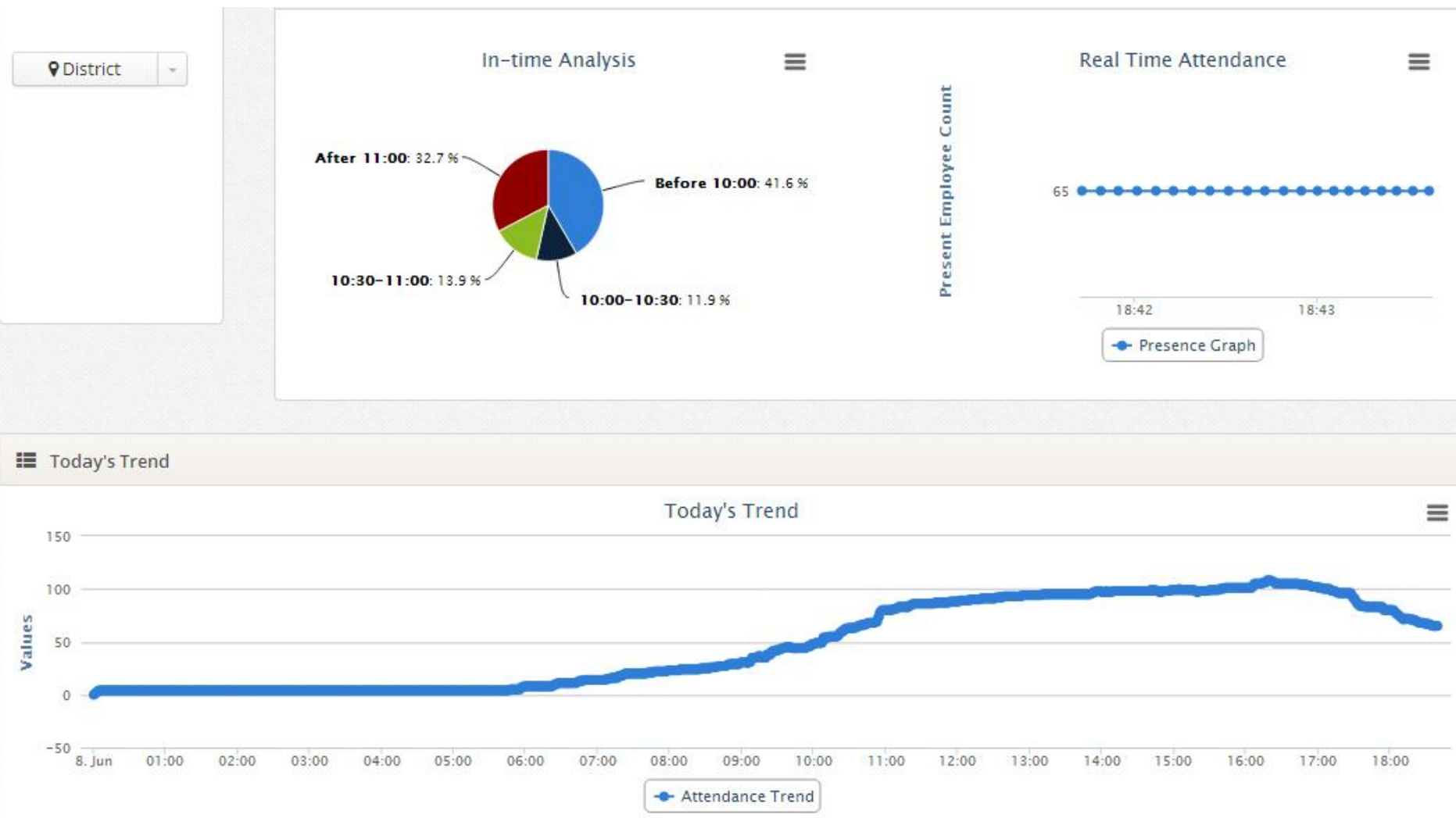
10:14

Avg. Out Time

5:57

 In Time Statistics

# AEBAS Services – Live MIS Dashboard



# AEBAS Services – Live Terminal Status

## • Features

- Live Monitoring of Client System Health from centralized location

Terminals Details

SL NO	TERMINAL ID	DESCRIPTION	ACTIVE	TODAY'S COUNT	TODAY'S	THIS MONTH'S	PREVIOUS MONTH'S	LAST ACTIVE
					AVERAGE RESPONSE TIME			
1	T-JHSECPROMI	Project Building 1st Floor Iris (Tablet)	<span style="color: green;">■</span>	4	2.87	3.06	15.88	
2	T-JHSECPRO3M	Project Building 3rd Floor Middle Left (Tablet)	<span style="color: green;">■</span>	6	0	3.25	3.94	11-06-2014 17:42:59
3	T-JHSECPROIM	Project Building 1st Floor Centre (Tablet)	<span style="color: green;">■</span>	17	1.99	2.78	3.78	11-06-2014 17:42:06
4	T-JHSECPRO4M	Project Building 4th Floor Centre (Tablet)	<span style="color: green;">■</span>	21	2.56	2.59	3.24	11-06-2014 17:42:22
5	T-JHSECPROGL2	Project Building Gnd Floor Left (Tablet 2)	<span style="color: green;">■</span>	160	3.28	3.29	4.45	11-06-2014 17:40:56
6	T-JHSECPRO2M	Project Building 2nd Floor Centre (Tablet)	<span style="color: green;">■</span>	8	2.33	2.85	3.44	11-06-2014 17:43:14
7	T-JHSECPRO3MR	Project Building 3rd Floor Middle Right (Tablet)	<span style="color: green;">■</span>	8	2.81	3.17	4.62	11-06-2014 17:45:02
8	T-JHSECPROGMC	Project Building Gnd Floor Middle Centre (Tablet)	<span style="color: green;">■</span>	120	2.35	2.57	3.28	11-06-2014 17:43:15
9	T-JHSECPROGML	Project Building Gnd Floor Middle Left (Tablet)	<span style="color: green;">■</span>	32	3	3.53	4.37	11-06-2014 17:44:31
10	T-JHSECPROGL3	Project Building Gnd Floor Left (Tablet 3)	<span style="color: green;">■</span>	186	3.99	4.03	5.32	11-06-2014 17:40:23
11	T-JHSECPROGL4	Project Building Gnd Floor Left (Tablet 4)	<span style="color: green;">■</span>	136	3.25	3.37	4.23	11-06-2014 17:41:26
12	T-JHSECPROGMR	Project Building Gnd Floor Middle Right (Tablet)	<span style="color: green;">■</span>	58	3.17	3.34	4.43	11-06-2014 17:43:35
13	T-JHSECPRO1L	Project Building 1st Floor Left (Tablet)	<span style="color: green;">■</span>	46	2.73	3.33	4.22	11-06-2014 17:40:10
<b>Totals:</b>			<b>13 Active/ 13</b>	<b>802</b>	<b>3.21</b>	<b>3.29</b>	<b>4.5</b>	



# AEBAS Services – Comprehensive MIS

- MIS Features

- Unit Wise Attendance MIS (Example Secretariat Offices, District Offices etc)
- Office/ Department wise Attendance MIS (Example IT Department)
- Individual Attendance MIS
- Department wise real time attendance tracking.
- Managers can create their own Employee groups or monitoring groups across locations and departments based on privilege.
- Search facility to easily get the attendance of an employee just by name.
- Advance reporting section based on various configurable parameters.
- Provision for recording various leaves against employees.
- Can be easily linked to salary calculation of employees

# AEBAS Jharkhand Success Story

- Successfully implemented in the State of Jharkhand
- Currently around 9000 employees are marking their attendances on daily basis.
- All State level offices, District Headquarters are covered by AEBAS.
- Rollout till Block level offices within this month.
- Pilot in schools, PHCs have been done.
- Live AEBAS MIS at <http://attendance.jharkhand.gov.in>

THANK YOU