



# adyta

< phone >

**PROTECT YOUR COMMUNICATIONS**

VOICE CALLS AND TEXT MESSAGES

**USE ADYTA.PHONE!**

adyta



**WHY YOU NEED  
ENCRYPTED  
COMMUNICATIONS**



- Workplace communications are critical to business success as well as productivity. However, in today's increasingly digital world, it is essential to protect the privacy of communications by safeguarding business data, personal data, and intellectual property.

Therefore, it is crucial to use communication tools with high security and integrity guarantees to protect user's privacy and data.

Not using solutions that preserve the security of communications exposes organizations and their workers to potential loss of information, data, and business details, making communications, calls, and messages susceptible to interception by malicious agents.



**WHAT**  
**ADYTA.PHONE**  
**CAN DO FOR YOU**





- [Adyta.Phone](#) is a solution for secure communications fully developed by [Adyta](#) in its offices in Portugal. It runs on iOS and Android smartphones.

This solution differs from other communication solutions on the market. It has a transparent business model, where the customer pays for a subscription for a service and does not pay by having his own personal or business data collected.

**WE DON'T WANT YOUR DATA!**

**IT IS YOURS AND WILL REMAIN  
SO WHENEVER YOU USE **ADYTA.PHONE****

- At the same time, [Adyta.Phone](#) provides strong and high-performance encrypted communications, data integrity and enhanced usability.

This is the tool you need to keep your communications safe, reliable, and efficient without running the risk of exposing them to malicious agents or dispersing your data to unknown places.



**WHAT**  
**ADYTA.PHONE**  
**GIVES YOU**





**PRIVACY**

## PRIVACY

### STRONG PEER-TO-PEER ENCRYPTION

- [Adyta.Phone](#) uses the most advanced encryption technology, successfully responding to the most demanding standards;

### NO DATA PERSISTENCE ON THE BACKEND

- [Adyta.Phone](#) does not save or maintain any data from your communications;



## PRIVACY

### **FULL CONTROL OF THE SERVING APPLIANCE (ON-PREMISES SOLUTIONS)**

- [Adyta.Phone](#) offers different modes of operation and has, exclusively for companies and organizations that value the security of their information, an on-premises model in which the customer has complete control of the solution's infrastructure;

### **THE SERVER DOES NOT PERSIST GROUPS (MEMBERS), NOR DOES IT STORE COMMUNICATED INFORMATION**

- The [Adyta.Phone](#) server does not maintain or store communication data between users. Its function is restricted and does not intervene in communication data;

## PRIVACY

### NO IDENTITY ANCHOR REQUIRED (DOES NOT USE YOUR DATA)

- **Adyta.Phone** does not use your data (or mobile phone number or others), so this data remains yours alone, and is not necessary to use this solution.
- **Adyta.Phone** preserves your privacy at all times.



**SECURITY / INTEGRITY**

## SECURITY / INTEGRITY

- **MILITARY-GRADE ENCRYPTION**
  - **SECRECY, INTEGRITY, AND AUTHENTICATION** FOR ALL MESSAGES AND CALLS
- **FORWARD-SECRECY**
  - Past communications are safe from attacks in the present



## SECURITY / INTEGRITY

- **POST-COMPROMISE SECURITY**

- Future communications are not compromised by attacks in the present

- **AUTHENTICATION**

- **NON-REPUDIATION OR DENIABILITY**

- [Adyta.Phone](#) communications impose authentication, meaning that it's able to determine whether a message was sent by any member of a group or if it was sent by a specific member of that group, granting deniability or non-repudiation, respectively.

## SECURITY / INTEGRITY

- **ENCRYPTED DATA AT-REST**

- When data is not being used (stored in the server for subsequent delivery or in the device, while "offline") it is always stored in an encrypted format.

- **SECURE REVOCATION & DATA MIGRATION**

- An account can only be revoked / recovered by its legitimate owner. This is achieved by data encryption and authentication. Data migration occurs during this process, thus being implicitly protected.



**PERFORMANCE**

## PERFORMANCE

- Performance is critical to ensuring the quality of service anywhere.

Connected to a data network, Adyta.Phone will work with high performance and reliability, allowing you to communicate with users anywhere.

### GROUP COMMUNICATIONS EFFICIENCY IN A WORST-CASE SCENARIO (MEMBER REPLACEMENT):

- Pairwise (Full-mesh) protocols:  $O(N^2)$
- Adyta.Phone:  $O(N)$



## PERFORMANCE

### ASYNCHRONOUS CRYPTOGRAPHY

- User are not required to be simultaneously online to update their cryptographic keys

### STREAMING WITH QUIC (HTTP3)

- QUIC is used to stream data, allowing to mask traffic has HTTP/3 when globally supported, while providing protection against stream identification and Deep Packet Inspection

# DISRUPTIVE TECHNOLOGY



## DISRUPTIVE TECHNOLOGY

### COMMUNICATIONS BETWEEN FEDERATIONS THAT PRESERVE PRIVACY

- Optionally, [Adyta.Phone](#) allows you to communicate privately and securely between federations (among different organizations), without allowing the federations to communicate with each other (segmented networks). For this, it uses an alternative infrastructure running a separate Adyta-managed global federation, wholly segregated from private federations, allowing users from different organizations to communicate with each other without using the resources of their organization's federations;

### CENTRALIZED STREAMING WITH END-TO-END ENCRYPTION KEYS

- [Adyta.Phone](#) always uses end-to-end encryption, offering maximum security in your communications;

## DISRUPTIVE TECHNOLOGY

### NON-NEGOTIABLE SECURITY

- [Adyta.Phone](#) does not allow cryptographic downgrade or use of keys known to servers. Thus, data packets (messages, calls) are always encrypted point-to-point. There is no transcoding or mixing of streams on the servers; they only selectively forward streams without knowing their content or modifying it.

## **A BUSINESS MODEL THAT GIVES THE CUSTOMER COMPLETE CONTROL OF THE SOLUTION**

- With Adyta.Phone, the customer manages the entire solution. It means that you have the possibility of managing your server (appliance), installing it on-premises (in your own data center), or keeping it in a cloud environment controlled by you.

## **THAT'S WHAT SETS US APART!**

**THE CUSTOMER IS THE COMPLETE OWNER OF THEIR ENCRYPTED COMMUNICATION SYSTEM.**



## CORPORATE SOLUTION

- A SOLUTION THAT ALLOWS SECURE COMMUNICATIONS INSIDE OF ORGANIZATIONS WITHOUT USING THIRD-PARTY INFRASTRUCTURES.



IN A CLOUD ENVIRONMENT  
CONTROLLED BY THE CLIENT

OR



ON THE ORGANIZATION'S OWN  
DATACENTER (ON-PREMISES)

## CORPORATE SOLUTION

- IF YOU WANT TO TALK TO SOMEONE FROM ANOTHER ORGANIZATION OR SOMEONE ELSE OUTSIDE, **YOU CAN DO IT WITHOUT USING YOUR ORGANIZATION'S INFRASTRUCTURE** (GLOBAL ADYTA SECURE COMMUNICATION SYSTEM)



ORGANIZATION A

ORGANIZATION B

## INDIVIDUAL USERS SOLUTION



YOU CAN ALSO USE IT AS AN **INDIVIDUAL USER** THROUGH THE **GLOBAL ADYTA COMMUNICATION SYSTEM**.

\*\* ALL CORPORATE SOLUTION USERS HAVE INDIVIDUAL USERS PLAN INCLUDED



**AVAILABLE FOR ALL USERS AT:**



**AVAILABLE FOR CORPORATE USERS AT:**

**[www.adyta.pt](http://www.adyta.pt)**



# **ABOUT US**



- **Adyta** is a Portuguese-owned company founded in Porto and the result of R&D projects at the University of Porto. Since its foundation, Adyta has been developing projects in two main areas: secure (encrypted) communications solutions and cybersecurity services.
- **Adyta.Phone**, an encrypted communication solution, is the company's flagship product and results from several years of work, research, and development on secure communications. In this sector, **Adyta** also has ongoing projects to protect communications in IoT environments, specifically in smart city projects.



- **Adyta** is also recognized for its cybersecurity services, with a particular focus on the area of conformity assessment, regularly participating in technical evaluations of systems and platforms that undergo conformity assessment within the scope of certification projects managed by the Portuguese National Security Authority. Two examples of this type of work are the audits in the certification processes of Samsung devices (6 consecutive years) and Microsoft Office 365 and Azure solutions (first certification of a cloud platform in Portugal).
- **Adyta** also cooperates with corporate clients from various sectors, from the financial to the automotive and retail, helping clients to improve cybersecurity performance through highly specialized processes.
- At **Adyta**, we believe that innovation is fundamental for technological progress, which is why we maintain a close collaboration with the academic world, through which, with R&D projects, we seek new solutions to the challenges posed to us.



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