

# Rainbow by Alcatel-Lucent Enterprise



## Rainbow Guardian:

Resilient communications in case of unplanned events

Setting up your production instance

Contact:

Frédéric Pont, Pierre-Yves Noel

Contact us in Rainbow:

[Frederic.pont@al-enterprise.com](mailto:Frederic.pont@al-enterprise.com)

[pierre-yves.noel@al-enterprise.com](mailto:pierre-yves.noel@al-enterprise.com)

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## Rainbow Guardian: introduction

**What is Rainbow Guardian?** Rainbow Guardian is a dedicated fallback communication solution designed to ensure continuous business communications during unexpected disruptions such as cyberattacks or system failures. It provides enterprises with a ready-to-use backup communication environment hosted on Rainbow Hub, a robust, secure, cloud-based communication platform.

**Problem Solved:** Rainbow Guardian addresses the critical business need for uninterrupted communications during crises, significantly minimizing operational disruptions, protecting business reputation, and enhancing employee safety through consistent internal and external communication.

### Key Benefits:

- **Instant Activation:** Provides rapid response during emergencies.
- **Seamless Communication Continuity:** Quickly transitions digital and telephony communications.
- **Ease of Use:** User-friendly interfaces with automated processes and passwordless authentication.
- **Real-Time Crisis Visibility:** Offers live analytics and monitoring during crises.
- **Automated Notifications:** Ensures swift internal communication and alerting.

**How Rainbow Guardian Works:** Rainbow Guardian is integrated into an enterprise's existing Business Continuity Plan. When activated via the intuitive web portal, it instantly switches communication services from the primary environment to the Rainbow Guardian backup environment. Employees receive immediate access to comprehensive telephony and digital communication capabilities through Rainbow Hub. Telephony continuity is supported through re-routed SIP trunks from certified service providers, maintaining seamless external communications.

**Unique Selling Proposition (USP):** Rainbow Guardian uniquely combines rapid, automated activation with extensive digital and telephony backup capabilities, distinguishing it from typical cloud solutions that may lack immediate telephony backup or have slow reactivity. It offers an innovative business model, charging customers predominantly when the backup system is activated, providing significant cost efficiencies.

**Ideal Customer Profile:** Primarily targeted at enterprises with robust business continuity and crisis management needs, particularly in critical sectors such as healthcare, finance, education, insurance, and government institutions vulnerable to cyber threats and compliance requirements.

Rainbow Guardian ensures business resilience by safeguarding vital communication channels, maintaining operational efficiency, and enhancing the enterprise's ability to manage crises effectively.

## 2. Rainbow Guardian components overview

Rainbow Guardian has 2 main components:

- It leverages the Rainbow Hub platform for communications and telephony
- It provides a web interface for Business Continuity Teams to control the Rainbow Guardian dry run and activation.

It also leverages other aspects of the Rainbow platform. Here is a description of the components used by Rainbow Guardian to provide its services.

### 1. Rainbow Hub

#### **Definition:**

Rainbow Hub is a cloud-based unified communications platform providing enterprise-grade telephony and digital collaboration services. It forms the primary infrastructure for Rainbow Guardian, delivering essential communication services such as:

- Telephony services (public trunk provided by the partner)
- Peer-to-peer calls
- Conference bubbles
- Messaging channels

#### **Role in Rainbow Guardian:**

Provides the communication environment activated in crisis mode, allowing seamless continuity of services for all employees.

### 2. Rainbow Guardian Web Portal (leveraging Rainbow CPaaS APIs)

#### **Definition:**

A specialized, intuitive web interface designed for business continuity teams (BCT) to manage and activate fallback communications during a crisis.

#### **Role in Rainbow Guardian:**

- Single-click activation of fallback communication services
- Management and monitoring of crisis communication activities
- Real-time analytics on usage and system status
- Secure, passwordless login via Rainbow credentials or Single Sign-On (SSO)

### 3. Dormant Employee Accounts

#### **Definition:**

Employee accounts pre-configured and maintained in an inactive state on Rainbow Hub, ready for rapid activation during crises.

#### **Role in Rainbow Guardian:**

- Quickly activated to restore full telephony and digital communication for employees during disruptions
- Accounts synchronized periodically through LDAP/Active Directory integrations or CSV uploads

#### 4. Data Synchronization and Employee Provisioning

**Definition:**

A process for replicating employee data from Active Directory (AD), LDAP, or CSV uploads into Rainbow Guardian.

**Role in Rainbow Guardian:**

- Ensures current employee information is readily available for immediate activation
- Provides accurate contact details (email, phone) required for notifications and secure account activation

#### 5. Direct Dial-In (DDI) Numbers and SIP Trunks

**Definition:**

Telephony services provided by a certified telecom operator, including specific DDI numbers assigned for fallback communications, and SIP trunk configurations enabling inbound and outbound call routing.

**Role in Rainbow Guardian:**

- Allow calls initially routed to the primary communication environment to be seamlessly redirected to Rainbow Guardian
- Provide telephony continuity ensuring external callers reach employees without disruption during a crisis

#### 6. Automated Notifications and Alerts

**Definition:**

Automatic dissemination of critical information via SMS and email notifications, facilitating clear internal communication during crisis events.

**Role in Rainbow Guardian:**

- Notify employees about the activation of Rainbow Guardian with access instructions
- Inform Business Continuity Teams (BCT) and management about crisis status and responses
- Enable secure, two-factor authentication for account access during stressful activation periods

## 7. Real-Time Analytics and Monitoring

### **Definition:**

Tools within the Rainbow Guardian portal providing immediate visibility into communication usage patterns and employee engagement during a crisis.

### **Role in Rainbow Guardian:**

- Offer insight into real-time system utilization and user activity
- Support decision-making by crisis management teams through up-to-date statistical information
- Aid rapid adjustments and informed responses to evolving crisis scenarios

## 8. Security and Authentication

### **Definition:**

Built-in security measures, including secure cloud hosting, Single Sign-On (SSO), passwordless login, and optional two-factor authentication (2FA).

### **Role in Rainbow Guardian:**

- Ensures secure, simplified user access under high-stress scenarios
- Protects sensitive company data and maintains compliance with security standards

## 9. Deployment and Support Packages

### **Definition:**

Optional professional service offerings designed to facilitate configuration, activation, and crisis response preparedness.

### **Role in Rainbow Guardian:**

- Assist initial configuration and integration into customer Business Continuity Plans
- Provide support during dry-run tests and actual crisis events
- Deliver dedicated ALE Customer Success management to ensure maximum readiness and operational effectiveness

## 10. Rainbow Admin Configuration

### **Definition:**

Administrative settings managed via Rainbow's admin interface, allowing configuration of Rainbow Guardian functionalities and user permissions.

### **Role in Rainbow Guardian:**

- Enables Business Continuity Teams to manage users, access permissions, notification settings, and telephony configurations
- Controls synchronization processes and crisis activation readiness

### 3. Rainbow Guardian personas definition

#### 1. Business Continuity Core Team

- **Definition:**  
Professionals directly responsible for the planning, operational readiness, and activation of the Rainbow Guardian solution. They manage crisis response activities, utilize the Rainbow Guardian web portal, monitor real-time analytics, coordinate communication, and ensure employees have immediate access to fallback communication channels during disruptions.

#### 2. Business Continuity Extended Team

- **Definition:**  
Comprises the Business Continuity Core Team along with executive-level stakeholders and management authorized to make strategic decisions, including activating Rainbow Guardian. The Extended Team ensures alignment of crisis response with broader organizational objectives and provides high-level guidance and support during disruptions.

#### 3. Rainbow Administrator

- **Definition:**  
Technical personnel in charge of configuring and maintaining Rainbow Guardian, including managing employee data synchronization (via Active Directory, LDAP, or CSV uploads), setting up dormant employee accounts, and ensuring continuous technical readiness of the system.

#### 4. IT and Security Personnel

- **Definition:**  
Specialists responsible for securing IT infrastructure, ensuring secure authentication (such as SSO and two-factor authentication), and supporting Rainbow Guardian's data privacy and security during both standard operations and crisis activation.

#### 5. Employees (End Users)

- **Definition:**  
All enterprise personnel whose communications are maintained or restored through Rainbow Guardian in case of a disruption. They receive automated notifications and have instant access to fallback telephony and digital collaboration tools provided by Rainbow Hub.

#### 6. Service Provider & Business Partners

- **Definition:**  
External telecom service providers certified by ALE, supplying critical telephony infrastructure, including Direct Dial-In (DDI) numbers and SIP trunk services required to maintain external communication channels during a crisis. Business

partners authorized to distribute Rainbow Guardian provide deployment assistance, integration support, and complementary services essential to ensure seamless operation of the solution.

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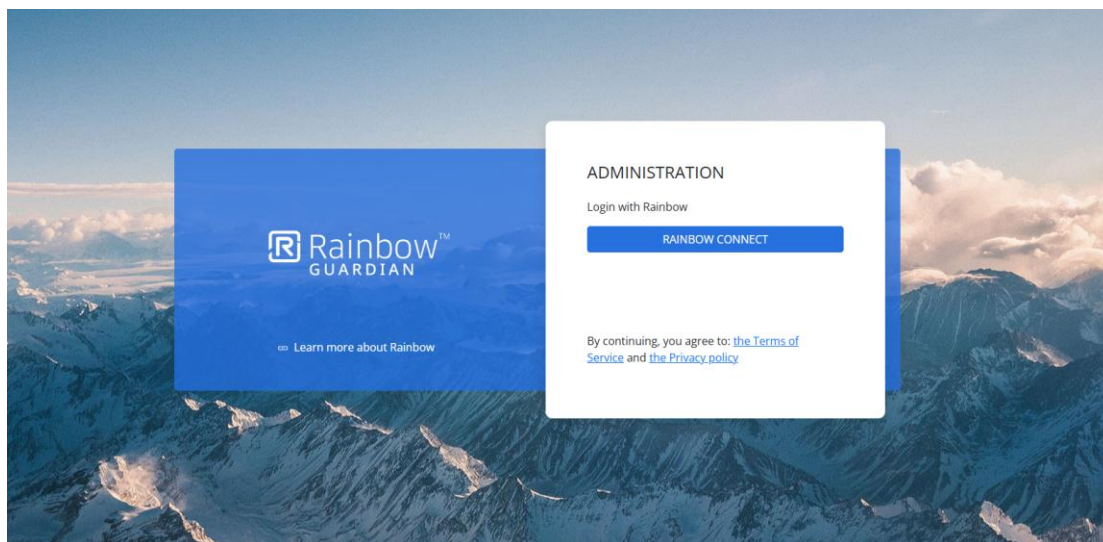
## 4. Rainbow Guardian production environment configuration

The following section takes you step by step in setting up your Rainbow Guardian production environment.

There might be unclear items or questions: please provide us any feedback so we can enhance this document and the procedures.

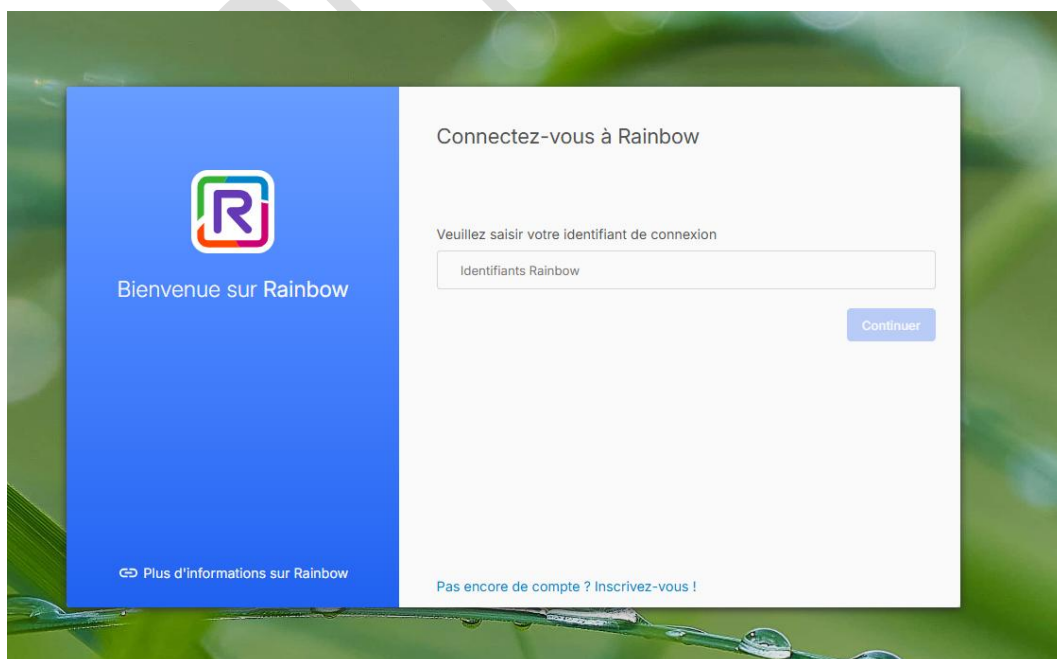
The Rainbow Guardian production environment can be reached at the following address:

<https://guardian.openrainbow.io/>



Rainbow Guardian on production environment is multi-tenant, you can log in with the Rainbow accounts of the business continuity team.

All companies and accounts must be created on [web.openrainbow.com](http://web.openrainbow.com) for the environment to work properly.



## Prerequisites

Prepare the following information before configuration:

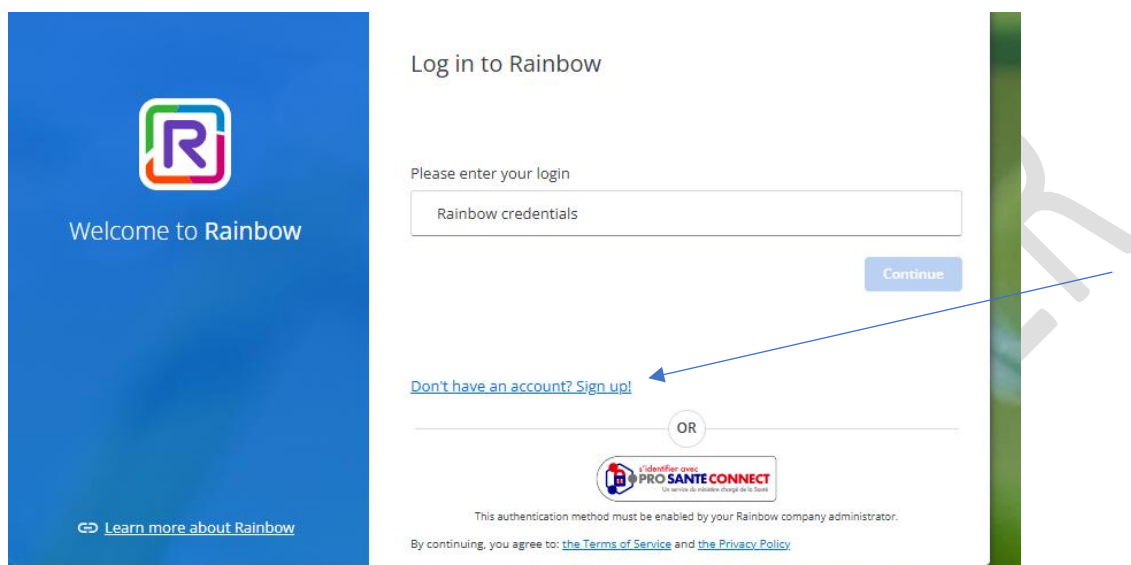
- **Administrator account:** Email to create a Rainbow company on [web.openrainbow.com](http://web.openrainbow.com)
- **Core Team emails:** 3 accounts
- **Extended Team emails:** 3 accounts
- **Employee emails:** 5 accounts
- **SIP trunk & DDI numbers:** Provided by a certified service provider or partner

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## ▶ Step-by-step configuration

### 1. Creating a Rainbow Company & Administrator Account for Guardian Production

- Log in to [web.openrainbow.com](http://web.openrainbow.com) with a dedicated admin email address for your Guardian environment



- Create a new company environment specifically dedicated for Rainbow Guardian:
  - **Company Name**
  - **Country & Region**
- Assign the user as **Rainbow Administrator account**.
- The company should be **linked to your own partner company** in Rainbow so that licences can be assigned.
- Once your Rainbow Guardian company is connected to your partner company, you can add **Rainbow Guardian Business Continuity** licences and **Rainbow Guardian Employee** licences to the company. Those licences will not be invoiced as part of the Lab & Demo program of Rainbow.

Once done, please notify your ALE contact so that the request is identified and our teams can support you in the process.

## 2. Company Configuration in Rainbow

(Performed by Rainbow Administrator)

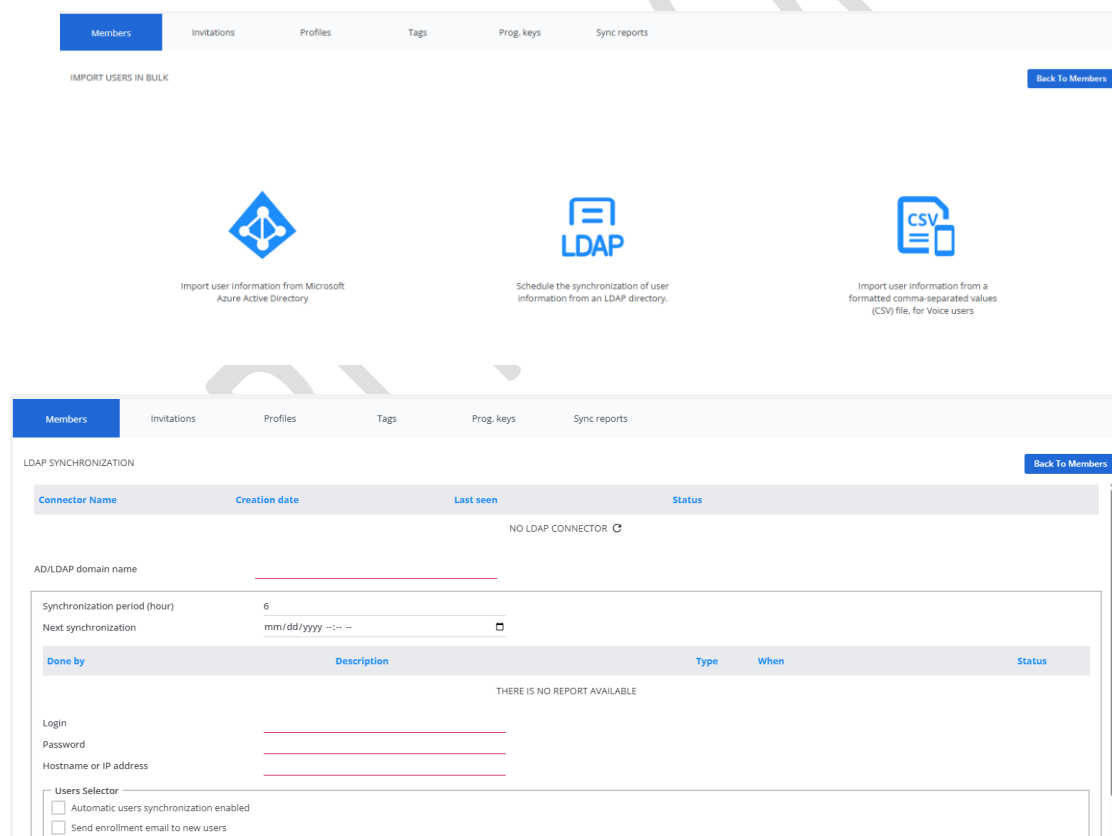
### Important Warning

Before importing user data, ensure your Active Directory (AD), LDAP, or CSV file is fully accurate and updated, as incorrect data may cause configuration issues and compromise your Rainbow Guardian Production environment.

Always verify data integrity carefully before synchronization.

### Import User Data

- Prepare user data CSV (example available for download in Rainbow) or connect LDAP synchronization.
- Create, import or synchronize user data:
  - Core Team members (3 accounts)
  - Extended Team members (3 accounts)
  - Employees (5 accounts, dormant state)



The screenshot displays the 'Members' section of the Rainbow Guardian interface. The top navigation bar includes 'Members', 'Invitations', 'Profiles', 'Tags', 'Prog. keys', and 'Sync reports'. Below the navigation, there are three main options for user import:

- Import user information from Microsoft Azure Active Directory:** Represented by a blue diamond icon with a network diagram.
- Schedule the synchronization of user information from an LDAP directory:** Represented by a blue 'LDAP' icon.
- Import user information from a formatted comma-separated values (CSV) file, for Voice users:** Represented by a blue 'CSV' icon.

The 'LDAP SYNCHRONIZATION' section is expanded, showing a table with columns: 'Connector Name', 'Creation date', 'Last seen', and 'Status'. The table is currently empty, displaying 'NO LDAP CONNECTOR'. Below the table, there are several configuration fields:

- AD/LDAP domain name:** A text input field.
- Synchronization period (hour):** A dropdown menu set to '6'.
- Next synchronization:** A date-time picker set to 'mm/dd/yyyy --:-- --'.
- Done by, Description, Type, When, Status:** A table header for a report, currently showing 'THERE IS NO REPORT AVAILABLE'.
- Login, Password, Hostname or IP address:** Three text input fields.
- Users Selector:** A section with two checkboxes:
  - Automatic users synchronization enabled
  - Send enrollment email to new users

### Assign Licenses

- Select and assign appropriate licenses:

- **Core Team members:** Administrator of the company + Guardian Business continuity monthly

Options

Guardian Business Continuity Monthly

Guardian Employee Monthly

- **Extended Team members:** Member (only) of the company+ Guardian Business continuity monthly

Options

Guardian Business Continuity Monthly

Guardian Employee Monthly

- **Employees:** Member (only) of the company + Guardian employee standby monthly

Options

Guardian Business Continuity Monthly

Guardian Employee Monthly

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## ▶ Assign Rights & Permissions

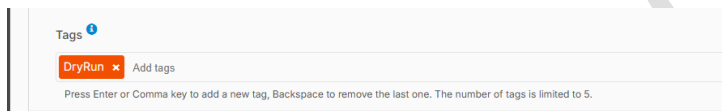
- Core Team:
  - Assign Rainbow Guardian portal administration rights.
- Extended Team:
  - Assign appropriate permissions (no admin rights).

Roles
Member
Member
Admin, Operations, Finance, Customer analytics, Analytics
Admin, Operations, Finance, Customer analytics, Analytics
Admin
Member
Member
Member
Member
Member
Member
Member
Admin, Operations, Finance, Customer analytics, Analytics
Member

## ▶ Important! Assign Dry Run employees

For all employees that should be taken into account in the Dry Run scenario:

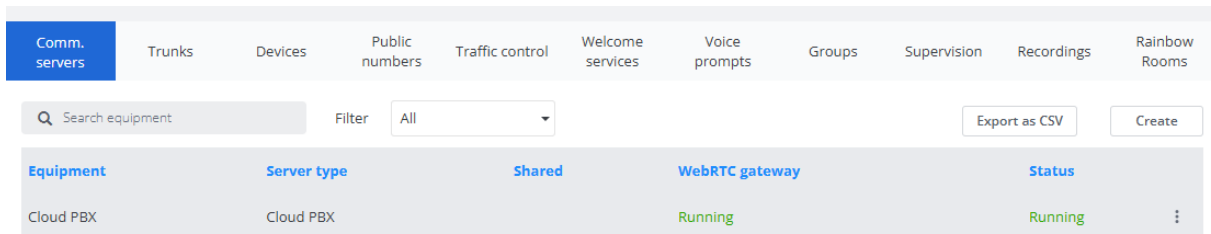
They should be assigned a “DryRun” tag in their user configuration



### 3. Setup Cloud PBX in Rainbow Hub

(Still in the Rainbow admin interface)

#### ▶ Configure your Rainbow Hub PBX in the Rainbow administration



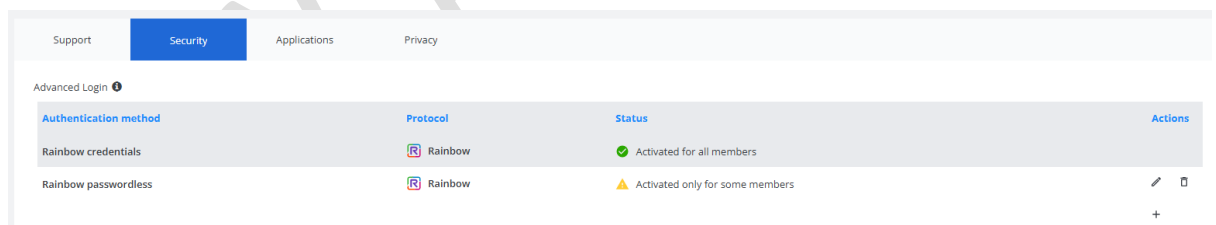
Equipment	Server type	Shared	WebRTC gateway	Status
Cloud PBX	Cloud PBX		Running	Running

#### ▶ Configure SIP Trunk & public Numbers

- Connect the SIP Trunk provided by service provider.
- Configure DDI numbers:
  - Assign new DDI numbers to Core and Extended Team members.
  - Configure DDI number forwarding rules for employee accounts.

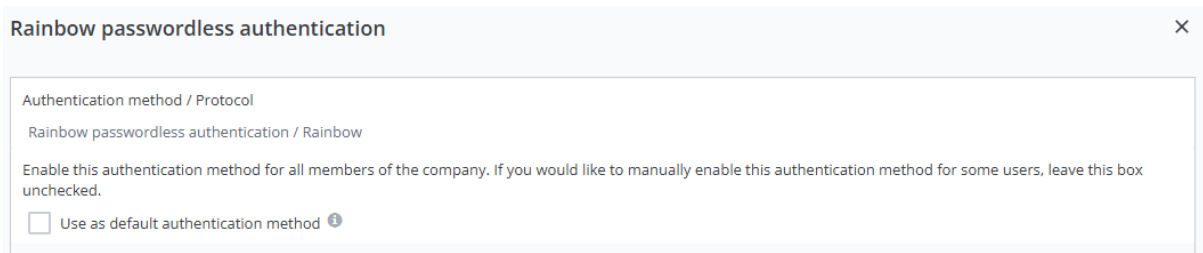
### 4. Configure Security Settings

- Set up authentication:
  - Rainbow Credentials is the default authentication method.
  - Single Sign-On (SSO) is recommended.



Authentication method	Protocol	Status	Actions
Rainbow credentials	Rainbow	Activated for all members	
Rainbow passwordless	Rainbow	Activated only for some members	✎ □

- Define the passwordless authentication method:
  - Passwordless login will be forced during the crisis.
  - This will ensure secure employee notifications and access links.
  - This method should not be set as the default authentication method.



**Rainbow passwordless authentication** [X]

Authentication method / Protocol  
Rainbow passwordless authentication / Rainbow

Enable this authentication method for all members of the company. If you would like to manually enable this authentication method for some users, leave this box unchecked.

Use as default authentication method ⓘ

- When activating Rainbow Guardian, the default authentication method will automatically be set to Rainbow passwordless authentication for all users.

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## 5. Rainbow Guardian specific configuration

- For each user, the emergency contact in case of Guardian activation are configured in the security tab.

The screenshot shows the 'Security' tab of a user configuration page. It includes sections for 'Change login' and 'Authentication policy'. Under 'Change login', there are fields for 'New identifier' (rainbow.guardian+bcp1@al-enterprise.com), 'Phone number to sign in' (+33612345678), and 'Authentication ID'. Under 'Authentication policy', the 'Sign-in method' is set to 'Rainbow passwordless'. There is also an 'Alternative email' field with the same email address as the 'New identifier'.

- In this section, you can configure
  - One email as “New identifier”: this email will be used by Rainbow Guardian to notify the user by email of the switch over to Rainbow Guardian for communications. It will also be used as the email for the 2-step authentication for web access.
  - The only way to declare this email address is to go through “*Rainbow passwordless*”. First select Rainbow Passwordless as authentication

This image shows a close-up of the 'Sign-in method' dropdown menu. The menu is open, showing four options: 'Same as company (Rainbow credentials)', 'Same as company (Rainbow credentials)', 'Rainbow credentials', and 'Rainbow passwordless'. The 'Rainbow passwordless' option is highlighted in blue.

- Then define the alternative email

This image shows a close-up of the 'Alternative email' field. The field contains the email address 'rainbow.guardian+bcp1@al-enterprise.com' and has an information icon to its right.

This image shows a summary of the authentication policy configuration. It includes the 'Sign-in method' set to 'Rainbow passwordless' and the 'Alternative email' field with the email address 'rainbow.guardian+bcp1@al-enterprise.com'.

- Click apply to save

This image shows a close-up of the 'Close' and 'Apply' buttons. The 'Apply' button is highlighted in blue, indicating it is the button to click to save the configuration.

- Re-open the contact and change the sign-in method to Same as company, to be relevant to the company security policy.

Sign-in method: Rainbow passwordless (selected)

Alternative email: Rainbow credentials, Rainbow passwordless

- Click apply to save

Close Apply

- One mobile number as “Phone number to sign-in”: this mobile phone number will be used by Rainbow Guardian to notify the user by SMS of the over to Rainbow Guardian for communications. It will also be used as the SMS for the 2-step authentication for mobile access (Rainbow application for Android & iPhone).

Information Permissions Telephony Prog. keys Services Roles Security

Change login

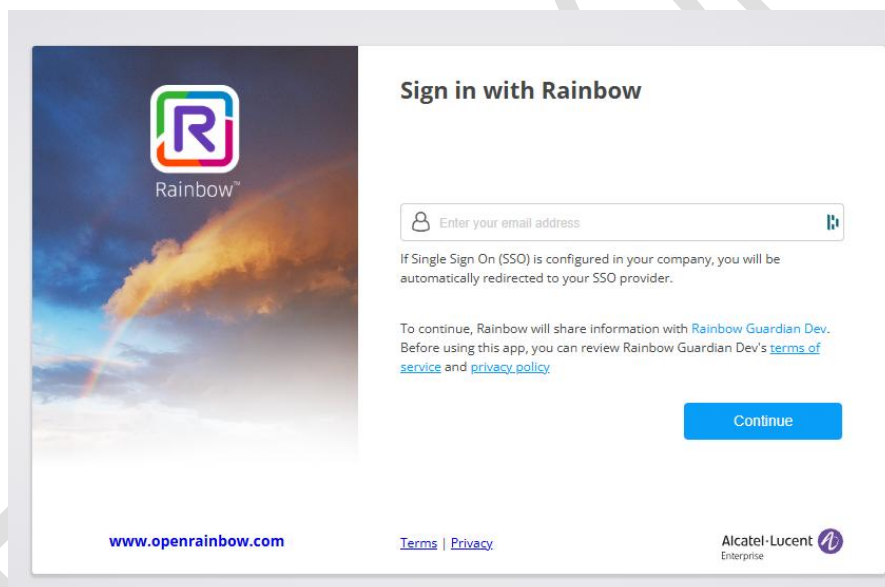
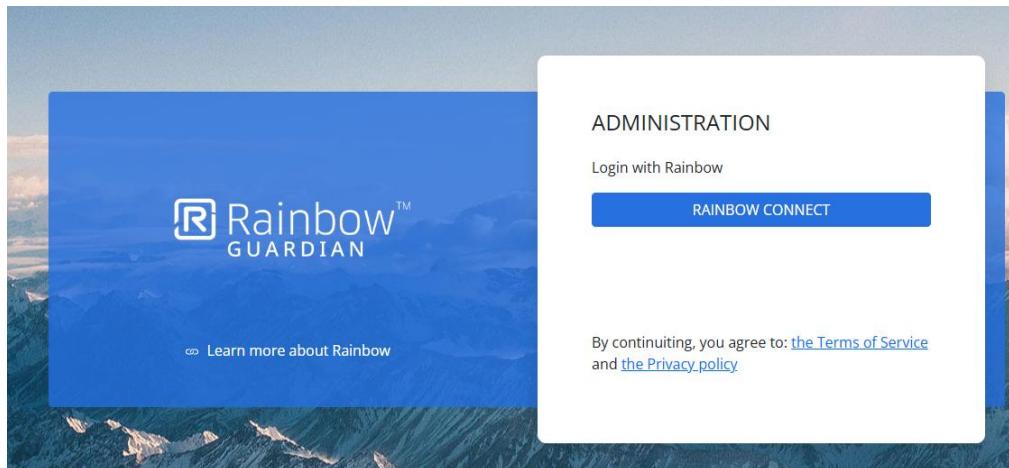
New identifier: rainbow.guardian+bcp1@al-enterprise.com

Phone number to sign in: +33612345678

Authentication ID

## 6. Rainbow Guardian Portal Final Check

- Login to the Rainbow Guardian web portal using Rainbow Core team credentials.
- Verify user accounts and data synchronization status.
- Ensure all users (core, extended, employees) appear correctly with correct rights and licenses.



## 7. Start using Rainbow Guardian - Activation Test (Dry Run/Production)

- Perform a dry run to verify system readiness:
  - Activate dormant accounts.
  - Verify automated notifications (email/SMS).
  - Validate external call routing and internal communications.

## 5. Rainbow Guardian production configuration check list & data collection

### ✦ Final Checklist

Step	Action	Verified?
1	Rainbow Company & Admin account created	✓ / ✗
2	Users imported (CSV/LDAP/AD)	✓ / ✗
3	Licenses assigned (Core, Extended, Employees)	✓ / ✗
4	SIP trunk & DDI configured in Rainbow Hub	✓ / ✗
5	Security settings (SSO, 2FA, passwordless)	✓ / ✗
6	Rainbow Guardian portal configuration check	✓ / ✗
7	Optional Dry Run executed successfully	✓ / ✗

To prepare for future Rainbow Guardian installations, the Rainbow Guardian data collection is provided as a guide. It provides a guide to collecting the various data necessary to setting up Rainbow Guardian for a customer. Also, it provides ideas on how to setup the environment (Bubbles, Channels) so that users are not entering a collaboration environment with no connection or users, when Rainbow Guardian is activated.

Creating the connections between users in anticipation, creating bubbles by departments and channels for the company for example, can help users be readily efficient when switching to Rainbow Guardian.

<b>Company information</b>	
Company name	
Administrator email	
Website	
Street	
City	
Postal code	
Country	
Timezone	
Company contact	
Size	
Activity	
CRD identifier	
<b>Privacy settings</b>	
Visibility	
Location of data	
Administrator Analytics level	
Partner Analytics level	
Invitations yes/no	
<b>Directory Synchronization</b>	

## 6. Feedback & ALE Support for your production environment setup

The Rainbow Guardian team is looking for your feedback and questions on the content of Rainbow Guardian and your experience with the production environment. For us to support you well and collect your feedback on the Rainbow Guardian overall experience, we kindly ask you to:

- Setup a bubble in Rainbow with your ALE account team and add [pierre-yves.noel@al-enterprise.com](mailto:pierre-yves.noel@al-enterprise.com) / [Frederic.pont@al-enterprise.com](mailto:Frederic.pont@al-enterprise.com) to the bubble. We will then add the relevant people to support you in your production environment setup.
- Provide us feedback of the preparation of your Rainbow Guardian production environment to adapt this document.
- Provide us feedback on Rainbow Guardian usage and features. We want to improve the context and experience with your feedback, so we provide the best possible experience to end-customers.

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