Getting started with Colibrí NetManager

User's Guide

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Chapter 1 About This Guide

This is the quick user guide for the Colibrí NetManager management platform. This platform enables remote management and monitoring of your network devices. The service is provided over the Internet by Teldat, S.A.. This document explains how to register a device and use the platform to control the different features of the device.

1.1 Supported devices

The information contained in this guide only applies to the *ATLAS360, ATLAS60, ATLASi60, Teldat M1, Teldat H1 Auto+, Teldat K and Teldat V router families.*

1.2 Who should read this manual?

This manual is intended for users who need to remotely manage or monitor a device from the list of supported devices.

1.3 When should I read this manual?

Read this guide as soon as you are ready to register a device. This manual will help you understand how devices are registered, configured and maintained.

1.4 What is in this manual?

This User's Guide contains the following information:

• How to register a new customer on the management platform.

• Instructions on registering devices.

• How devices are connected to the management platform.

• How to access device management.

• How to access device monitoring.

• Information on device instances and different remote functionalities.

• Basic steps to setup a device.

• Basic steps to manage configuration templates.

1.5 What is not in this manual?

This manual does not contain information relative to the device hardware nor is it intended as a comprehensive guide to all management operations available on the platform.

This manual does not contain information on how to setup the device for Internet connection.

For further information on configuring a device, please see the relevant manuals for the different devices at the following website: *www.teldat.com* .

1.6 How is the information organized?

The basic steps required to be able to manage a device through the management platform are dealt with separately in each chapter.

1.7 Technical Support

Teldat, S.A. offers a technical support service. Regular device and server software updates are available for maintenance purposes and new features.

Contact information:

Web: www.teldat.com

Tel.: +34 918 076 565

Fax: +34 918 076 566

Email: support@teldat.com

> **Note**
>
> The manufacturer reserves the right to make changes and/or improvements to the software, hardware and documentation without prior notice. The screen captures shown throughout the guide are provided for information purposes only. Minor modifications in the current software are possible.

1.8 Related documentation

Colibri Management Platform Administrator's Guide.

Colibri Management Platform User's Guide.

Chapter 2 Getting started with Colibrí NetManager

2.1 About the management platform

Colibrí NetManager is a web-based service published by Teldat. This service allows users to remotely control all compatible devices and functionalities. Devices should stay permanently connected to the server, even when they do not need to be, in order to obtain monitoring events and statistics. Bandwidth usage has been highly optimized for transmissions between devices and server.

The main functionalities of the management platform are:

- Equipment inventory.
- Device discovery.
- Configuration management for supported devices/functionalities.
- Configuration templates.
- Device and functionalities status.
- Group operations.
- Generating email and trap notifications for critical alarms and warnings.
- Managing and monitoring special device features.

2.2 Steps to use the platform

The following list shows the steps to use the platform. Subsequent sections of this document explain each step in more detail.

2.2.1 Cloud platform

The first mode is as a cloud-based service. This service is offered by Teldat, S.A.. This mode is recommended for those users who are unable or unwilling to commit to an initial investment in hardware, maintenance, etc., as it allows them to pay a small fee per device.

To manage your devices, please follow the steps below:

(a) Register a new customer on the platform.

(b) Buy a license for managing your devices from Teldat, S.A.Once you have acquired it, the license serial number and validation code will be sent to you.

(c) Enter the license data in your customer environment of the platform.

(d) Connect your device to the Internet.

(e) Register your new device in your customer environment. The device is now connected to the platform and the appropriate security certificates are in place.

(f) You can now manage your new device.

2.2.2 Virtual appliance

With the second mode the server is installed on the customer's premises, The server is distributed on two virtual machines and the customer is responsible for supplying the hardware and the hypervisor, installation of the virtual machines, maintenance, scalability, backups, etc.

Follow these steps to manage your devices in a local server:

(a) Request a copy of both the server 's virtual machines (one is used for the application and the other for data.)

(b) Deploy and configure the virtual machines on your hypervisor.

(c)   Create a new customer on your platform.

(d)   Buy a license for managing your devices from Teldat, S.A.Once you have acquired it, the license serial number and validation code will be sent to you.

(e)   Register a new customer on the cloud platform.

(f)   Enter the license data, together with your local server customer UUID, in your cloud customer. If the license data is correct, an XML file is generated with your license.

(g)   Upload the XML file to your local server.

(h)   Connect your device to the network. Please confirm that the device can reach your local server.

(i)   Register your new device to the local server customer.The device is now connected to the platform and the appropriate security certificates are in place.

(j)   You can now manage your new device.

2.3 Registering a new customer with the cloud server

To request new licenses for cloud or local servers, users must first create an account by registering on the cloud management platform at *https://teldat.networkcloudmanager.com* . Once they have registered, they can create an associated customer administrator user giving them full access to the platform's functionalities. They cannot register new devices or applications, however, until they have registered a valid license.

If you have not yet created a customer in the cloud server, select the *Register* link from the login screen and then enter your information. A new customer will be created. Then go to the *Licenses* section to manage your licenses. Find out how to register a license in the section headed *Requesting a new license from your provider* on page 4.

If your chosen management platform is a local server, you will always have access to the cloud customer to request and download licenses for your own local server.

> **Note**
>
> You must have a customer in the cloud server in order to create and manage cloud and local licenses.

2.4 Requesting a new license from your provider

Contact Teldat, S.A. to request a quote for the required licenses. Once you have received and accepted the quote, you will be sent the serial numbers and validation codes of the licenses. This information should only be entered in the customer environment used to generate the license (customers and servers are identified by a unique value known as the UUID.)

There are several types of licenses:

• Device licenses: these are valid for one year with a cloud-based server; they do not expire with a local server.

• Application licenses: these do not expire.

• Plugin licenses: these are valid for one year with a cloud-based server; they do not expire with a local server.

> **Note**
>
> The license term, if any, begins when the device first connects to the server.

2.5 Registering the license

Once you have received the serial number and validation code, you need to access your cloud customer to obtain the license. Access the following section to generate a license depending on the type of server:

• License for a cloud server:

(1)   Licenses -> Manage licenses for this server -> New license and enter the serial number and the license code.

- License for local servers:

  (1) Licenses -> Manage licenses for local servers -> New license and enter the serial number, the license code and the local server customer UUID (this is available in the Licenses section of your local server customer).

Enter the required information to register your new license:

- Cloud
  - Serial number
  - License code
- Virtual Appliance
  - Serial number
  - License code
  - UUID of the Virtual Appliance customer (it is available in the *Licenses* section of your virtual appliance customer)

In the case of the cloud server, the new license is automatically linked to the customer requesting the license.

If you are registering a license for a *local server*, it is linked to the cloud customer and the local server UUID. In this case, an *XML file* is generated. This file is only valid for the customer with the UUID used to register the license. The UUID is unique per customer and server. Please take care when entering this information as it cannot be modified.

You can access this section again via your cloud customer to check the general status of your licenses. You can also download registered XML files with local server licenses.

A cloud customer can register both cloud and local server licenses.

> **Note**
>
> Once you have registered a license, it cannot be reregistered. You will only be able to verify the status of the license or, in the case of local servers, download it again. The customer UUID linked to the registered license cannot be modified.

Please contact Teldat, S.A. if you have detected an error in the requested license data (such as an invalid UUID), or if you have any other questions.

2.5.1 License types

(a) Device licenses: These licenses allow you to manage devices and their functionalities: routers, access points, WLAN controllers, application hosts.

(b) Application licenses: These allow you to install applications on application hosts.

(c) Plugin licenses: These licenses enable certain functionalities on the server, such as the dashboard within the webcache application.

2.6 Registering licenses with local servers

When the license is created, access the local server and follow these steps:

(1) Licenses -> New license -> Select file-> Upload license.

Select the file containing the license you downloaded from the cloud server. Upload the new license to your local server. If the file is valid and corresponds to your customer's UUID, the license is registered and you can begin registering devices.

A license can only be used once; if it is uploaded more than once the system will ignore the operation.

2.7 Connecting the device to the server

Devices communicate with the management server using HTTP or HTTPS. Information is exchanged between the device and the end server, so you do not need to open ports to allow access to your private network.

The cloud server uses standard HTTP/80 and HTTPS/443 ports but you can choose other ports for a local server. Devices should either have a direct connection to the server, avoiding corporate proxies requiring authentication and other intermediate non-transparent services, or, at the very least, a transparent one.

2.8 Registering a device with the server

Access *Devices* from your customer environment on your management server and click on *Add Devices*. There are several device registration methods:

- Manual registration: Add devices individually or in batches using a *CSV* file.
- Discovered devices: When a device is connected to the server and does not belong to a customer, it is added to this discovered devices table. Choose the device you want to register and enter the validation code (if necessary.)
- Automatic registration: Configure your devices with the URL shown in the information box. The device auto-re-gisters with the server and is automatically linked to the customer that has the UUID specified in the URL.

2.9 Generating security certificates

All connections between devices and server are signed, and in the case of HTTPS ciphered, using the certificate that is automatically generated when the device first connects to the server. In this way, the device is linked to the server where the certificate is created, with connections only valid to this server, and the server can check that the device transmitting the information is not supplanted by another device/person.

The certificate remains the same for a device's life cycle. The server rejects all incorrectly signed information received from remote devices. When replacing a device, you need to remove the current certificates from both device and server before connecting a new device.

To remove a device certificate from the server, access the advanced options in the *device info* section. Refer to the user guides for help with removing certificates from the devices.

Chapter 3 Management

3.1 Device management

3.1.1 General information on the device

Access *Devices* and select a device to manage. You can perform the following operations from the main window:

- Check the connection status of a device:

    - The device has never connected to the server.

    - The device is connected to the server.

    - The device has not contacted the server for more than a minute and a half.

    - The device has not contacted the server for more than three minutes. In this case a security alert is raised.

- View basic information about the device: model, system version, license, serial number, etc.

- Retrieve the current geolocation of the device.

> **Note**
>
> This option requires an Internet connection. This is generally provided by a third party.

- Apply a tag to the device and assign it to a group.

- Monitor device health (CPU, memory and storage.)

- View device hierarchy (all devices/functionalities registered on the server with the same serial number.)

- Access advanced operations. Depending on the type of device, you can clear security certificates, request system logs and perform other remote actions like reboots or changing the log level.

3.1.2 Device configuration

Access the *Configuration* tab from the device management section. Here you can view or modify a device's configuration (provided it has been forwarded from the device to the server). Depending on the device type, you will either see a text-based configuration with historical data or a graphical configuration without historical data.

When it is a text-based configuration, you can use the text to create a new configuration template.

Finally, in graphic mode, templates can be used to define device parameters.

3.1.3 Jobs

Access this section to view the status of any jobs your device is running on this server.

3.1.4 Log

This section stores all operations performed on the device. Access the operations history to check when an action has been carried out and, depending on the action, perform other operations (download logs, restore a backup, etc.)

3.1.5 Alerts

This section displays the notification data when users need to be alerted to events or warnings that require their attention. Alerts are automatically registered, based on a set of rules:

- System rules: connection issues, license status, etc.

- User rules: Configured on the *dashboard* for monitoring parameters.

3.2 Managing configuration templates

Configurations can be assigned in text or graph mode based on the device type.

In the case of text configuration devices, you can establish configurations with certain variables and apply those variables to a set of devices using a CSV file. To create, manage or apply templates, please access *Devices* and click on the *Configuration templates* tab. A text template can also be registered in the configuration view of the device (see section *Device configuration* on page 7).

To configure graphical configuration devices, i.e. wireless network devices, please access the *Configuration* section from the main menu. To create a graphical configuration, follow these steps:

(a)   Create a configuration profile if the device is for a wireless network (WLAN.)

(b)   Create a configuration template based on the configuration profiles created in the previous step.

(c)   Assign the template to a group of devices.When the template is assigned to a group, it can be sent and applied to the group's devices.

Please remember that templates are only valid for one device type.

3.3 Managing device groups

Access the *Devices* section and click on the *Groups* tab to create the groups you need. Next, apply the configurations created in section *Managing configuration templates* on page 8. Configurations can only be applied in graphical mode. Text configurations should be directly applied in the *Configuration templates* section.

You can set up a specific group to be the default group. All new devices are automatically added to this default group when they are registered on the platform. Current devices that have not been assigned to a group are not included in the default group.

By assigning devices to a group you can massively *update the configuration* of the devices.

> **Note**
>
> If a device contains a specific parameter (see section *Device configuration* on page 7), the value of this parameter prevails over the value configured in the template. This applies to manually and automatically assigned configuration templates.

Chapter 4 Monitoring

4.1 System dashboard

Access the *DashboardSystem* section to globally monitor all your devices.

Global monitoring allows you to:

- Filter the information shown by selecting specific devices, device types, groups or tags.
- Select the layout of the various information boxes shown in the monitoring window:
    - Number of devices.
    - Devices without connection.
    - Graph with the number of devices.
    - Alerts and warnings.
    - Total number of WLAN clients.
- View the geolocation of the devices on a map and see their current status. You can also define your own floor maps.
- Access real-time analysis of your devices based on the latest received events.
- Create user rules to register alerts or warnings based on the parameter values sent periodically by your devices to the server.

4.2 Device dashboard

Click the *Health* tab on the device information page (see the device management section in *General information on the device* on page 7). Click on the *Go to device dashboard* link.

The device monitoring section can be indirectly accessed via certain *dashboard system* monitoring areas that reference the device.

Various device features can be monitored depending on the type of device you want to monitor. These include neighbor APs, area map, channels, signal level, clients, Tx and Rx, application data, overall size, storage size, in addition to default CPU parameters, memory, alerts and warnings.

Results can be filtered based on a time window.