



Teldat QoSPoll

Quick Guide

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Chapter 1 About This Guide

This Quick Guide focuses on the QoSPoll application for the Teldat Atlas i6x.

1.1 Supported Devices

The information contained in this guide only applies to the Atlas i6x equipped with an internal storage device and the QoSPoll application.

1.2 Who should read this manual?

This manual should be read by users who need to configure QoSPoll in an Atlas i6x.

1.3 When should I read this manual?

Read this guide as soon as you are ready to configure your QoSPoll application. This manual explains how to configure the different parameters of the application.

1.4 What is in this manual?

This Quick Guide contains the following information:

- A brief comment on the purpose and operation of the QoSPoll application.
- How to configure the application using the internal web of the Atlas i6x.
- A description of a general scenario for the QoSPoll application.

1.5 What is not in this manual?

This quick guide does not contain information on Atlas i6x hardware. Also, its purpose is not to describe all management operations available in the Management Platform, the Atlas i6x Application Host software and configuration, or any other application different from QoSPoll. It does not contain information on how to setup the device to connect to the Internet. For information on how to configure the device, please see the relevant manuals for the different protocols, which can be found on the following web site: *www.teldat.com*.

1.6 How is the information organized?

Chapter 1 explains how to use this guide and describes its contents. Chapter 2 introduces the QoSPoll application. Chapter 3 focuses on the different configuration methods for this application. Chapter 4 presents a scenario for the QoSPoll application.

1.7 Technical Support

Teldat, S.A. offers a technical support service. The device software can be regularly updated when new features are launched and for maintenance purposes.

Contact information:

Web: www.teldat.com

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Email: support@teldat.com

Note

The manufacturer reserves the right to make changes and improvements to the appropriate features in either software or hardware of this product, modifying the specifications of this manual without prior notice. The screen captures provided throughout the guide are provided as information guidelines only. Some small modifications may exist in the current software.

1.8 About OpenSource Software

Some software components of this product contain copyrighted software that is licensed under GPL, GFDL, LGPL and other open source licenses. You may obtain the complete corresponding source code from us for a period of three years after our last shipment of this product by downloading this free of charge from Teldat, S.A.. If you want the full corresponding source code to be stored in a physical medium (such as a CD-ROM), we may charge a cost for having to physically perform source distribution. This offer is valid to anyone in receipt of this information.

For more information about the licenses of the software installed in the Application Host of an Atlas i6x, please refer to the *About*section of the device's web configurator.

Chapter 2 What is the QoSPoll application?

2.1 Teldat QoSPoll application

Teldat's QoSPoll application is a QoS Poll server set up in a configurable port to listen and wait for packages coming from end-users who are QoS Poll clients. It answers these packages, allowing clients to carry out several Quality of Service actions. The client stores the historical results of the measurements in a database.

QoSPoll client is a software solution for end-users that runs several Quality of Service actions and stores historical results in a database. It can be run from large sets of user computers, analyzing the quality of the network they perceive. QoSPoll removes exogenous quality degradation causes by measuring user computer load and hindering network traffic. It is also capable of verifying the level of compliance regarding token bucket network SLAs reports.

A "token bucket" is a common mechanism used in network Service Level Agreements. The compliance to the parameters in the definition of such an agreement must be verified as it is critical in the performance of a network link. Both the end users and the service providers are interested in the correct implementation of such mechanism, as it influences user satisfaction. Knowing the degree of compliance to the contract values is therefore in the interest of both parties. The token bucket parameters that must be measured are the token bucket depth, the Committed Information Rate (CIR) and the Peak Information Rate (PIR).

The network schema for the application is shown in the figure below.



Chapter 3 Configuring the application

This application, like other applications installed on the Atlas i6x device, is configurable in two ways: by using the Atlas i6x internal web, or by using a text configuration or a configuration template inside the management platform to configure one or more devices simultaneously.

3.1 Web configuration

The application is represented, in the main window, as an icon over the QoSPoll name. To access the application's configuration menu, press the QoSPoll tab or click on the QoSPoll icon or name.

3.1. Web configuration window	
Configuration QoSPoll	User:1234
\$ §	
Configuration QoSPoll	

Clicking on one of them opens a new window. Click on QoSPoll (in the left-hand menu) to access the main configuration section.

Fig. 3.2. Main configuration window

Poll			
	QoSPoll configuration		Help 《》 Show status 《》
	= Port	8000	
	 Speed (Mbps) 	10	
	= Enable		
			Modify 🛞

3.1.1 Application: General Parameters

The previous figure shows the application configuration parameters. The meaning of each parameter is explained in this section.

In this window you can also see two buttons: show status and Modify . When the modify button is clicked, the

changes made in the configuration parameters are saved and applied. When the status button is pressed, the status screen appears.

The status screen shows information on the current status of the application. More specifically, this information includes:

The QoSPoll server status: it can be stopped or running.

Fig. 3.3. Status window

	Configuration QoSPoll	User:1234	
▶ QoSPoll	QoSPoll status	Help 《》 Show conf 《》	
	QoSPoll server status Running		

To save the changes made in the configuration parameters, press the modify button. Changes in configuration are applied immediately.

3.1.1.1 Port

This parameter indicates the port where the QoSPoll server is listening. It must be a number between 1024 and 65535.

3.1.1.2 Speed

Theoretical download speed measured in Mbps. Decimal values are allowed.

3.1.1.3 Enable

Check this box to enable QoS Poll server.

3.2 Text configuration commands

This section describes all the configuration directives allowed in the application's text configuration.

The configuration directives should be sent in a single text file to the device, through the Atlas i6x management portal.

If a statement does not appear in the configuration text, the engine will use the default value.

3.2.1 QoSPoll configuration

qospoll

Top level configuration directive

3.2.1.1 Port

port <value>

This is the port where the QoSPoll server is listening. It must be a number between 1024 and 65535.

Default value: 8000

3.2.1.2 Speed

speed <value>

This is the theoretical download speed measured in Mbps. Decimal values are allowed.

Default value: 10

3.2.1.3 Enable QoSPoll server

enable

Enable QoSPoll server

Default value: Disabled. Insert enable in the configuration text to start the QoSPoll server.

Chapter 4 Use cases

Fig. 4.1. QoS Poll remote points

In this section, a use case is presented to show the QoSPoll application capabilities. The procedure is described step by step.

4.1 Configure QoSPoll server and client

Follow these steps to configure the QoSPoll application on the Atlas i6x Application Host configuration web and then create a client.

- (a) Enter into the configuration web of the Atlas i6x Application Host and click on the QoSPoll icon or name to access the QoSPoll application configuration section. Then click on the QoSPoll name in the left-hand menu to see the configurable options.
- (b) In the configuration screen, modify the following parameters (if necessary): the listening port (e.g. 8000) and the theoretical download speed (expressed in Mbps, e.g. 100). Mark the *enable* checkbox to enable the QoSPoll server. Then click the *modify* button for changes to take effect.
- (c) The QoSPoll server is now ready to receive and answer the QoS Poll client. To configure a client, use a web browser to access the "QoS Poll Service Console" web and login with your user and password.
- (d) Go to the "Remote Point Management" tab and click on the Add button.
- (e) Enter the requested parameters. The name and description identify the remote point. The IP address is the IP address of the Atlas i6x Application Host. The port is the QoSPoll server listening port, previously configured in the QoSPoll Atlas i6x application configuration web. The interface is the interface of the Atlas i6x Application Host (vti0). The other parameters have to do with the measurements you want to take. Once you are done, click on the Add button and the new remote point entry will appear in the table.

ID A	Description 🖕	IP ≜ ▼	Port	Interface 🔶	Upload speed (Mbps)	Packets 🝦	Timeouts	Packet size ≑ (bytes)	Measurement 🛓	State 🍦	Actions
757/00121	Device 757/00121	192.168.212.186	8000	vti0	50	1000	3	1400	4	Active	5
757/00157	Device 757/00157	192.168.212.182	8000	vti0	50	1000	3	1400	4	Active	5

(f) If there is connectivity with the QoS Poll Atlas i6x application, the status column shows the word "Active". If the remote point is active, measurements will be carried out periodically. Results are stored and can be seen in the web's measurement tab (see the figure below).

Fig. 4.2. QoS Poll measurements - Graphics

Fig. 4.3. QoS Poll measurements - Data

Remote Point	Code	Init Time 🔻	Duration (sec)	RTT (ms)		Downstream		Upstream 🕐			
	€ ♦				Jitter (ms)	LossRate (%)	Bandwidth (Mbps)	Jitter (ms)	LossRate (%)	Bandwidth (Mbps)	
57/00121	0	2016-07-11 14:30:47	14.94	6.5	46.45	0	95.29	3.37	0	49.29	
57/00157	0	2016-07-11 14:30:13	15.6	3.42	1.87	0	95.63	8.14	0	49.84	
57/00121	0	2016-07-11 14:26:31	14.95	3.78	12.38	0	95.8	1.45	0	50.08	
57/00157	0	2016-07-11 14:25:56	15.61	3.53	5.58	0	90.4	12.92	0	50.11	
57/00121	0	2016-07-11 14:22:15	14.95	3.51	36.34	0	95.97	1.27	0	50.1	
57/00157	0	2016-07-11 14:21:38	16.6	3.83	10.97	0.04	91.14	1.29	0	50.11	
57/00121	0	2016-07-11 14:17:57	16.94	3.66	88.65	0.04	92.4	3.88	0	50.1	
57/00157	0	2016-07-11 14:17:20	16.6	3.37	11.18	0.04	91.58	1.26	0	50.11	
57/00121	0	2016-07-11 14:13:41	14.92	3.43	66.83	0	90.89	3.27	0	50.11	
57/00157	0	2016-07-11 14:13:04	14.6	3.34	5.43	0	95.28	1.17	0	50.11	