

ACS4000-E Network Bandwidth Usage

Overview: This application note provides data on the network bandwidth used by Brivo's ACS4000 control panels.

Applicability: Brivo ACS4000-E control panels, Firmware Rev. 1.4.3 and higher.

Introduction

Brivo's ACS4000-E products connect directly to an end user's corporate LAN, relying on this connectivity to reach the Internet via an ISP connection. The Brivo control panel initiates all network traffic using HTTPS interactions with Brivo's Web-hosted applications, and receives data from Brivo in response.

Network Traffic Profile

The Brivo ACS4000-E control panel produces the following types of network traffic:

- In response to local events (credential authorization, alarms, timers, etc.), posts HTTPS messages to Brivo's servers.
- Periodically polls Brivo using HTTPS to query for new data that may be available. The polling period is set by default to a 5 minute interval.
- Downloads new data sets via HTTPS if a new data set is available. Data sets consist of credentials, schedules, configuration parameters, etc. They may be anywhere from a few KB to several hundred KB, depending on the size of the user population, number of schedules, number of changes to the account, etc.
- Downloads new firmware when Brivo provides an upgrade. These downloads are fairly infrequent—no more than a few times per year—and may be several MB in size. Brivo typically sends out new firmware updates only during non-business hours, and only by request from the end user or dealer.

Typical Network Usage

The following table provides typical network usage for a control panel with four doors. Usage rates are based on averages gleaned from millions of transactions through the Brivo ACS service.

Message Type	Protocol	Avg Msgs Per Day Per Panel	Application Bytes Per Msg	Total Traffic Per Day (Incl. SSL) (MB)
Credential Used (1)	HTTPS	500	997	1.50
Save Credential (2)	HTTPS	0.76	13,967	0.01
Polling/Admin Traffic (3)	HTTPS	288	1,500	1.01
Other	HTTPS	24	200	0.05
Total Daily per Panel				2.57