

## Radio Buffering and Retry during Signal Outage

**Overview:** This Application Note describes the operation of the radio retry stages during signal or web site outages. This document will describe the general operation and in overall terms describe the expected operation. Specific instances will vary as operation is based on timing of the events and the types of events that enter the radio.

**Applicability:** ACS3000, RIM firmware Rev. 2.12 and later.

### Explanation

During operation when the radio has no signal from the tower, or is not receiving responses from the Brivo Web Site the following is the general flow and operation:

- 1) All transactions (minimum 200, maximum 300) are saved and buffered until re-connection with web site.
- 2) Buffered transactions are lost if unit is power cycled, or the system is reset.
- 3) After the buffer is full, all new transactions are dropped.
- 4) After reconnection, oldest transactions are sent first. During this period, new transactions are appended at the end of buffer and will be sent last.
- 5) The web interface will not show the loss of communications however, upon re-transmission these items will appear in your activity log with the time stamp from the event occurrence.
- 6) Persistence of the events in memory is only limited by power loss or system reset.

### Known Issues

There are no known issues with the operation of the product.

There is, however, a dependency on the rate at which events are presented to the control panel which can affect the number of messages stored in the buffer. Under normal operation (i.e., event spacing of 30 seconds or more), results close to the maximum storage limit are expected.

### Work Around

None / NA.

### Future Enhancements / Corrections

Brivo is enhancing the buffering capacity of its products in future releases to provide up to 4,000 events of storage in non-volatile memory.