SIM Setup

Concept

The SIM performs the following functions:

- Manages controller polling.
- Downloads facility and badgeholder data to the controllers.
- Receives alarm and history data from the controllers.
- Issues device control commands, such as *Door Open,Output On*, etc.
- Stores a copy of the system databases; therefore, it acts as a server to its attached controllers.
- If communications between the SIM and the controllers is interrupted, re-downloads data to the controllers after communications are reestablished.

Operational Considerations

- If *Fast Download* is configured, the frequency of polling for alarms/commands is changed. This greatly enhances badge download performance. To activate fast download, change the appropriate parameters in the nim_mon file. If fast download is *on*, the SIM polls for alarms/commands prior to each badge download to all applicable nodes. If fast download is *off*, the SIM polls for alarms/commands after each badge download to a single node.
- In a dialup configuration, deactivation of a badge from the DCS or from the OCS places the *delete badge* transaction in the queue waiting for the next available timer expiring interval. Option 3 of the utility dialup_util will simulate timer expiring and download the badge transactions waiting in the queue so the badge will be deleted from the panels immediately. Otherwise, the badge will be deleted at the next scheduled interval.
- The SIM prompts the master controller for the communication loop's *Site ID* when attempting to connect. If the *Site ID* is not correct, the SIM will disconnect.
- On dialup sites, communications are controlled by 1) the time interval parameter entered in the DEVICES-NETWORK DEVICES-SITES form, 2) when alarms (as defined by the appropriate device templates) are transmitted by the nodes, and 3) when a request is made from an OCS or SMS.
- If the SIM phone number value for a given site (DEVICES-ACCESS DEVICES-SITES) is *none*, then the system will assume the SIM is directly connected regardless of its entry in the SIM?s database files. The utility maint_db (option 4) may be used to correct the SIM database directly, if necessary.
- When creating or modifying database records, maint_db may be used to verify the record has been received by the SIM. It may be necessary to bounce the SIM to properly poll with a newly added *Site ID*. Insure that the amag_ctrl process is in respawn mode.

- In a dialup site configuration, the master_ctrl process sends an initialization message every two minutes to the server modem(s) if the communications line is not already connected to a site. This initializes the outbound ports and the inbound ports.

- In a direct connect configuration, when a node is reset (initialized), it queries the server for all information necessary to rebuild its data files. These requests are responded to by the SIM. If more than one controller initializes at the same time, the SIM queues the requests. The SIM downloads to the panels in the order the download requests are made. In a dialup configuration, use the dialup_util (option 2) to reset the panels.

•Procedure

•1. Define the SIM using the ACCESS SIM form.

2. Use the vi editor to add the following lines to the amm_mon file:

```
nim_dloadxx:respawn:nim_dload -t hostname -s SIM Name > nim_dload.SIM Name.out
udp_sendxx:respawn:udp_send -n -t hostname -w SIM Name> udp_send.SIM Name.out
```

Where xx is the next sequential nim_dload or udp_send statement number.

3. From the UNIX prompt, run team_stop , then run team_start to restart the process with the new SIM included.

