

## SMS Technical Memorandum

**VERSION:** All SMS Versions

**TOPIC:** CIM Configuration / Overloaded CIM

**ISSUE:** A Maximum of 64 Controllers is Supported per CIM Module

Configuring and operating any SMS installation with more than 64 controllers communicating with each CIM module has not been tested by Vanderbilt Industries and is unsupported.

**Note:** VSRC devices are single door controllers and must be included in the count of controllers communicating with the CIM module.

The behaviors listed below have been observed in customer installations where this limit has been exceeded.

- Controller communication with the CIM can be interrupted periodically:
  - The CIM will constantly try to re-load / update the affected controllers each time communication is restored causing update delays to other controllers
  - Unnecessarily increase network traffic due to excessive CIM update activity
- Increase CPU utilization on the workstation hosting the CIM potentially requiring hardware upgrades (CPU / RAM) in order to accommodate the increased demand
- The CIM can exhibit sporadic behavior updating and downloading to controllers:
  - Diagnosis of “real” problems will be masked by overloaded CIM
  - Lost communication with controllers
  - Controller communication cycling
  - Delays processing database change notifications
  - Increase likelihood for controller firmware flash update to fail
  - The CIM **may** fail to send and receive database changes to **all** controllers after or during a very busy transactional period

There is no limit to the number of CIM modules that may communicate with the SMS System Processor (SP). Install additional CIM modules as required.