

Network Control Modem Products

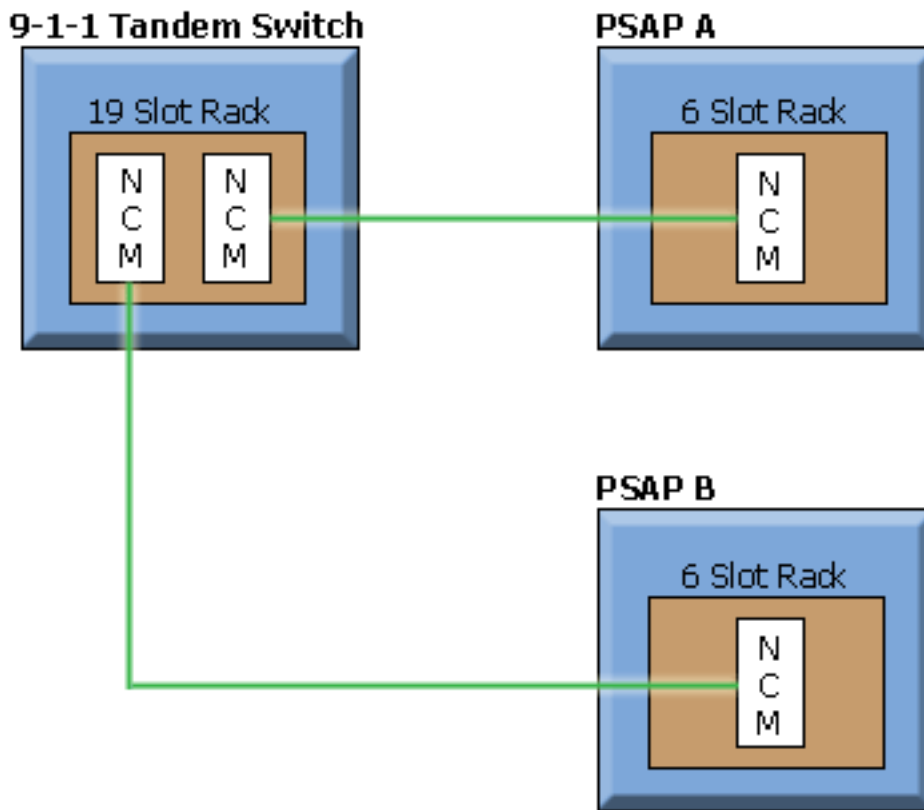
OVERVIEW

The Network Control Modem (NCM) was designed to monitor the 9-1-1 alternate answer circuit for line continuity and to signal the 9-1-1 tandem switch to re-direct 9-1-1 calls to an alternate PSAP. In the 9-1-1 environment an alternate answer circuit is used to 'make busy' a 9-1-1 trunk group and re-direct 9-1-1 calls from one Public Safety Answering Point (PSAP) to an alternate PSAP. The re-direction of 9-1-1 calls from one PSAP to another is a normal occurrence for a variety of reasons, which makes the monitoring of the alternate answer circuit crucial for network integrity. By continually monitoring this circuit by sending a heartbeat every six seconds, the NCM will produce an alarm when the heartbeat is not received (detecting that line continuity is missing) notifying personnel at the PSAP and the Central Office that this circuit is not functioning.



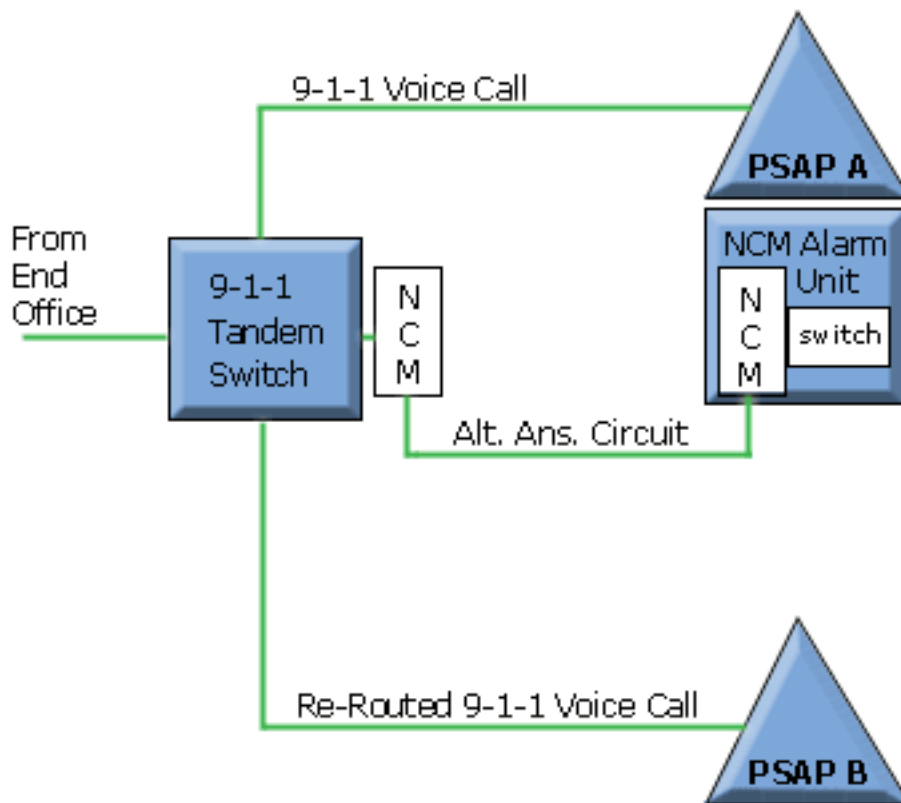
DEPLOYMENT

The diagram below shows the typical deployment of the NCM. The NCM located at the PSAP will send a heartbeat to the NCM at the 9-1-1 tandem switch. If the heartbeat is not received by the NCM at the tandem then both NCMs will indicate a line failure notifying personnel at the PSAP and at the central office.



The second purpose of the NCM is to send a signal that will saturate a scan point at the tandem switch and re-direct the 9-1-1 calls to an alternate PSAP as illustrated below. The Informer NCM Alarm Unit will provide the PSAP with both a transfer switch to send the signal to the tandem switch to re-direct 9-1-1 calls and a visual and audible alarm in the case that line continuity is not detected.





HOUSING

Informer provides shelves to house the NCM cards that will mount into existing racks at both the tandem switch and at the PSAP. At the tandem a NEBS approved 19 slot NCM rack will be used, while at the PSAP either a six-slot NCM rack or a NCM alarm unit will be deployed. A power/fuse indicator board is also provided that fits into both size racks and will let PSAP and central office personnel know if the racks are receiving power and/or if a fuse has tripped. If a six-slot NCM rack is used, Informer provides an alarm detection panel and a NCM switch to bring the alarming and switching out of the PSAP back room and into the PSAP.

