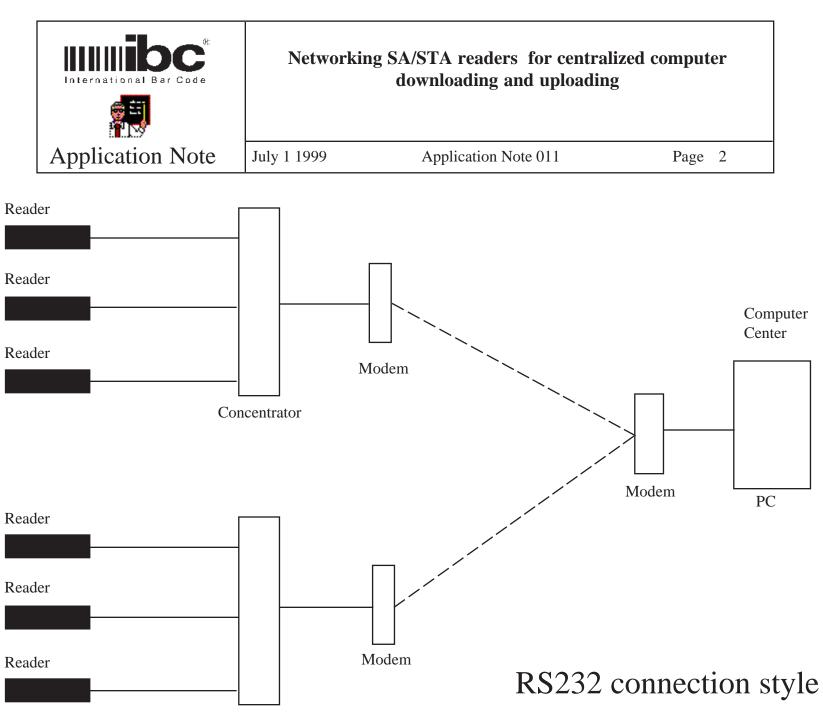


The SA and STA readers can be networked together in one facility using rs422. Utilizing the IBC network protocol, you can then download information to the readers and also upload information. In some cases, however, you may want to use rs232 readers instead of rs422 readers, and might even want to connect multiple locations together, so that you can centralize the data download and upload process. The following two diagrams show you how you can physically connect rs232, and/or rs422 readers together in multiple facilities, and connect them to a centralized pc using modems.

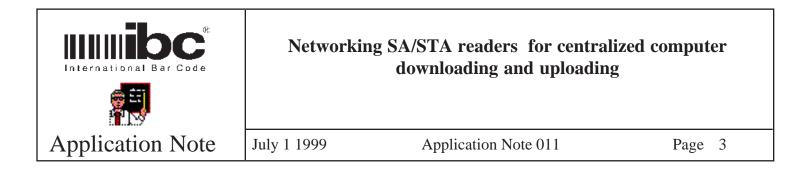
In the case of the rs232 readers (page 2) - they are connected to "concentrators" which allow you to address each port (reader) on the concentrator using an address. The concentrator is then connected directly to a modem for communications to your pc. To address a specific reader, your software can dial up the modem number, and send the appropriate reader command prefixed by the concentrator port number, and talk to one specific reader.

In the case of the rs422 readers (page 3) - the readers are conected together on the same line and each reader is individually addressed using the IBC protocol. The rs422/432 convertor is required so that you can connect up to the modem. The software at the central pc downloads the devices by dialing up the modem and then sending download instructions to each reader individually or by using the global address commands. Uploading is achieved by addressing each reader individually.

There are other configurations which could be used as well. The diagrams here are only meant to provide a simple approach to wiring these readers to a centralized point. If you have questions concerning these diagrams or other potential wiring methods, contact IBC.



Concentrator



Reader

