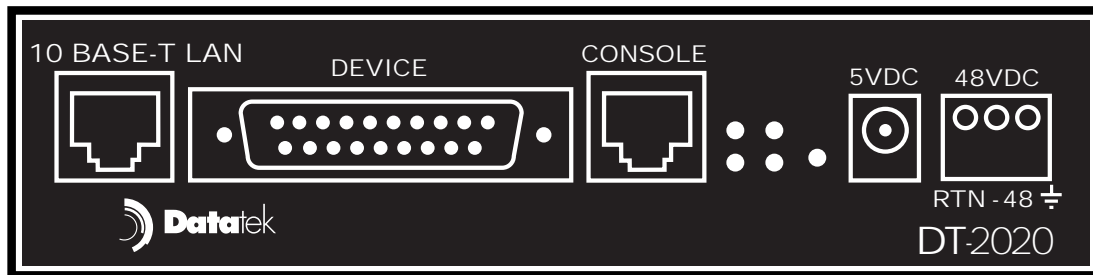


## DT-2020

### SAM traffic over IP INDEPENDENT of BNS Networks



The Synchronous Asynchronous Multiplexor (SAM) family of concentrators has been reliable mainstay for many customers of the BNS-2000 Family of products. However, as you plan to transition your backbone network towards one that is IP based give strong consideration to the DT-2020 Inter-Networking Mediation Interface For SAM Concentrators.

The DT-2020 turns your embedded base of SAM concentrators into versatile IP based terminal servers. You maintain all the features and functionality of the SAM without additional cost or the need for Datakit. In other words connect terminals, modems, and microcomputers over serial lines to local area (IP) networks (LANs) or wide area (IP) networks (WANs).

#### What is a DT-2020?

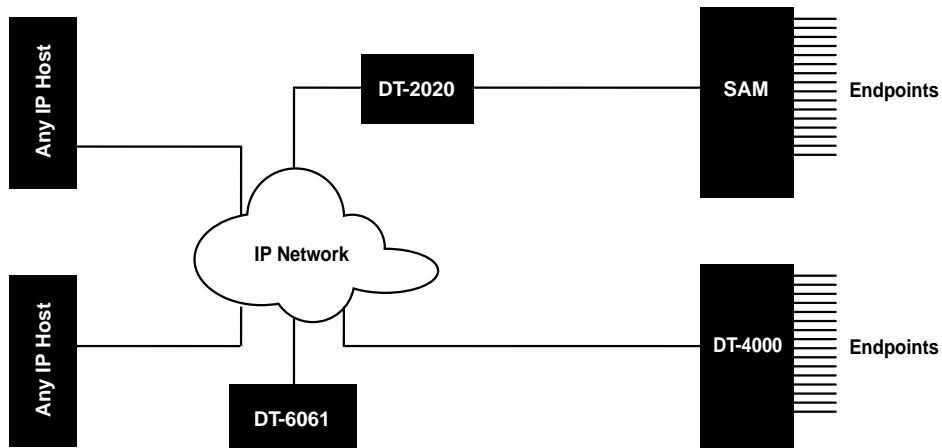
The DT-2020 is a mediation product, which allows re-use of a SAM endpoint interface concentrator (*up to 64 ports*) on an IP infrastructure without any BNS equipment. The DT-2020 supports all of the SAM port options, and is compatible with the mediation function of the DT-4000.

The DT-2020 provides a TELNET over TCP path, or a transparent TCP path, for each user port on the SAM concentrator. These ports may then connect to an arbitrary IP host without an intermediary interface. This is normally the case for Asynchronous protocols. It is also true of Synchronous Protocols where the peer host has implemented the framing interface per the appropriate RFCs. For hosts, which are not directly compatible with these specifications, the circuit will need to traverse a mediation gateway such as the DT-6061.

#### Built-In Flexibility

The compact DT-2020 is available in both stand-alone and rack-mount versions to fit various space and configuration requirements. The DT-2020 is available as either a 115V/220V AC or 48V DC powered unit.

# DT-2020



## Smart Network Management

The DT-2020 is easy to manage and provides several easy ways to configure and get status/diagnostic information. An industry standard Telnet connection to the DT-2020 gives you access to a command line based configuration application. In addition, a serial RS-232C connection gives you the same configuration capability. Finally, the DT-2020 is another network element that the StarKeeper® II NMS can administer, manage and maintain.

## SNMP

The DT-2020 unit's resident SNMP agent supports a database of predefined SNMP MIB (Management Information Base) variables as well as SNMP Trap operations, Set operations and Get operations.

## Software Update

Field software updates, which can occur from a remote location, take place while the DT-2020 is in service and transporting data. As new features and enhancements come out, the DT-2020 software can be upgraded just by installing a new software release using an industry standard Telnet application or serial RS-232C connection to the DT-2020.

The above configuration is not the only possible one. However, it does depict some of the interesting interface capabilities of the DT-2020.

- A port on the DT-2020 connected SAM could be having a session directly with an IP host.
- A second port on the DT-2020 connected SAM could be having a session directly with a device sitting off a DT-4000.

- A third port on the DT-2020 connected SAM could be connected to a fourth port on the same DT-2020. Local switching is done at the DT-2020 connected SAM (Note: The functionality of the DT-2020 is built into the DT-4000.)
- A fifth port could be connected to an IP Host via a mediation application in the DT-6061. This allows any protocol (even selective broadcast applications) to be directly supported by the DT-2020.

The connection to the attached SAM is via a SAM trunk.

- SAM8s, and SAM16s use the DDS protocol.
- For a SAM64, either a SAMSL or a Universal Trunk is required.

Trunking speeds vary on the particular SAM.

- A SAM8 supports a 56K trunk, as does a SAMSL connected SAM64/504.
- A SAM16 supports a 128Kbit trunk.
- A SAM with a Universal Trunk supports link speeds up to E1.

The connection to the IP network is via a 10BaseT interface.

- The network interface is active when the DT-2020 is in service even if the connected SAM is not in service.

Other protocols on the 10BaseT such as SNMP, Telnet, ARP, etc. are not shown for simplicity of the diagram.

