



READ ME FIRST!!

DT-2020

**INTERNETWORKING MEDIATION
INTERFACE**

FOR SAM CONCENTRATORS

PRODUCT / RELEASE NOTES

RELEASE 11.X

102 SW Orange Blossom
Lake City, Florida
32025-1613
Phone: 386-754-5700
email: sales@trdcusa.com
<http://www.trdcusa.com>

Manufacture & Distribution:



<http://www.datatekcorp.com>

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Important Safety Instructions



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

When installing, operating, or maintaining this equipment, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- Read and understand all instructions.
- Follow all warnings and instructions marked on this product.
- For information on proper mounting instructions, consult the User's Manual provided with this product.
- The telecommunications interface should not leave the building premises unless connected to telecommunication devices providing primary and secondary protection.
- This product should only be operated from the type of power source indicated in the User's Manual.
- This unit is intended to be powered from either –48 V DC or AC voltage sources. See User's Manual before connecting to the power source.
- The –48 V DC input terminals are only provided for installations in Restricted Access Areas locations.
- Do not use this product near water, for example, in a wet basement.
- Never touch uninsulated wiring or terminals carrying direct current or leave this wiring exposed. Protect and tape wiring and terminals to avoid risk of fire, electric shock, and injury to service personnel.
- To reduce the risk of electrical shock, do not disassemble this product. Service should be performed by trained personnel only. Opening or removing covers and/or circuit boards may expose you to dangerous voltages or other risks. Incorrect re-assembly can cause electric shock when the unit is subsequently used.
- For a unit intended to be powered from –48 V DC voltage sources, read and understand the following:
 - This equipment must be provided with a readily accessible disconnect device as part of the building installation.
 - Ensure that there is no exposed wire when the input power cables are connected to the unit.
 - Installation must include an independent frame ground drop to building ground. Refer to User's Manual.



This symbol is marked on the DT-2020, adjacent to the ground (earth) area for the connection of the ground (earth) conductor.

- This Equipment is to be Installed Only in Restricted Access Areas on Business and Customer Premises Applications in Accordance with Articles 110-16, 110-17, and 110-18 of the National Electrical Code, ANSI/NFPA No. 70. Other Installations Exempt from the Enforcement of the National Electrical Code May Be Engineered According to the Accepted Practices of the Local Telecommunications Utility.
- For a unit equipped with an AC Wall Plug-In Unit, read and understand the following:
 - Use only the K'TRON, Model KA-52A Wall Plug-In Unit shipped with this product.
 - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
 - Do not staple or otherwise attach the power supply cord to the building surfaces.
 - Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.
 - The socket outlet shall be installed near the equipment and shall be readily accessible.
 - The Wall Plug-In unit may be equipped with a three-wire grounding type plug, a plug having a third (grounding) pin. This plug is intended to fit only into a grounding type power outlet. Do not defeat the safety purpose of the grounding type plug.
- Do not allow anything to rest on the power cord. Do not locate this product where the cord may be abused by persons walking on it.
- Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a) When the power supply cord or plug is damaged or frayed.
 - b) If liquid has been spilled into the product.
 - c) If the product has been exposed to rain or water.
 - d) If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions because improper adjustment of other controls may result in damage and will often require extensive work by qualified technician to restore the product to normal operation.
 - e) If the product has been dropped or the cabinet has been damaged.
 - f) If the product exhibits a distinct change in performance.

Save These Instructions

IMPORTANT !!

USER DOCUMENTATION IS AVAILABLE AT OUR WEB SITE.

Documentation:	http://www.trdcusa.com
Sales:	sales@trdcusa.com

The **DT-2020** is factory configured for 115V AC usage. 48V DC Operation requires a different jumper setting on the **DT-2020** system board. Refer to the latest **DT-2020** User's Manual at <http://www.trdcusa.com> for instructions on changing this factory setting.

Special Installation and Upgrade Procedures

- **Database Conversion** – Release 11.1 and later will convert a **DT-2020** database that is on releases 7 through 11.1 inclusive. User's upgrading their **DT-2020s** from builds earlier than release 7 will need to use an intermediate release (Build 8 suggested) or a conversion failure will result. Conversion failures may require the **DT-2020** to be repaired for recovery.
- **Release Numbers** - Build numbers, beginning with release 11.1, consist of two parts: a release number and version level.
- **Activation Keys** – The **DT-2020**, when initially manufactured and delivered to the customer, *may* need a software key to fully activate the software¹. If so, when initially delivered, the equipment can be installed, but the module cannot be restored to service after it is configured until the keys are entered. In addition, when the **DT-2020** is upgraded with a new software build, a software key is required to activate the new software. The software initially is placed into a staging area and is not active. However, prior to the information being obtained for mechanized key generation, the device must be rebooted to make the new software active. When the reboot is executed without the new key being installed, the new software will execute, and the device will continue functioning as it did previously. However, no backup, reloads, or upgrades can be performed nor can any OA&M be performed or parameters, such as an IP address, be changed until

¹ It is the intent of the manufacturer, and its resellers, to have already installed the key(s) before receipt by the end-customer, so that the software is fully functional.

the key(s) have been installed for the active software. If the module is taken out of service, the module cannot be restored until the new key(s) are installed.

- **Mechanized Key Procedure** – A mechanized key procedure is required starting with release 11.1. The mechanized procedure simplified the key installation and allows many devices to be installed at the same time.

1 INTRODUCTION

These release notes highlight the product features, modifications, known caveats and any special considerations for the **DT-2020** product. For detailed information on this product, reference the **DT-2020** User's Manual.

2 PRODUCT FEATURES

The **DT-2020** is a mediation product, which allows the re-use of SAM concentrator endpoints on an IP infrastructure without any BNS equipment presence. The **DT-2020** provides an integrated solution. It attaches to a SAM concentrator and supports up to 64 ports. The **DT-2020** supports all of the current SAM port options and is compatible with the mediation function of the DT-4000².

Consult the User's manual for a complete enumeration of the features..

² The DT-4000 is an internetworking device existing in BNS and IP, ATM, TDM or Frame Relay networks simultaneously. It acts like a SAM16, but supports IP inputs and higher port speeds. The DT-4000 communicates via Frame Relay, ATM, TDM or IP across the backbone network and becomes a stand-alone edge device in non-BNS networks.

3 RELEASE CHANGES

3.1 RELEASE 11.1 ERRATA

- Support for TACACS+ RADIUS servers is added. Two servers are supported, a primary and a secondary. Non-standard TCP ports are fully supported. Each server may be individually enabled. The syntax is as follows:

**Syntax: tac < PRI | SEC > [ipaddr=<IP Address>]
[port=<TCP Port>]
[key="Encryption Key" | NONE]
[ENABLE]
[DISABLE]**

- The BANNER page has been added with up to 24 lines of 80 characters each. The syntax is as follows:

Syntax: banner [clear] [L#="Line # Message"]

- A correction is implemented to the TCP that prevents the potential for some additional packets at connection teardown.
- The console timeout has semantic changes where the number of units specified is now in minutes. This was formerly seconds. The valid range is 1 through 255 minutes, or approximately 4 hours and 15 minutes. The SNMP agent has been updated to include protections from malicious attack. It should also be noted that access to the the SNMP agent can be restricted by closed user groups.

3.2 RELEASES PRIOR TO 11.1

Contact support@trdcusa.com with specific questions on releases older than 11.1.

4 INSTALLATION ADDENDUM

4.1 OBTAINING INFORMATION FROM TELECOMP R&D

Load modules for all the TeleComp R&D products are obtained by sending email to support@trdcusa.com. All other documentation, including release notes, user manuals, “white-papers”, etc. can be accessed on the TeleComp R&D web site and downloaded for your use.

To insure that the correct version of the binary load modules have been retrieved and has not been corrupted during the transmission process, the UNIX® **sum** command can be used.

On some hosts, the “-s” flag must be used with the **sum** command. On X86 linux hosts, the **-sysv** flag must be used with the **sum** command.

Key-in **sum** < name of load module file>.

The values returned must match the numbers shown below:

For example:

Key-in: **sum -sysv dt_2020.11.1**

Response: **33297 1518 dt_2020.11.1**

4.2 DATABASE CONVERSIONS

When moving from one release or version to the next, the database is usually automatically converted. Therefore, **do not attempt** to perform a **backup** on an earlier release/version and then do a **reload** on the new release/version. The database structures may not be the same. For safety reasons, do a **backup** on the earlier release/version in case you need to revert back to this release/version. Then upgrade to the new release/version, and do a backup again which will now be the converted database for use with this release/version. Backups and restores should only be used with the same release/version, not across releases or versions.

4.3 SOFTWARE REGISTRATION

The **DT-2020** must be registered when it is upgraded with new software. The **DT-2020** will continue to operate without registration, but **various OA&M functions, including placing the module into service, will not operate until registration is complete.** See the **DT-2020** User’s Manual for the registration procedure.

4.4 UTILITIES

The current version of the upgrade, backup, and reload utilities are 19.1 respectively. The getinfo, devrep, and setreg utilities have a current version of 2.1. All of the utilities are available by contacting support@trdcusa.com. Please note that the TCP port for the console is 1023.

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5 DOCUMENTATION

The current version of the DT-2020 Internetworking Mediation interface for SAM Concentrators User manual, and this release letter, may be downloaded from the support area of <http://www.trdcusa.com>.

6 HARDWARE WARRANTY

The warranty period for hardware shall be ninety (90) days from the date of shipment from TeleComp R&D or a designated manufacturer. Replacements and repairs are guaranteed for the longer of the remaining original warranty period or 30 days.

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Communications Technology Solutions

CBM of America, Inc.
Mr. Mike Stephens
1455 West Newport Center Drive
Deerfield Beach, Florida
33442

800-881-8202
954-698-9104 Fax: 954-360-0682

www.cbmusa.com



Datatek Applications, Inc.
Mr. Dan Conklin
379 Campus Drive, Suite 100
Somerset, New Jersey
08873

732-667-1080 Fax: 732-667-1091

www.datatekcorp.com

10 AUTHOR

Comments and Questions regarding this document or the products covered within this document should be addressed to the author Angel Gomez via email at angel@trdcusa.com or via telephone at 386-754-5700.

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