



READ ME FIRST!!

UTILITIES

USER MANUAL / RELEASE NOTES

UPGRADE – RELEASE 18.4

BACKUP – RELEASE 18.4

RELOAD – RELEASE 18.4

GETINFO – RELEASE 1.2

DEVREP – RELEASE 1.2

SETREG – RELEASE 1.2

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

TABLE OF CONTENTS

Important Safety Instructions	4
1 Introduction.....	5
2 Product Features	5
3 Release Changes	8
3.1 Upgrade	8
3.1.1 Release 18.4 Errata	8
3.1.2 Release 18.3 Errata	8
3.1.3 Release 18.2 Errata	8
3.1.4 Release 18.1 Errata	8
3.1.5 Release 17.1 Errata	8
3.2 Backup	9
3.2.1 Release 18.4 Errata	9
3.2.2 Release 18.3 Errata	9
3.2.3 Release 18.2 Errata	9
3.2.4 Release 18.1 Errata	9
3.2.5 Release 17.1 Errata	9
3.3 Reload	10
3.3.1 Release 18.4 Errata	10
3.3.2 Release 18.3 Errata	10
3.3.3 Release 18.2 Errata	10
3.3.4 Release 18.1 Errata	10
3.3.5 Release 17.1 Errata	10
3.4 Getinfo	11
3.4.1 Release 1.2 Errata	11
3.4.2 Release 1.1 Errata	11
3.5 Devrep	11
3.5.1 Release 1.2 Errata	11
3.5.2 Release 1.1 Errata	11
3.6 Setreg.....	12
3.6.1 Release 1.2 Errata	12
3.6.2 Release 1.1 Errata	12
4 Command Syntax	13
4.1 Upgrade	13
4.2 Backup	14
4.3 Reload	14
4.4 Getinfo	15
4.5 Devrep.....	16
4.6 Setreg.....	17
4.7 Product Types	17
5 Installation Addendum	18
5.1 Obtaining Information from TeleComp R&D	18

6 Documentation 19

7 End-User License Agreement for Software..... 20

7.1 Software License20

7.2 Intellectual Property Rights20

7.3 Software Support20

7.4 Export Restrictions21

7.5 Limited Warranty.....21

7.6 No Other Warranties21

7.7 Special Provisions21

8 Limitation of Liability 22

9 Author..... 22

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 4180, 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

1 INTRODUCTION

These release notes highlight the product features, modifications, known caveats and any special considerations for the set of utilities that are used to upgrade software, backup the configuration parameters, reload the configuration parameters, and manage the inventory for products designed by TeleComp R&D. This document contains both the release notes and user manuals for each of the utilities.

2 PRODUCT FEATURES

The utilities consist of the following applications:

- Upgrade → Used to update the software in a TeleComp R&D Device to a new version.
- Backup → Used to backup a configuration database in a TeleComp R&D Device to a secondary storage server.
- Reload → Used to restore a configuration database to a TeleComp R&D Device using the file previously saved by Backup.
- Getinfo → Accumulate device information on a single or multiple devices. Also used during product registration.
- Devrep → Display device information stored in the output files generated by Getinfo.
- Setreg → Install registration to a single or multiple devices. Used in conjunction with Getinfo after new software is loaded on devices.

At the present time, these utilities operate on any of the following Operating Systems:

HP-UX → 10.20 or later.

Solaris® → SunOS 2.6 or later.

® Solaris is a registered trademark of SUN Microsystems, Inc.

Linux → Redhat 9.x, Fedora, or other compatible X86 deployments.

The support hosts, on which the utilities execute, must have a TCP/IP connection to an ethernet network through which the devices are accessible. These utilities connect to the console TCP ports of the devices as follows:

- Via the IP ethernet network “directly” to the IP console of the product using Telnet. This is the most expedient, and therefore the preferred method.
- Via an IP ethernet connected TRDC serial port device where the serial port of the target device is connected as an asynchronous user port on the second device. In a manner similar to the option above, the utility telnets to the IP address of the connecting device user port with a socket number corresponding to that port. The end to end transitions occur with the target physical serial console.
- Via a Datakit/BNS network where the serial console port of the device is connected to an asynchronous port such as a TY12, SAM, or DT-4000 used as a SAM. A UMI must exist somewhere in the Datakit/BNS network which has a **vport** that is either predefined to the serial port via a service address, or alternatively, the double-dial feature is used. Double-dial is the capability where the utility will connect to the UMI vport via telnet and then a second Destination prompt is presented to which the utility will issue the Datakit/BNS dial string.

The following devices are currently supported.

- 4000XA.
- IP-DSU.
- DT-2020i
- DT-4000.
- DT-4180
- DT-4280
- DT-4284
- DT-9480
- DT-SAM
- UTM
- UMI

When a software upgrade is executed, the configuration data for the product is NOT usually destroyed¹. However, it is strongly recommended that the configuration data of a product be saved in a another location for later restoration in the event that a product should experience a fatal hardware problem, or be destroyed by fire, water damage, or other calamity.

In order to obtain the utilities, the user contacts TeleComp R&D who will send via email the set of utilities that are compatible with the operating system of the user’s host platform. The user then FTPs

¹ For certain older releases of software in some products, the configuration data is destroyed. These exceptions are explicitly stated along with details on how to reestablish the configuration data in the release notes for the particular software version for that product.

Utilities

the utilities to the host platform through which access to the product consoles will be obtained. The utilities execute on the host platform and perform the functions listed.

A utility automatically logs into the product if the console was logged out. It logs out upon exit. If the console was already logged in, it leaves it logged in upon exit. However, if the `-r` option² is specified, the console is left logged out upon exit regardless of the initial state.

² The utility performs an automatic reboot after performing the indicated operation.

3 RELEASE CHANGES

3.1 UPGRADE

3.1.1 RELEASE 18.4 ERRATA

There was an error in the 18.3 release whereby a download image is incorrectly determined to be defective. This release corrects that error. The error was introduced in the 18.3 release, and prior releases do not exhibit the error.

3.1.2 RELEASE 18.3 ERRATA

There is no errata for the upgrade utility in this release. The release numbers have merely been kept consistent with the other utilities.

3.1.3 RELEASE 18.2 ERRATA

Support has been added for the 4000XA. The 4000XA is a software conversion to a 4000 that gives it the personality and the feature set of the 4180. The **-m4000XA** is used to specify a 4000XA device.

3.1.4 RELEASE 18.1 ERRATA

A new option “-x” has been added on the command line for those users using a support processor running Solaris version 2.6 or older. These older versions of Solaris do not support the advanced TCP features of newer versions of Solaris. The “-x” option excludes the need for these advanced TCP features.

There is no errata on this release for OS variants other than Solaris.

Usage is as follows:

```
upgrade [-v] [-d] [-p<PASS>] [-b<DDS>] [-r] [-t<TCP#>] [-slow] [-x] -m<TYPE> <IP-ADDR>
<fname>
```

3.1.5 RELEASE 17.1 ERRATA

The upgrade utility, in this release, becomes the sole utility for updates in either a TCP or BNS network and supercedes all previous versions, including BNS only derivatives. If the device must be accessed through it's serial console port because there is no TCP/IP connectivity available, then the serial port may be connected to a BNS asynchronous module as explained in the introduction.

When providing access via a serial port, configure the port on the BNS network at 9600 baud and no parity. For connection to a SAM or MSM port, configure the port as type **host** and enable **pap**. For connection to a TY port, configure the port as type **console**. For the argument of the **-b** flag used on the command line for the utility, configure the dialstring for the serial console port. As an example, assume the serial console of a UTM is connected to a SAM port that has a service address of **samhost**. Assume the BNS network has a UMI module at **IP address** 192.168.0.234 and has a configured a **vport** of **type=rcv** having an hport=50001. The command line syntax for the upgrade utility would be:

```
upgrade -v -d -r -t50001 -bsamhost -slow -mUTM 192.168.0.234 univ_pp.16.1
```

Note the **-slow** flag. This parameter is necessary to slow the transfer because certain devices, namely the UTM, UMI, IP-DSU, DT-2020, and DT-2020i, can only accept only one character at a time on their serial interfaces until firmware updates can be made to these devices at some later time. However, the product continues to run while the upgrade is taking place. Previously, using the serial

port for access by a utility required the device to be out-of-service. Note that it takes considerable time to upgrade through the serial port. Future enhancements should eliminate the need for this parameter.

WARNING: When using the **-b** option, the TCP numbers of 23 and 1023 may not be used on the target devices as those indicate telnet consoles on the target devices. Any other TCP value in the range of 1-65535 may be used. However, values lower than 1024 have been reserved for specific functions by Internet Standards and should be avoided.

3.2 BACKUP

3.2.1 RELEASE 18.4 ERRATA

There is no errata for the upgrade utility in this release. The release numbers have merely been kept consistent with the other utilities.

3.2.2 RELEASE 18.3 ERRATA

The **-m4000XA** operation was corrected.

3.2.3 RELEASE 18.2 ERRATA

Support has been added for the 4000XA. The 4000XA is a software conversion to a 4000 that gives it the personality and the feature set of the 4180. The **-m4000XA** is used to specify a 4000XA device.

3.2.4 RELEASE 18.1 ERRATA

A new option "**-x**" has been added on the command line for those users using a support processor running Solaris version 2.6 or older. These older versions of Solaris do not support the advanced TCP features of newer versions of Solaris. The "**-x**" option excludes the need for these advanced TCP features.

There is no errata on this release for OS variants other than Solaris.

Usage is as follows:

```
backup [-v][-d][-p<PASS>] [-b<DDS>] [-t<TCP#>] [-slow] [-x] -m<TYPE> <IP-ADDR>
<fname>
```

3.2.5 RELEASE 17.1 ERRATA

The backup utility, in this release, becomes the sole utility for saving configuration in either a TCP or BNS network and supercedes all previous versions, including BNS only derivatives. If the device must be accessed through its serial console port because there is no TCP/IP connectivity available, then the serial port may be connected to a BNS asynchronous module as explained in the introduction.

When providing access via a serial port, configure the port on the BNS network at 9600 baud and no parity. For connection to a SAM or MSM port, configure the port as type **host** and enable **pap**. For connection to a TY port, configure the port as type **console**. For the argument of the **-b** flag used on the command line for the utility, configure the dialstring for the serial console port. As an example, assume the serial console of a UTM is connected to a SAM port that has a service address of **samhost**. Assume the BNS network has a UMI module at **IP address** 192.168.0.234 and has a configured a **vport** of **type=rcv** having an **hport=50001**. The command line syntax for the backup utility would be:

backup -v -d -t50001 -bsamhost -mUTM 192.168.0.234 test.db

WARNING: When using the **-b** option, the TCP numbers of 23 and 1023 may not be used on the target devices as those indicate telnet consoles on the target devices. Any other TCP value in the range of 1-65535 may be used. However, values lower than 1024 have been reserved for specific functions by Internet Standards and should be avoided.

3.3 RELOAD

3.3.1 RELEASE 18.4 ERRATA

There is no errata for the upgrade utility in this release. The release numbers have merely been kept consistent with the other utilities.

3.3.2 RELEASE 18.3 ERRATA

The **-m4000XA** operation was corrected.

Some existing device backup files, including those from a 4180 target, were incorrectly determined to be invalid. The file auditing routines have been updated to correct that anomaly.

3.3.3 RELEASE 18.2 ERRATA

Support has been added for the 4000XA. The 4000XA is a software conversion to a 4000 that gives it the personality and the feature set of the 4180. The **-m4000XA** is used to specify a 4000XA device.

3.3.4 RELEASE 18.1 ERRATA

A new option "**-x**" has been added on the command line for those users using a support processor running Solaris version 2.6 or older. These older versions of Solaris do not support the advanced TCP features of newer versions of Solaris. The "**-x**" option excludes the need for these advanced TCP features.

There is no errata on this release for OS variants other than Solaris.

Usage is as follows:

```
reload [-v] [-d] [-p<PASS>] [-b<DDS>] [-r] [-t<TCP#>] [-slow] [-x] -m<TYPE> <IP-ADDR> <fname>
```

3.3.5 RELEASE 17.1 ERRATA

The reload utility, in this release, becomes the sole utility for restoring database configuration in either a TCP or BNS network and supercedes all previous versions, including BNS only derivatives. If the device must be accessed through its serial console port because there is no TCP/IP connectivity available, then the serial port may be connected to a BNS asynchronous module as explained in the introduction.

When providing access via a serial port, configure the port on the BNS network at 9600 baud and no parity. For connection to a SAM or MSM port, configure the port as type **host** and enable **pap**. For connection to a TY port, configure the port as type **console**. For the argument of the **-b** flag used on the command line for the utility, configure the dialstring for the serial console port. As an example, assume the serial console of a UTM is connected to a SAM port that has a service address of **samhost**. Assume the BNS network has a UMI module at **IP address** 192.168.0.234 and has a

configured a **vport** of **type=rcv** having an **hport=50001**. The command line syntax for the reload utility would be:

```
reload -v -d -r -t50001 -bsamhost -slow -mUTM 192.168.0.234 test.db
```

Note the **-slow** flag. This parameter is necessary to slow the transfer because certain devices, namely the UTM, UMI, IP-DSU, DT-2020, and DT-2020i, can only accept only one character at a time on their serial interfaces until firmware updates can be made to these devices at some later time. However, the database is quite small and there is little impact from this option for the reload command.

WARNING: When using the **-b** option, the TCP numbers of 23 and 1023 may not be used on the target devices as those indicate telnet consoles on the target devices. Any other TCP value in the range of 1-65535 may be used. However, values lower than 1024 have been reserved for specific functions by Internet Standards and should be avoided.

3.4 GETINFO

3.4.1 RELEASE 1.2 ERRATA

Support has been added for the 4000XA. The 4000XA is a software conversion to a 4000 that gives it the personality and the feature set of the 4180. The entire range of feature packages supported by the 4180 is also supported by the 4000XA.

3.4.2 RELEASE 1.1 ERRATA

This is the first official release of the utility. Changes from the Beta versions are as follows:

- The utility has a defined release number, and will no longer be issued quarterly.
- The problem associated with the beta version where a default "info" file is created without regard to the master file name has been corrected. The "info" file follows the name of the master file. This allows multiple groups of information to be collected simultaneously.

3.5 DEVREP

3.5.1 RELEASE 1.2 ERRATA

Support has been added for the 4000XA. The 4000XA is a software conversion to a 4000 that gives it the personality and the feature set of the 4180. The entire range of feature packages supported by the 4180 is also supported by the 4000XA.

3.5.2 RELEASE 1.1 ERRATA

This is the first official release of the utility. Changes from the Beta versions are as follows:

- The utility has a defined release number, and will no longer be issued quarterly.

3.6 SETREG

3.6.1 RELEASE 1.2 ERRATA

Support has been added for the 4000XA. The 4000XA is a software conversion to a 4000 that gives it the personality and the feature set of the 4180. The entire range of feature packages supported by the 4180 is also supported by the 4000XA.

3.6.2 RELEASE 1.1 ERRATA

This is the first official release of the utility. Changes from the Beta versions are as follows:

- The utility has a defined release number, and will no longer be issued quaterly.

4 COMMAND SYNTAX

4.1 UPGRADE

Syntax:

```
upgrade [-v] [-d] [-r] [-p<PASS>] -m<TYPE> [-t<TCP#>] [-b<DDS>] [-slow] [-x]
<IP_ADDR> <fname>
```

Where:

-v	Print version of the utility.
-d	Present verbose debugging data. Under certain conditions, this option may slow down the upgrade.
-p<PASS>	Use password <PASS> in lieu of the default for the purposes of logging into the device console.
-r	Automatic Reboot after Upgrade.
-m<TYPE>	The target device type. (e.g. -m4180, -m4000XA)
-t<TCP#>	Over-Ride the default TCP number. Since this option is an over-ride. It should follow the device definition -m<TYPE> as that option sets the default and options are processed left to right.
-b<DDS>	In situations where a UMI is used in a BNS/Datakit network as a means to access a serial port connected device, this options specifies the "double-dial" dial string used in the BNS/Datakit network.
-slow	Enable single character processing. This option actually verifies when the character was sent by the asynchronous port connected to the target console.
-x	Exclude advanced TCP features. Used for Solaris 2.6 and earlier.
<IP-ADDR>	The IP address of the target device. In situations where a UMI is used to access a serial port, the IP address of the UMI. In situations where a serial port is connected to another device. This is IP address of the device which has the support serial port.
<fname>	Upgrade Image.

4.2 BACKUP

Syntax:

backup [-v] [-d] [-p<PASS>] -m<TYPE> [-t<TCP#>] [-b<DDS>] [-x] <IP_ADDR> <fname>

Where:

-v	Print version of the utility.
-d	Present verbose debugging data.
-p<PASS>	Use password <PASS> in lieu of the default for the purposes of logging into the device console.
-m<TYPE>	The target device type. (e.g. -m4180)
-t<TCP#>	Over-Ride the default TCP number. Since this option is an over-ride. It should follow the device definition -m<TYPE> as that option sets the default and options are processed left to right.
-b<DDS>	In situations where a UMI is used in a BNS/Datakit network as a means to access a serial port connected device, this options specifies the "double-dial" dial string used in the BNS/Datakit network.
-x	Exclude advanced TCP features. Used for Solaris 2.6 and earlier.
<IP-ADDR>	The IP address of the target device. In situations where a UMI is used to access a serial port, the IP address of the UMI. In situations where a serial port is connected to another device. This is IP address of the device which has the support serial port.
<fname>	The name of the file to be created containing the Database Backup.

4.3 RELOAD

Syntax:

reload [-v] [-d] [-r] [-p<PASS>] -m<TYPE> [-t<TCP#>] [-b<DDS>] [-slow] [-x] <IP_ADDR> <fname>

Where:

-v	Print version of the utility.
-d	Present verbose debugging data.
-p<PASS>	Use password <PASS> in lieu of the default for the purposes of logging into the device console.
-r	Automatic Reboot after Upgrade.
-m<TYPE>	The target device type. (e.g. -m4180)
-t<TCP#>	Over-Ride the default TCP number. Since this option is an over-ride. It should follow the device definition -m<TYPE> as that option sets the default and

	options are processed left to right.
-b<DDS>	In situations where a UMI is used in a BNS/Datakit network as a means to access a serial port connected device, this options specifies the “double-dial” dial string used in the BNS/Datakit network.
-slow	Enable single character processing. This option actually verifies when the character was sent by the asynchronous port connected to the target console.
-x	Exclude advanced TCP features. Used for Solaris 2.6 and earlier.
<IP-ADDR>	The IP address of the target device. In situations where a UMI is used to access a serial port, the IP address of the UMI. In situations where a serial port is connected to another device. This is IP address of the device which has the support serial port.
<fname>	The name of the Database Backup File to be reloaded onto the target.

4.4 GETINFO

The **getinfo** utility is invoked on a file containing a list of devices to be administered. This file is called the master device list file.

The master device list file may have **any name** in the form of “my_devices.master”. The first part “my_devices” will be reused as the output of getinfo will be a file named “my_devices.info” and any registration files will be named “my_devices.register” and “my_devices.msgs”. The “my_devices” name may be of arbitrary size within reasonable limits. Note that it is possible to have many different master files to group devices by any criteria (e.g. north_region.master, ama_group.master, telemetry.master, etc.).

The master device list file may have any name and it is provided as an argument to the **getinfo** utility. The master device list may also contain devices that do not require registration. The **getinfo** utility makes inquiry of each device in the master device list and creates a device information file named in the form “my_devices.info” in the current directory.

The master device file line format is as follows:

```
<IP ADDRESS> [<TCP PORT>] [-P<Password>] [-b<DDS>] # Comment
```

An example “my_devices.master” file follows:

```
# This is a Sample master device list file “my_devices.master”.
# Note that there is one device ( Connect IP Address ) per line.
# TCP Port Override is allowed. Registration may use the serial console.
# Password Override is allowed.
# It is OK to have devices that do not need registration listed for inventory.
```

```
# Comments in this file are preceded with a pound symbol.
# Blank Lines are treated as comments.
# Basic Line Format is as follows:
192.168.0.80 # Device at Location 'A'
192.168.0.82 # Device at Location 'B'
192.168.0.155 50001 # Example of TCP port Override.
192.168.0.156 50001 -pcustom1 # Example of Password Override.
192.168.0.234 50001 -bsamhost # UTM Serial Console via a UMI into Datakit
```

Once the “my_devices.master” file is prepared, it is used as an input to the [getinfo](#) utility.

getinfo my_devices.master

This will produce the file “my_devices.info” that is used by the other utilities or may be sent for registration to keys@trdcusa.com. When doing so, it is OK if only one device needs registration even if the group contains many devices. Only the needed registration will actually be generated.

Syntax:

getinfo [-v] [-d] [-x] <MASTER FILE NAME>

Where:

-v	Print version of the utility.
-d	Present verbose debugging data.
-x	Exclude advanced TCP features. Used for Solaris 2.6 and earlier.

4.5 DEVREP

The devrep utility displays information gathered during the getinfo process. It can be useful for inventory purposes. It uses, as input, the “my_devices.info” file created by the getinfo utility.

Syntax:

devrep [-v] [-d] <INFO FILE NAME>

Where:

-v	Print version of the utility.
-d	Present verbose debugging data.

4.6 SETREG

The setreg utility is used to install registration information on the target device. When registration was needed on one or more devices, the getinfo utility was used on the master group containing those devices. The resulting <any_name.info> file was then sent to keys@trdcusa.com.

The registration procedure is performed and a file named “any_name.register” is attached to return email to the original sender. A messages file named “any_name.msgs” is also attached and may be printed as a report of the key generation function.

After receiving the “any_name.register” file, the **setreg** utility is invoked with the relative path of the “any_name.register” file as it’s sole argument. The **setreg** utility will only contact the devices that actually need registration, and for which one or more keys were successfully generated. All of the appropriate keys, including a device key and multiple per port feature package keys, are installed by the **setreg** utility. The device is not restarted and this operation may occur during normal transport operation.

Syntax:

setreg [-v] [-d] [-x] <REGISTER FILE NAME>

Where:

-v	Print version of the utility.
-d	Present verbose debugging data.
-x	Exclude advanced TCP features. Used for Solaris 2.6 and earlier.

4.7 PRODUCT TYPES

The valid values for <TYPE> for the “-m” parameter in any of the utilities are as follows:

IPDSU	The IP-DSU of any series.
2020i	DT-2020i Module
4000	DT-4000 Access Device.
SAM	DT-SAM Access Device.
9480	DT-9480 Access Device.
4284	DT-4284 Access Device.
4180	DT-4180 Access Device.
4000XA	4000XA Access Device.
UMI	Universal Mediation Interface 504 Module.
UTM	Universal Trunk Module.

5 INSTALLATION ADDENDUM

5.1 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 ***

Response:

```
26608 225 backup.hpux.18.4
52048 68  backup.linux.18.4
60588 66  backup.sun.18.4
```

```
1319 217 devrep.hpux.1.2
22600 63  devrep.linux.1.2
50597 69  devrep.sun.1.2
```

```
12919 257 getinfo.hpux.1.2
15896 91  getinfo.linux.1.2
7071 105 getinfo.sun.1.2
```

```
64965 225 reload.hpux.18.4
28953 69  reload.linux.18.4
49195 67  reload.sun.18.4
```

```
23029 241 setreg.hpux.1.2
33722 81  setreg.linux.1.2
18796 89  setreg.sun.1.2
```

```
36390 225 upgrade.hpux.18.4
12592 70  upgrade.linux.18.4
63295 69  upgrade.sun.18.4
```

® UNIX is a registered trademark in the United States and other countries licensed exclusively through X/Open Company, Ltd.

Note that a user would request only the files compatible with their support host's operating system, and not all the above files.

After moving the utility applications to the host platform and verifying the checksums, before executing the applications, the user must remove any filename extensions. They may also rename the utility to any desired name at that time. (mv <application name><operating system><release number>.<version number> <desired name for this utility>.

For example,

```
mv upgrade.hpux.18.4 upgrade
mv reload.hpux.18.4 reload
mv backup.hpux.18.4 backup
mv getinfo.hpux.1.2 getinfo
mv devrep.hpux.1.2 devrep
mv setreg.hpux.1.2 setreg
chmod +x upgrade reload backup getinfo devrep setreg
```

6 DOCUMENTATION

The current version of this document may be downloaded from the support area of <http://www.trdcusa.com>.

7 END-USER LICENSE AGREEMENT FOR SOFTWARE

This License Agreement ("License") is a legal contract between you and the manufacturer ("Manufacturer") of the system ("HARDWARE") with which you acquired software product(s) identified above ("SOFTWARE"). The SOFTWARE may include printed materials that accompany the SOFTWARE. Any software provided along with the SOFTWARE that is associated with a separate end-user license agreement is licensed to you under the terms of that license agreement. By installing, copying, downloading, accessing or otherwise using the SOFTWARE, you agree to be bound by the terms of this LICENSE. If you do not agree to the terms of this LICENSE, Manufacturer is unwilling to license the SOFTWARE to you. In such event, you may not use or copy the SOFTWARE, and you should promptly contact Manufacturer for instructions on return of the unused product(s) for a refund.

7.1 SOFTWARE LICENSE

You may only install and use one copy of the SOFTWARE on the HARDWARE (unless otherwise licensed by Manufacturer). The SOFTWARE may not be installed, accessed, displayed, run, shared or used concurrently on or from different computers, including a workstation, terminal or other digital electronic device ("Devices"). Notwithstanding the foregoing and except as otherwise provided below, any number of Devices may access or otherwise utilize the services of the SOFTWARE. You may not reverse engineer, decompile, or disassemble the SOFTWARE, except and only to the extent that such activity is expressly permitted by applicable law notwithstanding this limitation. The SOFTWARE is licensed as a single product. Its component parts may not be separated for use on more than one HARDWARE. The SOFTWARE is licensed with the HARDWARE as a single integrated product. The SOFTWARE may only be used with the HARDWARE as set forth in this LICENSE. You may not rent, lease or lend the SOFTWARE in any manner. You may permanently transfer all of your rights under this LICENSE only as part of a permanent sale or transfer of the HARDWARE, provided you retain no copies, you transfer all of the SOFTWARE (including all component parts, the media and printed materials, any upgrades, this LICENSE and, if applicable, the Certificate(s) of Authenticity), and the recipient agrees to the terms of this LICENSE. If the SOFTWARE is an upgrade, any transfer must also include all prior versions of the SOFTWARE. Without prejudice to any other rights, Manufacturer may terminate this LICENSE if you fail to comply with the terms and conditions of this LICENSE. In such event, you must destroy all copies of the SOFTWARE and all of its component parts.

7.2 INTELLECTUAL PROPERTY RIGHTS

The SOFTWARE is licensed, not sold to you. The SOFTWARE is protected by copyright laws and international copyright treaties, as well as other intellectual property laws and treaties. You may not copy the printed materials accompanying the SOFTWARE. All title and intellectual property rights in and to the content which may be accessed through use of the SOFTWARE is the property of the respective content owner and may be protected by applicable copyright or other intellectual property laws and treaties. This LICENSE grants you no rights to use such content. All rights not expressly granted under this LICENSE are reserved Manufacturer and its licensors (if any).

7.3 SOFTWARE SUPPORT

SOFTWARE support is not provided by Manufacturer, or its affiliates or subsidiaries separate from the HARDWARE. For SOFTWARE support, please contact your supplier of the HARDWARE. SOFTWARE support is limited to the warranty period stated below unless either a separate contract

has been consummated between you and the manufacturer or the manufacturer has agreed in writing at the time of purchase by you of the software to an extension of the warranty. Should you have any questions concerning this LICENSE, or if you desire to contact Manufacturer for any other reason, please refer to the address provided in the documentation for the HARDWARE.

7.4 EXPORT RESTRICTIONS

You agree that you will not export or re-export the SOFTWARE to any country, person, or entity subject to U.S. export restrictions. You specifically agree not to export or re-export the SOFTWARE: (i) to any country to which the U.S. has embargoed or restricted the export of goods or services, which as of March 1998 include, but are not necessarily limited to Cuba, Iran, Iraq, Libya, North Korea, Sudan and Syria, or to any national of any such country, wherever located, who intends to transmit or transport the products back to such country; (ii) to any person or entity who you know or have reason to know will utilize the SOFTWARE or portion thereof in the design, development or production of nuclear, chemical or biological weapons; or (iii) to any person or entity who has been prohibited from participating in U.S. export transactions by any federal agency of the U.S. government.

7.5 LIMITED WARRANTY

Manufacturer warrants that (a) the SOFTWARE will perform substantially in accordance with the accompanying written materials for a period of ninety (90) days from the date of shipment from TeleComp R&D or a designated manufacturer. Software support is limited to the hours of 9 AM to 5 PM ET Monday through Friday excluding TeleComp R&D observed holidays. Other coverage and extended warranty may be purchased at additional cost. Any implied warranties on the SOFTWARE are limited to ninety (90) days. Some states/jurisdictions do not allow limitations on duration of an implied warranty, so the above limitation may not apply to you.

Manufacturer's and its suppliers' entire liability and your exclusive remedy shall be, at Manufacturer's option, either (a) return of the price paid, or (b) repair or replacement of the SOFTWARE that does not meet this Limited Warranty and which is returned to Manufacturer with a copy of your receipt. This Limited Warranty is void if failure of the SOFTWARE has resulted from accident, abuse, or misapplication. Any replacement SOFTWARE will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer.

7.6 NO OTHER WARRANTIES

TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, MANUFACTURER AND ITS SUPPLIERS DISCLAIM ALL OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT, WITH REGARD TO THE SOFTWARE AND THE ACCOMPANYING WRITTEN MATERIALS. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHERS, WHICH VARY FROM STATE/JURISDICTION TO STATE/JURISDICTION.

7.7 SPECIAL PROVISIONS

The SOFTWARE and documentation are provided with RESTRICTED RIGHTS. Use, duplication, or disclosure by the United States Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and HARDWARE Software clause at DFARS 252.227-7013 or subparagraphs (c)(1) and (2) of the Commercial HARDWARE Software-Restricted Rights at 48 CFR 52.227-19, as applicable. Manufacturer is TeleComp R&D or it's designee manufacturer., 102 SW Orange Blossom, Lake City, Florida, 32025-1613.

If you acquired the SOFTWARE in the United States of America, this Software License are governed by the laws of the State of Florida, excluding its choice of laws provisions. If you acquired the SOFTWARE outside the United States of America, local law may apply. This LICENSE constitutes the entire understanding and agreement between you and the Manufacturer in relation to the SOFTWARE and supersedes any and all prior or other communications, statements, documents, agreements or other information between the parties with respect to the subject matter hereof.

8 LIMITATION OF LIABILITY

To the maximum extent permitted by applicable law, in no event shall Manufacturer or its suppliers be liable for any damages whatsoever (including without limitation, special, incidental, consequential, or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising out of the use of or inability to use this product, even if Manufacturer has been advised of the possibility of such damages. In any case, Manufacturer's and its suppliers' entire liability under any provision of this License shall be limited to the amount actually paid by you for the SOFTWARE and/or the HARDWARE. Because some states/jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

9 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.

©Copyright 2003, 2007 TeleComp R&D Corp.
©Copyright 1998, 2002 TeleComp, Inc.
All Rights Reserved
Printed in USA