



## **T-40 SERIES**

# **MULTIMATE ASYNCHRONOUS SERIAL PORTS**

## **APPLICATION NOTE**

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## T-40 Series MultiMate Serial Ports Application Note

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### 1 ABOUT THIS DOCUMENT

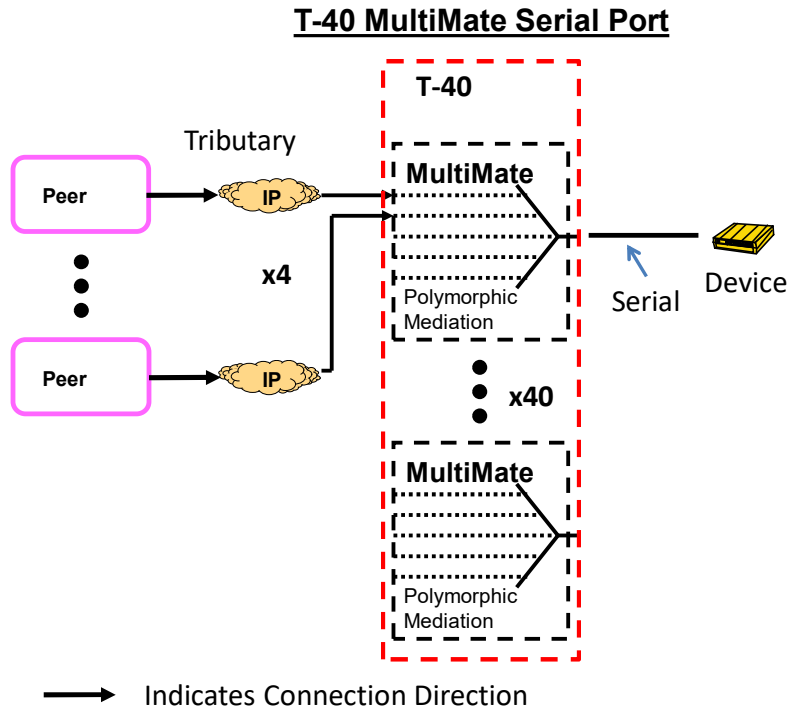
The **T-40** series is a flexible set of devices for protocol mediation. They can also be used for customer specific applications on a dedicated basis.

This document describes the **MultiMate asynchronous serial ports**. Essentially, they are asynchronous ports that may be simultaneously shared with multiple peers. The feature is commonly used for console management in active – active disaster recovery deployments.

Protocols, interfaces, and other **T-40** features are described in separate documents. This document only describes the use of the MultiMate asynchronous serial ports.

### 1.1 Functionality

A MultiMate serial port can be defined by the following diagram:



The **T-40** presently supports up to 4 tributaries ( users ) for a MultiMate port. Further, the serial port is currently only asynchronous protocols. This may change in the future if required, but MultiMate ports are typically used for console sharing.

All of the tributaries use the same hunt group TCP port. This defaults to 50000 + the serial port number ( i.e. 50001, 50002, ..., 50040 ). But this may be changed to any desired value.

The MultiMate serial ports support all of the standard port options, including CUGs, RADIUS authentication, and selection of a transport API. The configuration is exactly the same as an asynchronous port with the exception of `type=mma` instead of `type=rcv` on the initial configuration.

## **2 CONFIGURATION EXAMPLE**

The following is a simple example that defines a MultiMate asynchronous serial port on port #1. It uses all the default values for the serial port.

```
port 1 type=default  
port 1 type=mma  
rs p 1
```

The above will define port 1 with the tributaries hunting to TCP port 50001. By default, it uses the TELNET transport API, and does not authenticate.

Changing the TCP hunt group is as follows:

```
rm p 1  
port 1 hport=5001  
rs p 1
```

The above changed the TCP hunt port from 50001 to 5001.

Changing the transport API of the tributaries from TELNET to SSH:

```
rm p 1  
port 1 api=ssh  
rs p 1
```

The above changed the transport API to SSH. It still uses the same TCP port as defined earlier.

RADIUS authentication, or closed user groups, is defined in the same manner as a normal asynchronous port. For example, to authenticate with RADIUS:

```
rm p 1  
port 1 aaa=radius  
rs p 1
```

Please note that at least one RADIUS server needs to be defined, and enabled, for this configuration to be useful.

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The default exclusion timer is 180 ticks. That is about 3 seconds. Each tick is one Hertz or 1/60<sup>th</sup> of a second. It makes the connection exclusive with one tributary during the timeout period. It can be disabled, or set to a different value. To disable:

```
rm p 1  
port 1 excl=off  
rs p 1
```

### **3 AUTHOR**

Comments and Questions regarding this document, or the products covered within this document, should be addressed to the author.

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