RADview-HPOV/TDM

Network Management System for TDM Applications

Optimux-T3 Ring

Contents

Intro	Introduction1-1		
	1.1 Overview Opening the Application	1-1 1-1	
Ring	Management	2-1	
	2.1 System Management	2-1	
	Displaying X-Connection Table	2-2	
	Connecting Optimuxes	2-5	
	Polling Ring Status	2-8	
	Updating Ring Configuration	2-8	
	Renaming Ring	2-9	
	Closing the Ring	2-9	
	Exiting the Application	2-10	
	Viewing Paths	2-10	
	Displaying Chain View	2-11	
	Setting the Polling Interval	2-12	
	Viewing Sanity Check Errors	2-13	
	2.2 Optimux Management		
	Updating Agent	2-14	
	Removing an Optimux from the Ring	2-14	

List of Figures

1-1. Ring List	1-2
1-2. Add Ring1	1-2
2-1. Ring Map	2-1
2-2. X-Connection Table	2-3
2-3. Change Path Name2	2-4
2-4. Deleting Connections	2-4
2-5. Add/Delete Path Dialog Box2	2-5
2-6. Optimux Channel Assignment Dialog Box2	2-6
2-7. Path Name Dialog Box	2-7
2-8. Disconnecting All Connections	2-8
2-9. Update Ring Configuration	2-8
2-10. Rename Ring2	2-9
2-11. Closing Application2	2-9
2-12. Exiting Application2-	·10
2-13. Viewing Paths2-	·11
2-14. Chain View Dialog Box2-	·11
2-15. Invisible Chain Connection2-	·12
2-16. Polling Interval2-	·12
2-17. Sanity Check Errors2-	·13
2-18. Updating Agent2-	-14
2-19. Cannot Remove Optimux From Ring2-	-14

List of Tables

2-1.	Ring Management Options	2-2
2-2.	Optimux Channel Assignment Color Coding	2-7
2-3.	Optimux Management Options	-13

Chapter 1 Introduction

1.1 Overview

RADview-TDM Network Management System for Optimux-T3-Ring provides you with all the necessary tools manage a number of Optimux-T3 units connected together in a ring topology. The ring topology enables you to connect the Optimux-T3 units without the need to connect them through an SDH network. The application allows you to connect one channel of an Optimux-T3 to another channel of an Optimux-T3 in the ring.

Note You can check management of the Ring from two separated stations that are connected to the same Node. However, you can't check management of the Ring from two separate stations that are connected to the different nodes on the same Ring.

Opening the Application

► To open the application:

1. From the HPOV map's **Misc** menu, select **RADview/OV** followed by **Service Center** and **Optimux T3 Ring...**

The Optimux T3 Ring Dialog Box (*Figure 1-1*) appears listing all existing rings.

🕀 Optimux T3 Ring 👘		×
	Ring List	
optimuxring		
Open	Add Remove	Close

Figure 1-1. Ring List

2. Select a ring from the list and click **<Open>**.

A window appears with the message "Initializing Ring". A progression bar indicates the status of the initialization process. When initialization finishes, the Ring Map appears.

Adding a Ring to the Ring List

► To add a ring to the ring list:

 From the Ring List dialog box (*Figure 1-1*), click <**Add**>. The Add Ring dialog box appears (*Figure 1-2*).

💮 Add Ring	×
Ring Name :	Untitled
Select Optimux:	_
Selected Optimux IP:	0.0.0
Set	Cancel

Figure 1-2. Add Ring

- 2. Configure the following parameters: **Ring Name, Select Optimux** and **Select Optimux ID.**
- 3. Click **<Set>**.

The Optimux is added to the ring.

Removing a Ring from the Ring List

► To remove a ring from the ring list:

- Select a ring in the Ring List dialog box (*Figure 1-1*) and click <**Remove**>.
 A confirmation dialog box appears.
- 2. Click **<OK**> to confirm remove.

Closing the Ring List

► To close the ring list:

In the Ring List dialog box (*Figure 1-1*), click **<Close**>.

The ring list closes.

Chapter 2 Ring Management

2.1 System Management



Figure 2-1. Ring Map

	System Tasks – Configuration	Dialog Box and Parameter Location	Path
Configuration X-Connection Table	Displaying X- connection table	X-Connection Table (<i>Figure 2-2</i>)	Configuration ➡X-Connection Table
Add/Delete Path Poll Ring Status	Connecting Optimuxes	Add/Delete Path dialog box (Figure 2-5)	Configuration ➡Add/Delete Path
Update Ring Configuration Rename	Polling agent	See Polling Ring Status	Configuration ➡Poll Ring Status
Exit	Updating ring status	Update Ring Configuration dialog box (Figure 2-9)	Configuration ➡Update Ring Status
	Renaming ring	Rename Ring dialog box (<i>Rename Ring</i>)	Configuration ➡Rename
	Closing ring map	Close Application dialog box (<i>Figure 2-11</i>)	Configuration ➡Close
	Exiting application	Exiting Application dialog box (Figure 2-12)	Configuration ⇔Exit
	System Tasks – Fault	Dialog Box and Parameter Location	Path
View	Displaying paths between Optimuxes	Viewing Paths dialog box (Figure 2-13)	Fault ➡Path
Chain View	Making chain sections invisible	Chain View dialog box (Figure 2-14)	Fault ➡Chain View
	System Tasks – Options	Dialog Box and Parameter Location	Path
Options Polling Interval	Setting polling interval	Polling Interval dialog box (<i>Figure 2-16</i>)	Options ➡Polling Interval
Sanity Check Errors	Displaying Sanity Check errors	Sanity Check Errors dialog box (<i>Figure 2-17</i>)	Options ➡Sanity Check Errors

Table 2-1.	Ring	Management	Options
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Displaying X-Connection Table

The **X-Connection** command displays the X-connection table.

- ► To view the X-connection table:
 - From the Configuration menu, select X-Connection Table...

The X-Connection Table appears (Figure 2-2).

Note When opening the X-connection table for the first time and no path has been added, the buttons <*Change Path Name...>* and *<Delete Path>* are not enabled.

🕀 optimuxring: X-Connection Table 🛛 🛛 🛛 🛛					
Sum of Eree CHer	26				
Sum of thee of its.	20				
Path Name	Framer CH	Framer Type	opt227	opt226	opt225
Path 1	1	E1	By-Pass	CH 8	CH 9
Spare 2	2	E1	By-Pass	By-Pass	By-Pass
Spare 3	3	E1	By-Pass	By-Pass	By-Pass
Spare 4	4	NA	By-Pass	By-Pass	By-Pass
Spare 5	5	NA	By-Pass	By-Pass	By-Pass
Spare 6	6	NA	By-Pass	By-Pass	By-Pass
Spare 7	7	NA	By-Pass	By-Pass	By-Pass
Spare 8	8	NA	By-Pass	By-Pass	By-Pass
Spare 9	9	NA	By-Pass	By-Pass	By-Pass
Spare 10	10	NA	By-Pass	By-Pass	By-Pass
Spare 11	11	NA	By-Pass	By-Pass	By-Pass
Spare 12	12	NA	By-Pass	By-Pass	By-Pass
Spare 13	13	NA	By-Pass	By-Pass	By-Pass
Spare 14	14	NA	By-Pass	By-Pass	By-Pass
Spare 15	15	NA	By-Pass	By-Pass	By-Pass
Spare 16	16	NA	By-Pass	By-Pass	By-Pass
Spare 17	17	NA	By-Pass	By-Pass	By-Pass
Spare 18	18	NA	By-Pass	By-Pass	By-Pass
Spare 19	19	NA	By-Pass	By-Pass	By-Pass
Spare 20	20	NA	By-Pass	By-Pass	By-Pass
Spare 21	21	NA	By-Pass	By-Pass	By-Pass
Spare 22	22	NA	By-Pass	By-Pass	By-Pass
Spare 23	23	NA	By-Pass	By-Pass	By-Pass
Spare 24	24	NA	By-Pass	By-Pass	By-Pass
Spare 25	25	NA	By-Pass	By-Pass	By-Pass
Spare 26	26	NA	By-Pass	By-Pass	By-Pass
Spare 27	27	NA	By-Pass	By-Pass	By-Pass
Spare 28	28	NA	By-Pass	By-Pass	By-Pass
				1 1	
	Change Path Nar	ne Delete Pa	th Cancel	Print	

Figure 2-2. X-Connection Table

Changing Path's Name

► To change a path's name in the X-connection table:

- 1. Select the desired path in the X-Connection Table (Figure 2-2).
- 2. Click < Change Path Name...>

The Change Path Name dialog box appears (Figure 2-3).

💮 Change Path Na	ame 🛛 🔀
Current Path Name :	Path 1
New Path Name :	Path 1
Set	Cancel

Figure 2-3. Change Path Name

3. Configure New Path Name and click **<Set**>.

The new path name appears in the X-Connection Table (Figure 2-2).

Deleting Paths from X-Connection Table

- ► To delete a path from the X-connection table:
 - 1. Select the desired path in the X-Connection Table (Figure 2-2).
 - 2. Click < Delete Path>

A confirmation dialog box appears (Figure 2-4).

Ring	Name: optimuxring	×
?	Deleting all selected connections	
	OK	

Figure 2-4. Deleting Connections

3. Click **<OK>**.

The path is deleted from the X-Connection Table (Figure 2-2).

Printing X-Connection Table

► To print the X-connection table:

- In the X-Connection Table (*Figure 2-2*), click < Print>. The printer dialog box appears.
- 2. Select desired printer and click **<OK>**.

Connecting Optimuxes

The **Add/Delete Path** command allows you to connect one Optimux to another.

- ► To Connect one Optimux to another:
 - 1. From the **Configuration** menu, select **Add/Delete Path**. The Add/Delete Path dialog box appears (*Figure 2-6*).
 - Or
 - 2. On the Ring Map (*Figure 2-1*), drag and drop one Optimux to another Optimux.

The Add/Delete Path dialog box appears (Figure 2-6).

💮 optimuxring: A	dd/ Delet.	🗵
Connect Optimux :	opt225	•
To Optimux:	opt226	◄
Set	Cancel	

Figure 2-5. Add/Delete Path Dialog Box

3. Configure desired parameters and click <**Set**>.

A window appears with the message "Collecting Data". A progression bar indicates the status of the process. When the process finishes the Optimux Channel Assignment dialog box appears (*Figure 2-6*).



Figure 2-6. Optimux Channel Assignment Dialog Box

Channel Assignment

The Optimux Channel Assignment Dialog Box (*Figure 2-6*) displays the physical channel assignments for the two Optimuxes that were selected in the Add/Delete Paths dialog box (*Figure 2-5*). The cells of the table are color-coded.

Color	Remarks
Title Cells	
Bright Green	Channel is connected to the opposite Optimux in the table
Dark Green	Channel is connected to another Optimux (not in the table)
Blue	Channel can not be selected (E1 group 4 th channel)
Gray	Channel is disconnected
E1/T1/NA	Indicates channel type. NA for E1 group 4 th channel
Inside Cells	
Yellow	Channel is connected to the opposite Optimux in the table
Blue	Channel can not be selected (E1 group 4 th channel, E1-T1 mismatch, connected channel to another Optimux)
Gray	Channel is disconnected

Table 2-2.	Optimux	Channel	Assignment	Color	Coding
	opennen	0		00.0.	000

Making Connections

► To select a cell:

- 1. Using the mouse's left button, click inside a cell in the Optimux Channel Assignment dialog box (*Figure 2-6*).
- 2. Click **<Connect>**.

Note Connect is available only when there is communication with the agent.

The cell becomes yellow (all other cells in the row and column line become blue) and the Path Name dialog box appears.

🛞 Path Name 🛛 🗙				
Path Name :	Path 5			
Set	Cancel			

Figure 2-7. Path Name Dialog Box

- Configure the Path Name and click <Set>. The Path Name dialog box closes.
- 4. Click **<Close>** in the Channel Assignment dialog box (*Figure 2-6*).

Disconnecting Connections

You can disconnect one connection or all connections.

> To disconnect a connection:

- 1. Using the mouse's left button, click inside a yellow cell in the Optimux Channel Assignment dialog box (*Figure 2-6*).
- 2. Click **<Disconnect**>.

The connection is disconnected.

To disconnect all connections:

- 1. Using the mouse's left button, click inside a yellow or gray (empty) cell in the Optimux Channel Assignment dialog box (*Figure 2-6*).
- 2. Click **<Disconnect All>**.
 - A confirmation message appears (Figure 2-8).



Figure 2-8. Disconnecting All Connections

3. Click **<OK>**.

All connections between the Optimuxes are disconnected.

Polling Ring Status

- ► To poll the agent:
 - From the **Configuration** menu, select **Poll Ring Status**.

The agent is polled immediately.

Updating Ring Configuration

- ► To update the ring configuration:
 - 1. From the **Configuration** menu, select **Update Ring Configuration**.
 - A confirmation message appears.

🖉 Ring	Name: optimuxring	×
⚠	Updating Ring Configuration	
	OK Cancel	

Figure 2-9. Update Ring Configuration

2. Click **<OK>**.

Renaming Ring

- ► To rename the ring:
 - 1. From the **Configuration** menu, select **Rename...**

The rename ring dialog box appears (Figure 2-10).

💮 Rename Ring			
Current Name :	optimuxring		
New Name :	optimuxring		
Set	Cancel		

Figure 2-10. Rename Ring

- **Note** If you click **<Set>** before configuring a **New Name** the message: "Ring name already exists!" appears (with red background) in the bottom part of the Rename Ring dialog box.
 - 2. Configure New Name.
 - 3. Click **<Set>**.

Closing the Ring

- ► To close the ring map (*Figure 2-1*):
 - 1. From the **Configuration** menu, select **Close**.

A confirmation message appears.



Figure 2-11. Closing Application

2. Click **<OK**>.

The ring map closes and the Ring List appears.

Exiting the Application

- ► To exit the application:
 - 1. From the **Configuration** menu, select **Close**.

A confirmation message appears (Figure 2-12):



Figure 2-12. Exiting Application

2. Click **<OK**>.

The application closes.

Viewing Paths

The Path command displays paths between Optimuxes on the ring.

► To display paths between Optimuxes on the ring map:

• From the **View** menu, select **Path**.

The existing path between the Optimuxes is displayed on the map (*Figure 2-13*).



Figure 2-13. Viewing Paths

Displaying Chain View

The **Chain View** command allows you to display sections of the chain link (in the ring) as invisible.

> To make a chain section (of the ring map) invisible:

1. From the **View** menu, select **Chain View**.

The Chain View dialog box appears (Figure 2-14).

🍪 optimuxring: Chain View				×	
Invisible Conne	ction:	opt22	6-opt227		•
	OK		Cancel		

Figure 2-14. Chain View Dialog Box

- 2. Configure Invisible Connection.
- 3. Click **<OK>**.

The ring connection between the two Optimuxes becomes invisible on the ring map.



Figure 2-15. Invisible Chain Connection

Setting the Polling Interval

► To set the polling interval:

- From the Options menu, select Polling Interval...
 The polling interval dialog box appears (*Figure 2-16*).
- 2. Select a polling interval: **60, 120, <u>180</u>** or **240** seconds.
- 3. Click **<Set**>.



Figure 2-16. Polling Interval

Viewing Sanity Check Errors

- ► To view sanity check errors:
 - From the **Options** menu, select **Sanity Check Errors...**

The sanity check errors dialog box appears (Figure 2-17).

ProfrsoRing: Sanity Check Errors					
Framer CH Idx	Description	Optimux			
	1				
	Close Print				

Figure 2-17. Sanity Check Errors

► To print the sanity check errors:

1. Click **<Print**>.

The printer dialog box appears.

2. Select desired printer and click **<OK>**.

2.2 Optimux Management

Optimux management is performed when an Optimux in the ring is selected.

	System Tasks – Configuration	Dialog Box and Parameter Location	Path
Configuration Update Agent Remove Optimux	Updating Optimux agent	Updating Agent dialog box (<i>Figure 2-18</i>)	Configuration ➡Update Agent
	Removing Optimux from ring	See Removing an Optimux from the Ring	Configuration →Remove Optimux

Table 2-3. Optimux Management Options

Updating Agent

- ► To update the agent:
 - 3. From the **Configuration** menu, select **Update Agent...**

The update agent dialog box appears (Figure 2-18).

4. Click <**OK**>.



Figure 2-18. Updating Agent

Removing an Optimux from the Ring

Only Optimuxes that do not exist in other ring application can be removed.

- ► To remove an Optimux from the ring:
 - 5. From the **Configuration** menu, select **Remove Optimux...** A confirmation message appears. Click **<OK>**.
- *Note* If the Optimux is currently working in the ring, you cannot delete it. A warning message (Figure 2-19) will indicate so. Click *<***O***K>*.

👹 Optii	mux Name: opt227	х
?	Cannot Remove Optimux opt227 Optimux is currently working in the F	Ring
	ОК	

Figure 2-19. Cannot Remove Optimux From Ring