

# **Administration**

A number of administrative features in Cisco IP Solution Center Traffic Engineering Management (ISC TEM) are common to ISC. Instructions on how to use these features are described in detail in *Cisco IP Solution Center Infrastructure Reference*, 4.0.

In this chapter, only TE-specific administrative features are described.

This chapter contains the following sections:

- TE User Roles, page 9-1
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  - Delete Policy, page 9-5
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- Manage Lock, page 9-18.

# **TE User Roles**

A TE user role can be a predefined or a user-specified role defining a set of permissions. For a detailed description of user roles in ISC and how to use them, see the *Cisco IP Solution Center Infrastructure Reference*, 4.0.

To access the User Roles window and locate the TE user roles, navigate Administration > Security > User Roles. The User Roles window in Figure 9-1 appears.

ISE	er F	Roles	
			View roles with Name 💌 Matching *
			Showing 11 - 20 of 20 records
#		Name	Description
1.		NATRole	ISC predefined role. It has the permission to manage Inventory and deploy NAT Service Request.
2.		NATServiceOpRole	ISC predefined role. It has the permission to deploy NAT Service Request.
з.		QoSRole	ISC predefined role. It has the permission to manage Inventory and deploy QoS Service Request.
4.		QoSServiceOpRole	ISC predefined role. It has the permission to deploy QoS Service Request.
5.		SysAdminRole	ISC predefined role. It has full permission.
6.		TERole	ISC predefined role. It has the permission to manage Inventory and deploy TE Service Request.
7.		TEServiceOpRole	ISC predefined role. It has the permission to deploy TE Admission Service Request.
8.		UserAdminRole	ISC predefined role. It has full permission to manage User, Group and Role.
9.		VPLSRole	ISC predefined role. It has the permission to manage Inventory and deploy VPLS Service Request.
20.		VPLSServiceOpRole	ISC predefined role. It has the permission to deploy VPLS Service Request.
	Rov	vsperpage: 10 💌	[[<] <p>↓ Go to page:</p>
			Create Copy Edit Delete

Figure 9-1 User Roles

For a description of the various window elements, see *Cisco IP Solution Center Infrastructure Reference*, 4.0.

There are two pre-defined TEM user roles:

- **TERole**—Grants full permission to TEM operations.
- TEServiceOpRole—Grants permission only to manage the TE Admission SR.

# **TE Policies**

Policies are used to define common tunnel attributes. Attributes such as bandwidth pools, hold and setup priority, and affinity bits, are set manually during policy creation as described below.

This section describes the following policy operations:

- Create Policy, page 9-2
- Edit Policy, page 9-4
- Delete Policy, page 9-5

## **Create Policy**

ISC TEM allows you to create TE-specific policies in a manner similar to other ISC policies. To create a TE policy, you must access the Policy Manager. Use the following steps:

Step 1 Navigate Service Design > Policy Manager.

**Cisco IP Solution Center Traffic Engineering Management User Guide**, 4.0

### Step 2 Click the Policy Manager icon.

The Policies window in Figure 9-2 appears.

Polic	ies				
	Show Policies with Policy Name	Matching *		of Type All	Find
				Showing 1 -	7 of 7 records
# 🗆	Policy Name	Туре		Owner	
1. 🗖	ISC-P8261-isctmp1:Tunnel3	TE	Provider	- pad0	
2. 🕅	ISC-P8262-isctmp1:Tunnel4	TE	Provider	- pad0	
3. 🗖	ISC-P8263-isctmp1:Tunnel5	TE	Provide	MPLS Policy	
4. 🗖	man1	TE	Global	L2VPN Policy	
5. 🗖	pm-none	ТЕ	Global	VPLS Policy	
6. 🗖	um1	TE	Global	QoS Policy	
7. 🗖	um2	TE	Global	IPsec Policy	
R	owe her here: 10 💌		14	TE Policy	f 1 🐻 🗅 🕅
	Sws ber page. [10]			Firewall Policy	
		Create		Edit Copy	Delete

### Figure 9-2 Policies Window

### **Step 3** Click **Create** and select **TE Policy** to set up a new TE policy.

The TE Policy Editor window in Figure 9-3 appears.

Figure 9-3 TE Policy Editor

Т

Policy Name *:	(1 - 64 characters)
Owner ":	Global
Managed:	
Pool Type *:	C Sub Pool (BC1)  Global pool (BC0)
Setup Priority 🐮	0
Hold Priority *	0
Affinity (0x0-0xFFFFFFFF):	
Affinity Mask (0x0-0xFFFFFFFF):	
FRR Protection Level:	None     O Best Effort     O Link & SRLG     O Link, SRLG & Node
Delayed Constraint:	Max Delay (msec):
	Save Cancel

The TE Policy Editor window contains the following fields:

- **Policy Name**—Name of the TE policy chosen by the user.
- **Owner**—The owner of the TE policy:
  - Global—A global policy.
  - Provider—A provider policy.
  - Customer—A customer policy.
- **Managed**—Check this box to make the policy to be used by managed tunnels. When clicked, both the setup and hold priorities are set to zero and these are not editable. If the box s unchecked, the setup/hold priorities can be set to a value between 1 and 7.

Clicking the **Managed** check box will add some extra fields in the TE Policy Editor corresponding to two additional protection levels for **FRR Protection Level** (Fast Re-Route) and a new field, **Delay Constraint**.

- **Pool Type**—Tunnel bandwidth pool type.
  - Sub Pool (BC1)—Bandwidth section nested inside the Global Pool part of the total bandwidth.
  - Global Pool (BC0)—Section of the total link bandwidth containing all Sub Pools for the link.
- Setup Priority—Priority used when signaling an LSP for the tunnel to determine, which of the existing tunnels can be preempted. Valid values are from 0 to 7, where a lower number indicates a higher priority. Therefore, an LSP with a setup priority of 0 can preempt any LSP with a non-0 hold priority.
- Hold Priority—Priority associated with an LSP for the tunnel to determine if it should be preempted by other LSPs that are being signaled. Valid values are from 0 to 7, where a lower number indicates a higher priority.
- Affinity—Attribute values required for links carrying the tunnel (bit values are either 0 or 1).
- Affinity Mask—Which attribute values should be checked. If a bit in the mask is 0, a link's attribute value of that bit is irrelevant. If a bit in the mask is 1, the link's attribute value and the tunnel's required affinity for that bit must match.
- FRR Protection Level—Level of Fast Reroute protection required on the primary tunnel.
  - None—No backup tunnel needed.
  - Best Effort—Use backup tunnel if available.
  - Link & SRLG—Requires the path used by the tunnel to have link and SRLG protection.
  - Link, SRLG & Node—Requires the path used by the tunnel to have link, SRLG, and node protection.
- **Delay Constraint**—The path used by the tunnel is required to meet the delay constraint specified.
  - Max Delay (msec)—Maximum delay allowed.

Two actions are available:

- **Save**—Save the TE policy with the current data.
- **Cancel**—Quit the TE Policy Editor and discard any changes.

### **Edit Policy**

A policy can be edited only if it is not associated with a tunnel.

To edit a TE policy, use the following steps:

- Step 1 Navigate Service Design > Policy Manager.
- Step 2Click the Policy Manager icon.The Policies window in Figure 9-2 appears.
- **Step 3** Select the desired policy and click **Edit**.

The TE Policy Editor window in Figure 9-3 appears. The TE Policy Editor window in Figure 9-3 appears. The policy editor is described in Create Policy, page 9-2. The only difference between the create and edit processes is that the policy name and owner are not editable when editing a policy.

Step 4 Make the desired changes to the policy attributes and click Save. If the save operation succeeds, the new TE policy now appears in the Policies window. If not, the Status box will indicate the type of error that occurred and, when possible, the corrective action required.

## **Delete Policy**

A policy can be deleted only if it is not associated with a tunnel.

To delete a TE policy, use the following steps:

- Step 1 Navigate Service Design > Policy Manager.
- Step 2 Click the Policy Manager icon. The Policies window in Figure 9-2 appears.
- **Step 3** Select the desired policy and click **Delete**. The Confirm Delete window in Figure 9-4 appears

### Figure 9-4 Policies - Confirm Delete

confirm Delete			
	Confirm I	)elete	
		Sł	nowing 1 - 1 of 1 record
# Policy Name	e Ser	vice	Owner
1. test1	TE	Global	
Rows per page: 10 💌		🛛 🗐 🗐 Go to page: 🕇	of 1 🌀 👂 🕅
		D	elete Cancel

- **Step 4** Check the policy marked for deletion and click **OK**.
- Step 5 The Policies window refreshes and the selected policy disappears.

# TE Tasks

ISC TEM currently offers three TE-specific tasks that are used in a manner similar to other ISC tasks:

- **TE Discovery**—Populates the repository with data from the TE network. Discrepancies are reconciled and/or reported.
- **TE Functional Audit**—Performs functional audit on TE Primary or Backup SRs in certain states.
- **TE Interface Performance**—Calculates the interface/tunnel bandwidth utilization.

This section focuses on describing how to create TE Functional Audit and TE Interface Performance tasks. Instructions on how to create a TE Discovery task are included in Chapter 3, "TE Network Discovery".

### **Creating a TE Task**

TE tasks are managed in the ISC Task Manager, which is accessed as follows:

### Step 1 Navigate Monitoring > Task Manager.

The Tasks window in Figure 9-5 appears.

### Figure 9-5 Tasks Window

Cisco Systems						Home   Shortcuts	s I Aco	count I Index	Help   About   Logout
di di	П	P S	Solution Center						
illiinmilliim.	S	erv	ice Inventory Service D	esign Monito	ring Adr	ministration	h.		User: admin
🔶 Task Manager	•	Ping	♦ SLA ♦ TE Performance Rep	ort 🔹					
You Are Here:    Monitoring    Task M	lanag	ger	Tasks						Customer: None
	Τa	sks	;						
Selection • Tasks			Show Tasks with Ta	ask Name matching 🖡		of Type *			Find
. Logs								Sho	wing 1 - 4 of 4 records
	#		Task Name	Туре		Schedule		Creator	Created on
	1.		Deploy Primary SR-ID 4 2004-06-17 17:47:12:121	Service Deployment	Schedule TE P	rimary SR deployment		admin	2004-06-17 17:47:12.121
	2.		Deploy Backup SR-ID 3 2004-06-17 17:45:00.724	Service Deployment	Schedule TE B	lackup SR deployment		admin	2004-06-17 17:45:00.724
	з.		TE Disc - isctmp2	TE Discovery	Single run at 2	004-06-12 23:34:00.0		admin	2004-06-12 23:34:01.996
	4.		LAB Discovery	TE Discovery	Single run at 2	004-06-12 15:35:00.0		admin	2004-06-12 15:34:54.268
N		Rov	wsperpage: <mark>10 .▼</mark>				IQ ()	Go to page: 1	of 1 💿 👂 🕅
L.	Â	rto R	tefresh: 🔽			Create 🔻	Detail	s Sched	ules Delete

For a detailed description of the window elements in the Tasks window, see *Cisco IP Solution Center Infrastructure Reference*, 4.0.

This page shows all collection and deployment tasks that have been executed. Note that a task could be scheduled to happen once or there could be several scheduled runs of a task. The schedule can be viewed by selecting a task and clicking **Schedules**.

### **Creating a TE Functional Audit Task**

For each tunnel in the SR, the TE Functional Audit task checks the LSP currently used on a router against the LSP stored in the repository:

- tunnel down—Ignore (do not check)
- tunnel up—Check the LSP used on the router against the one stored in the repository:

- If they are the same, the tunnel and the SR are both set to Functional.
- If they are different, both the tunnel and the SR are set to Broken.
- tunnel missing from router—SR left untouched. The tunnel state is set to Lost.

This task only performs functional audit on TE Primary or Backup SRs, which are not in one of the following states:

- Closed
- Requested
- Invalid
- Failed Deploy

For a detailed explanation of the various states, see *Cisco IP Solution Center Infrastructure Reference*, 4.0.

To create a TE Functional Audit task, use the following steps:

**Step 1** Navigate **Monitoring > Task Manager**.

Step 2 Click Audit > TE Functional Audit to open the Create Task window in Figure 9-6.

Figure 9-6 Create a TE Functional Audit Task

lame":	TE Func	tional	Audit 200	14-10-191	3:42:13.462			
уре:	TE Function	nal Aud	t					
escription:	Create	d on	2004-1	0-19 13	:42:13.4	62	A V	
e: * - Require	ed Field							
e: * - Require	ed Field							
e: * - Require	ed Field							
e: * - Requin	ed Field							
e: * - Require	ed Field							
e: * - Requir	ed Field							

For a detailed description of the window elements in the Create Task window, see *Cisco IP Solution Center Infrastructure Reference*, 4.0.

Step 3 Modify the Name or Description fields as desired and click Next.

The Task Service Requests window in Figure 9-7 appears.

Task Service Requests				
Show Services with Job ID	🗾 matchir	ng /*	of Type All	▼ Find
				Showing 0 of 0 records
# 🗖 Job ID State	Туре	Customer Name		VPN Name
Rows per page: 10 💌		I<	] 🔇 Go to page: 🛙	of 1 💿 🔉 🕅
			Ad	ld Delete
Step 1 of 3 -		< Back Ne	ext > Finist	n Cancel

### Figure 9-7 Task Service Requests

Step 4 Click Add to add a task service request. The Select Service Request(s) window in Figure 9-8 appears.

Figure 9-8 Select Service Request(s)

			Show Ser	vices with	Job ID		Matcł	ning <b>*</b> Find
								Showing 1 - 5 of 5 records
#		Job ID	State	Туре	Operation Type	Creator	Customer Name	Policy Name
1.		1	DEPLOYED	TE Tunnel	MODIFY	admin		
2.		2	DEPLOYED	TE Protection	MODIFY	admin		
з.		3	INVALID	MPLS	ADD	admin	customer1	SEVT-LESSON-PLS
4.	Γ	4	DEPLOYED	IPsec	ADD	admin	h	sil
5.		13	REQUESTED	TE Admission	MODIFY	admin		
	Ro	)ws p	ber page: 10	<b>•</b>			0	🗐 🗐 Go to page: 🚺 🛛 of 1 🙆 🕞 🕅
								Select Cancel

**Step 5** Select an SR using the **Select** button.

The Selected Service Request(s) window closes and the selected task(s) now appears in the Task Service Requests window. To add other SRs, repeat the procedure in Step 4 and Step 5.

**Step 6** In the Task Service Requests window, click **Next**. The Task Schedules window in Figure 9-9 appears.

Ta	sk Scl	nedules				
					Sho	wing 0 of 0 records
#		Schedule	Start Date and Time	End Date and Time	Max Runs	Max Instances
	Rows p	erpage: 10 💌		1∢<	Go to page: 1	of 1 💿 🕨 🅅
					Now Crea	te Delete
- Ste	p2of3-					
				< Back Next	.> Finish	Cancel

Figure 9-9 Task Schedules

**Step 7** Click **Now** to start the task immediately or **Create** to create a task schedule. The Task Schedule window in Figure 9-10 appears.

Figure 9-10 Task Schedule

Single run:	Now	C Once			
Periodic Run:	C Minute	C Hourly	C Daily	C Weekly	C Monthly
Periodic Run A Run Interval: Run Limits:	Attributes				
Start Date and	Time	10 000			
Time:	iber <u> </u>	44 <b>•</b> PM	-		
	lime (Default	t is unlimited	)		
End Date and 1					
End Date and I Date: Mon	th 💌	Day 🗾 Ye	ear 💌		
End Date and T Date: Mon Time: Hou	th 💌	Day 💌 Ye Min 💌 Al	ear 💌		

**Step 8** In the Task Schedule window, indicate when and how often to run the task.

Step 9 Click OK. The scheduled task should now appear in the Task Schedules table.



The default setting is to schedule a single TE Functional Audit task to take place immediately ("Now").

**Step 10** Click **Next**. The Task Schedule window now shows the new task in its list of created tasks as shown in Figure 9-11.

Tas	k Sc	hedules				
					Show	ving 1 - 1 of 1 record
#		Schedule	Start Date and Time	End Date and Time	Max Runs	Max Instances
1.		Single run at 2004-10-19 13:44:00.0	2004-10-19 13:44:00.0	not applicable	unlimited	unlimited
	Rows p	ber page: 10 💌		I4 <	] Go to page: 1	of 1 💿 🖓 🕅
					Now Crea	ate Delete
Stor	f ?					
- Stek	2013	•		< Back Nex	t> Finish	Cancel

Figure 9-11 Task Schedule with Scheduling Data

**Step 11** A summary of the scheduled task appears as shown in Figure 9-12.

Figure 9-12 TE Functional Audit Task Summary

Name	TE Functional Audit 2004-10-19 13:42:13.462
Description	Created on 2004-10-19 13:42:13:462
Service Job IDs	1
Schedules	Single run at 2004-10-19 13:44:00.0

Step 12 Click Finish. This adds the task to the list of created tasks in the Tasks window (Figure 9-5).

To view the task logs for the created tasks, see Viewing a Task Log, page 10-2.

### **Creating a TE Interface Performance Task**

This task calculates interface/tunnel bandwidth utilization using the Simple Network Management Protocol (SNMP).

Calculating utilization depends on how data is presented for the object you want to measure. Interface utilization is the primary measure used for network utilization. Because MIB-II variables are stored as counters, you must take two poll cycles and figure the difference between the two (hence, the delta used in the equation).

Three variables are required:

- task duration—how long the task will run (in secs)
- frequency—how frequent the data will be collected (in secs)
- interval—the distance between two poll cycles (in ms).

The following explains the variables used in the formulas:

- delta(ifInOctets)—the delta between two poll cycles of collecting the SNMP ifInOctets object, which represents the count of inbound octets of traffic
- delta(ifOutOctets)—the delta between two poll cycles of collecting the SNMP ifOutOctets object, which represents the count of outbound octets of traffic
- IfSpeed—the speed of the interface, as reported in the snmpifSpeed object.

A more accurate method is to measure the input utilization and output utilization separately, using the following formula:

delta(ifInOctets) x 8 x 100

Input utilization = -----

(number of seconds in delta) x ifSpeed

delta(ifOutOctets) x 8 x 100

Output utilization = -----

(number of seconds in delta) x ifSpeed

To create a TE Interface Performance task, use the following steps:

**Step 1** Navigate **Monitoring > Task Manager**.

**Step 2** Click **Create** to open the Create Task window in Figure 9-13.

Create Tasl	k	
Name <sup>*</sup> :	TE Interface Performance 2004-10-07 11:33:21.599	
Туре:	TE Interface Performance	
Description:	Created on 2004-10-07 11:33:21.599	
Note: * - Require	ed Field	
Step 1 of 2 -	< Back llext > Finish Cancel	122991

Figure 9-13 Create TE Interface Performance Task

For a detailed description of the window elements in the Create Task window, see *Cisco IP Solution Center Infrastructure Reference*, 4.0.

Step 3 Select TE Interface Performance in the drop-down list of the Type field.

The Select TE Provider window in Figure 9-14 appears.

Figure 9-14 Select TE Provider

			Show TE Providers with Name matching Find
			Showing 1 - 2 of 2 recon
#			Provider Name
1.	$\odot$	pad0	
2.	0	provider1	
	Rows	per page: 10 💌	🛛 🖓 🖓 Go to page: 🚺 🗾 of 1 🚾 👂

**Step 4** Click a radio button to select a TE provider.

**Step 5** Click Next. The TE Performance Collection window in Figure 9-15 appears.

Figure 9-15 TE Performance Collection

E Performance Collection		
Task Duration (sec) *:	1000	
Task Frequency (sec) *:	100	
Task Interval (msec) *:	10	
Targets		
		Showing 0 of 0 records
Device	Туре	Name
Rows per page: 10 💌		<] <p>  Go to page: 1 of 1</p>
		Add v Delete
Sten 2 of 4 -		TE Tunnel
- 316p 2 01 4 -	< Back	Ilext > TE Link Cancel

Step 6 Enter desired values in the Duration, Frequency, and Interval fields.

**Step 7** Use the **Add** button to select a tunnel or link on which to run the interface performance task:

- **TE Tunnel**—Add a TE tunnel. The Select Tunnel(s) window in Figure 9-16 appears.
- **TE Link**—Add a TE link. The Select Link(s) window in Figure 9-17 appears.

TE	TE Provider pad0									
Sh	Show Existing  Tunnels with All  Matching  Find									
	Showing 1 - 10 of 10 records									
#		Head	Dest	Tunnel Name	Tunnel ID	Deploy Status	Policy	Туре		
1.		isctmp1	isctmp2	isctmp1:Tunnel1	ISC- P16039	DEPLOYED	pm-none	Managed		
2.		isctmp1	isctmp6	isctmp1:Tunnel4	ISC- P7634	DEPLOYED	um1	UnManaged		
3.		isctmp1	isctmp6	isctmp1:Tunnel3	ISC- P7633	LOST	um1	UnManaged		
4.		isctmp2	isctmp1	isctmp2:Tunnel200	ISC- P7635	DEPLOYED	man1	Managed		
5.		isctmp2	isctmp5	isctmp2:Tunnel300	ISC- P7636	DEPLOYED	man1	Managed		
6.		isctmp4	isctmp7	isctmp4:Tunnel5	ISC- P16024	INVALID	pm-none	Managed		
7.		isctmp7	isctmp8	isctmp7:Tunnel2	ISC- P7637	DEPLOYED	ISC-P7637- isctmp7:Tunnel2	Managed		
8.		isctmp7	isctmp6	isctmp7:Tunnel11	ISC- P7639	DEPLOYED	ISC-P7637- isctmp7:Tunnel2	Managed		
9.		isctmp7	isctmp8	isctmp7:Tunnel12345	ISC- P7640	LOST	ISC-P7640- isctmp7:Tunnel12345	Managed		
10.		isctmp7	isctmp1	isctmp7:Tunnel3	ISC- P7638	DEPLOYED	man1	Managed		
	Row	s per pag	e: 10 💌	]		IK	] 🖉 Go to page: 🚺 🛛 o	f 1 💿 🕞 🕅		
							Select	Cancel		

Figure 9-16 Select Tunnel(s) - Interface Performance

Sho #		nks with: Device Name	e 💌 matching 🔭	Find								
#		From	S	howing 1-10 of 28 records								
#		From		Showing 1-10 of 28 records								
			Link	То								
1.		isctmp1	10.2.2.110<->10.2.2.97	isctmp7								
2.		isctmp2	10.2.2.193<->10.2.2.206	isctmp6								
З.		isctmpe2	10.2.3.14<->10.2.3.1	isctmp6								
4.		isctmp3	10.2.3.74<->10.2.3.73	isctmp9								
5.		isctmp3	10.2.3.70<->10.2.3.69	isctmp9								
6.		isctmp7	10.2.2.33<->10.2.2.46	isctmpe3								
7.		isctmp4	10.2.3.82<->10.2.3.81	isctmp9								
8.		isctmp8	10.2.2.238<->10.2.2.225	isctmp6								
9.		isctmp4	10.2.3.106<->10.2.3.105	isctmp3								
10.		isctmp5	10.2.2.81<->10.2.2.94	isctmp4								
F	Row	s per page: 10 💌	🛛 🗐 🖓 Go to page:	1 of 3 💿 🖓 🕅								
			[	Select Cancel								

Figure 9-17 Select Link(s)

- Step 8 Select one or more of tunnels and links and click Next.
- **Step 9** The Task Schedules window in Figure 9-18 appears.

Figure 9-18 Task Schedules



- Step 10 Click Now or Create to create a task schedule. When you select Create to customize the schedule, the Task Schedule window in Figure 9-19 appears (with Now, this step is skipped).

**Note** The default setting is to schedule a single TE Interface Performance task to take place immediately ("**Now**").

Figure 9-19 Task Schedule

ask Sched	ule				
Single run:		O Once			
Periodic Run:	C Minute	C Hourly	C Daily	C Weekly	C Monthly
Periodic Run A Run Interval: Run Limits:	ttributes				
Start Date and Date: July Time: 5 ▼	Time	14 🔹 2004 54 💌 PM	4 <b>-</b>		
End Date and T Date: Mont	ime (Default	t is unlimited Dav ▼ Ye	) ear 🔻		
Time: Hour		Min 💌 🗚	1		
				ОК	Cancel

**Step 11** In the Task Schedule window, make your selections to define when and how often to run the task.

Step 12 Click OK. The scheduled task should now appear in the Task Schedules table as shown in Figure 9-20.

as	k Sc	hedules				
					Show	ing 1 - 1 of 1 record
#	◄	Schedule	Start Date and Time	End Date and Time	Max Runs	Max Instances
1.	V	Single run at 2004-10- 07 11:54:00.0	2004-10-07 11:54:00.0	not applicable	unlimited	unlimited
	Rows	per page: 10 💌		IA 4	Go to page: 1	of 1 💿 🛛 🏹
					Now Crea	te Delete
Step	) 3 of 4	-		< Back   Heyt >	Einisb	Cancel
				DINNI HOAC		

Figure 9-20 Task Schedules with Scheduling Data

Step 13 Click Next. A summary of the scheduled task appears as shown in Figure 9-21.

Figure 9-21 Performance Task Summary

Name	TE Interface Performance 2004-10-07 11:33:21.599
Task Duration (sec)	1000
Task Frequency (sec)	100
Task Interval (msec)	10
Devices	isctmp2 isctmp2:Tunnel200 isctmp2 isctmp2:Tunnel300
Schedules	Single run at 2004-10-07 11:54:00.0



### Figure 9-22 Performance Task Summary

CIRCO SVETEME					Home   Shortcut	s I Account	I Index   Help   About   Logout	
	I	P S	Solution Center					
	Ľ	erv	ice Inventory Service L	Design Monito	oring Administration		User: admin	
🔷 Task Manager	•	Ping	<ul> <li>SLA </li> <li>TE Performance Rep</li> </ul>	oort 🔹				
You Are Here:   Monitoring  Task N	lana	iger -	Tasks				Customer: None	
	Тa	sks	3					
Selection • Tasks • Logs			Show Tasks with Ta	ask Name matching 🔭	of Type *		Find	
							Showing 1 - 4 of 4 records	
	#		Task Name	Туре	Schedule	Cr	reator Created on	
	1.		Deploy Primary SR-ID 4 2004-06-17 17:47:12.121	Service Deployment	Schedule TE Primary SR deployment	admin	n 2004-06-17 17:47:12.121	
	2.		Deploy Backup SR-ID 3 2004-06-17 17:45:00.724	Service Deployment	Schedule TE Backup SR deployment	admin	n 2004-06-17 n 17:45:00.724	
	3.		TE Disc - isotmp2	TE Discovery	Single run at 2004-06-12 23:34:00.0	admin	n 2004-06-12 23:34:01.996	
	4.		LAB Discovery	TE Discovery	Single run at 2004-06-12 15:35:00.0	admin	n 2004-06-12 n 15:34:54.268	
		Ro	ws per page: 10 💌			🛛 🗐 🗐 Go to	page: 1 of 1 <b>Go</b> ▷ ▷	
L	ς Υ	uto F	Refresh: 🔽		Create	Details	Schedules Delete	2683
								- 14

To view the TE Performance Report that is generated for TE Interface Performance task(s), see TE Performance Reports, page 10-4.

To view the task logs for the created tasks, see Viewing a Task Log, page 10-2.

# SR History, Config Audit Report, and Configlets

The history, config audit reports, and configlets associated with individual service requests can be viewed from the Service Requests window when you click the **Details** button.

The history of an SR is essentially a state change report. It lists the various states that elements associated with an SR has transitioned between and reports relevant details pertaining to these state changes.

Configlets for devices associated with SRs are in simple scrollable text format.

## Manage Lock

Whenever a task is performed that incurs a database update, which might affect the resource and hence the result of a tunnel computation, it locks the system before the update and releases it at completion of the update. If for some reason the lock is not released, other updates that require the lock are blocked.

The purpose of the lock feature is to prevent concurrent and mutually inconsistent planning activities from being committed to the database. Meaning, if each user takes the same snapshot of the the repository, performs computations, and tries to commit what he/she sees, the locking mechanism helps synchronize the commit and ensures that no commit invalidates other commits.

If the system is locked for prolonged periods of time, the administrator should check if anyone is performing long planning tasks and take note of, which process locked the system and report it. If the administrator is sure that no one is using the system, it can be unlocked by using the lock manager.

Each system lock is linked to a TE provider. To unlock the TE provider, use the following steps:

- Step 1Navigate Service Inventory > Inventory and Connection Manager > Traffic Engineering<br/>Management > TE Providers.
- **Step 2** The TE Providers window in Figure 2-3 appears.
- **Step 3** Select a TE provider that is locked by clicking the corresponding check box.
- Step 4 Click Manage Lock. The System Lock Management window in Figure 9-23 appears.

Figure 9-23 System Lock Management

Provider:	Provider1			
User:	admin			
Process:	TE Discover	y Task		
Timestamp:	Oct 1, 2003 1	0:05:44 AM		
Description:				
Lock Status:	Cocked	C Unlocked		
			Unlock	Close

The text fields in this window are read-only.

**Step 5** To unlock, click the **Unlock** button.

The System Lock Management window closes and the **System Lock Status** field in the TE Providers window is updated accordingly.