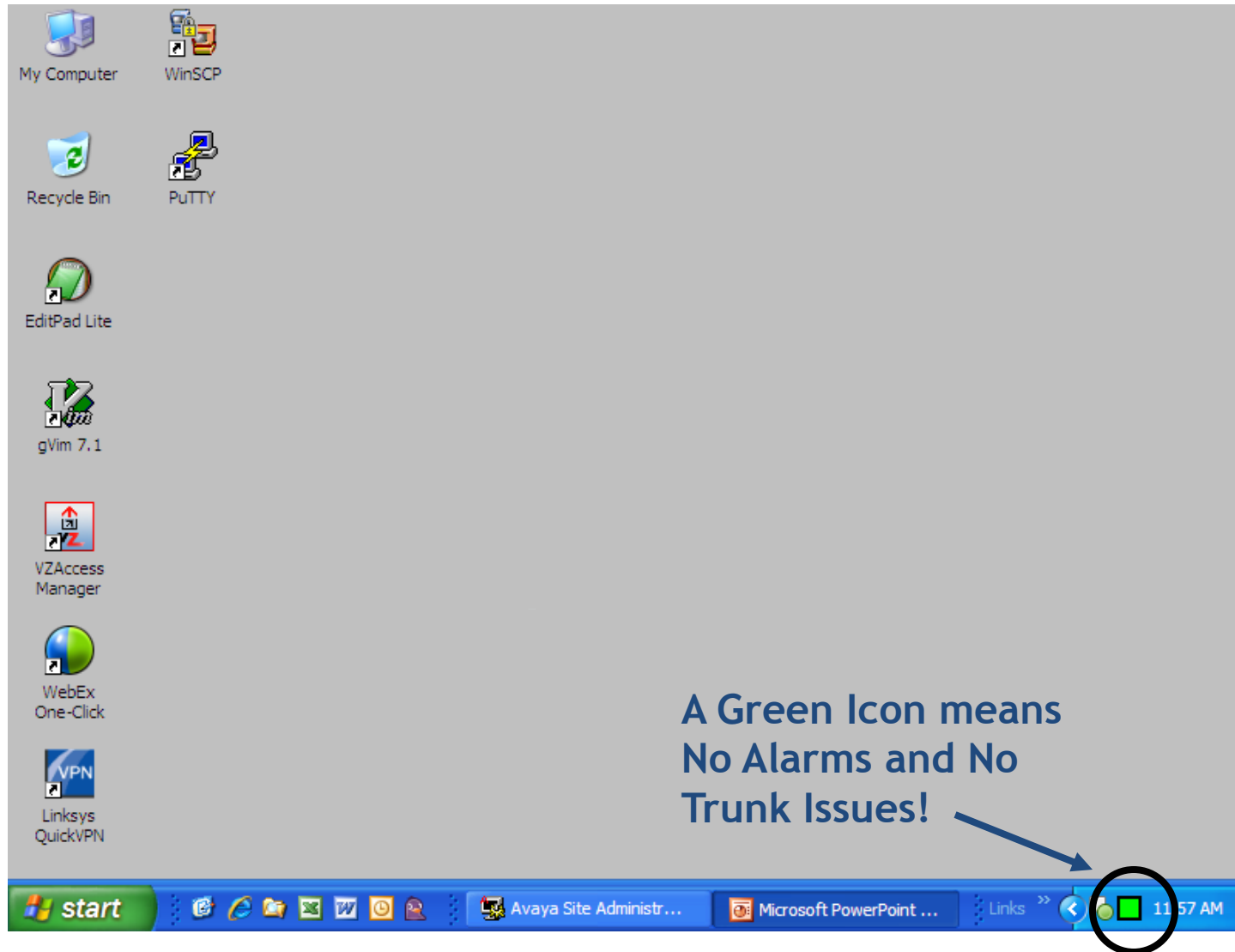


Trunk Dashboard

Real-Time Monitoring of Avaya Trunk Performance





My Computer

WinSCP

Recycle Bin

PuTTY

EditPad Lite

gVim 7.1

VZAccess Manager

WebEx One-Click

Linksys QuickVPN

start

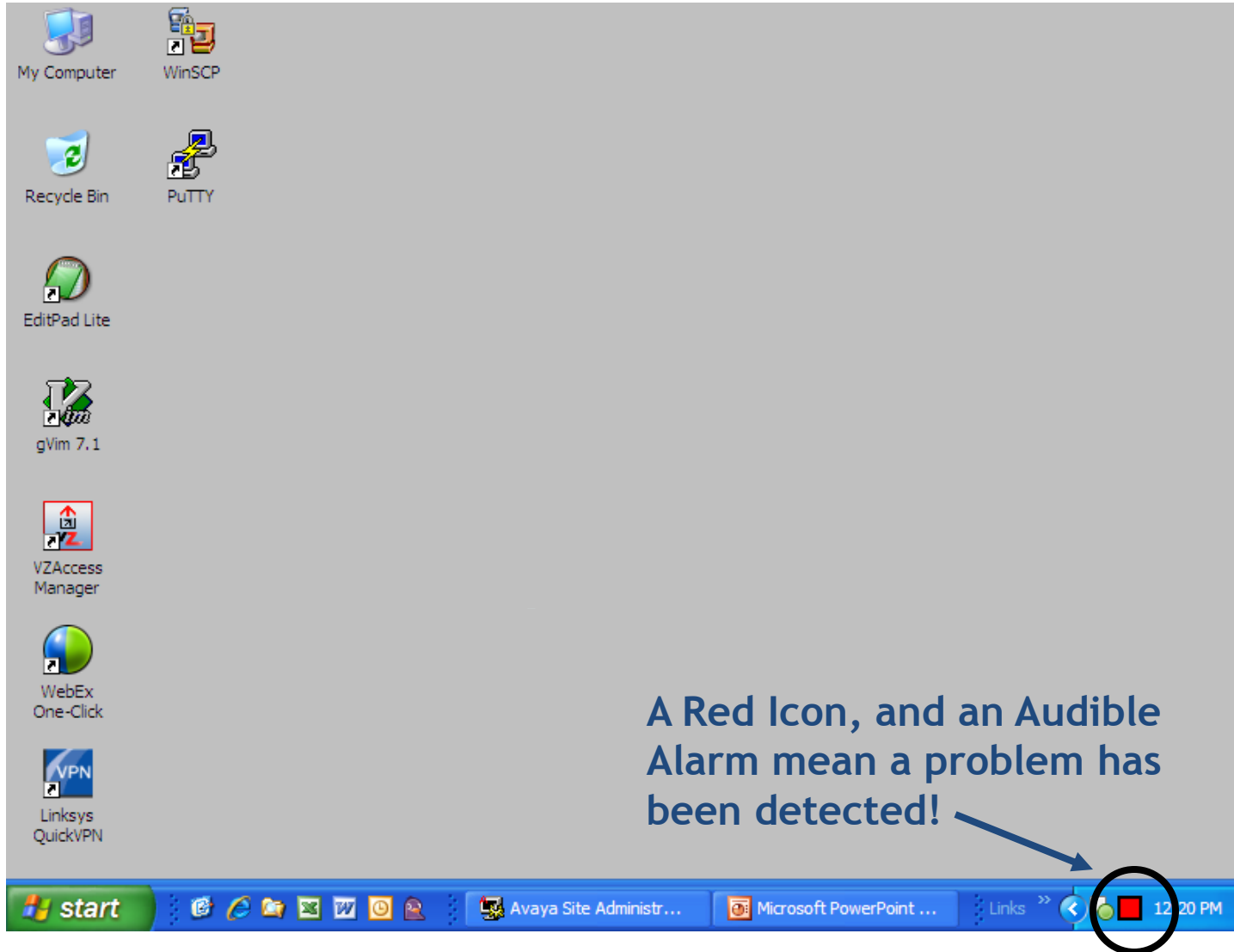
Avaya Site Administr...

Microsoft PowerPoint ...

Links >>

11:57 AM

A Green Icon means No Alarms and No Trunk Issues!



A screenshot of a Windows desktop environment. The desktop background is grey. On the left side, there is a vertical column of application icons: My Computer, WinSCP, Recycle Bin, PuTTY, EditPad Lite, gVim 7.1, VZAccess Manager, WebEx One-Click, and Linksys QuickVPN. At the bottom, there is a blue taskbar with the Start button on the left, several application icons in the middle, and the system tray on the right. The system tray contains a clock showing 12:20 PM and a red square icon. A blue arrow points from the text 'A Red Icon, and an Audible Alarm mean a problem has been detected!' to the red square icon. The red square icon is circled in black.

My Computer WinSCP

Recycle Bin PuTTY

EditPad Lite

gVim 7.1

VZAccess Manager

WebEx One-Click

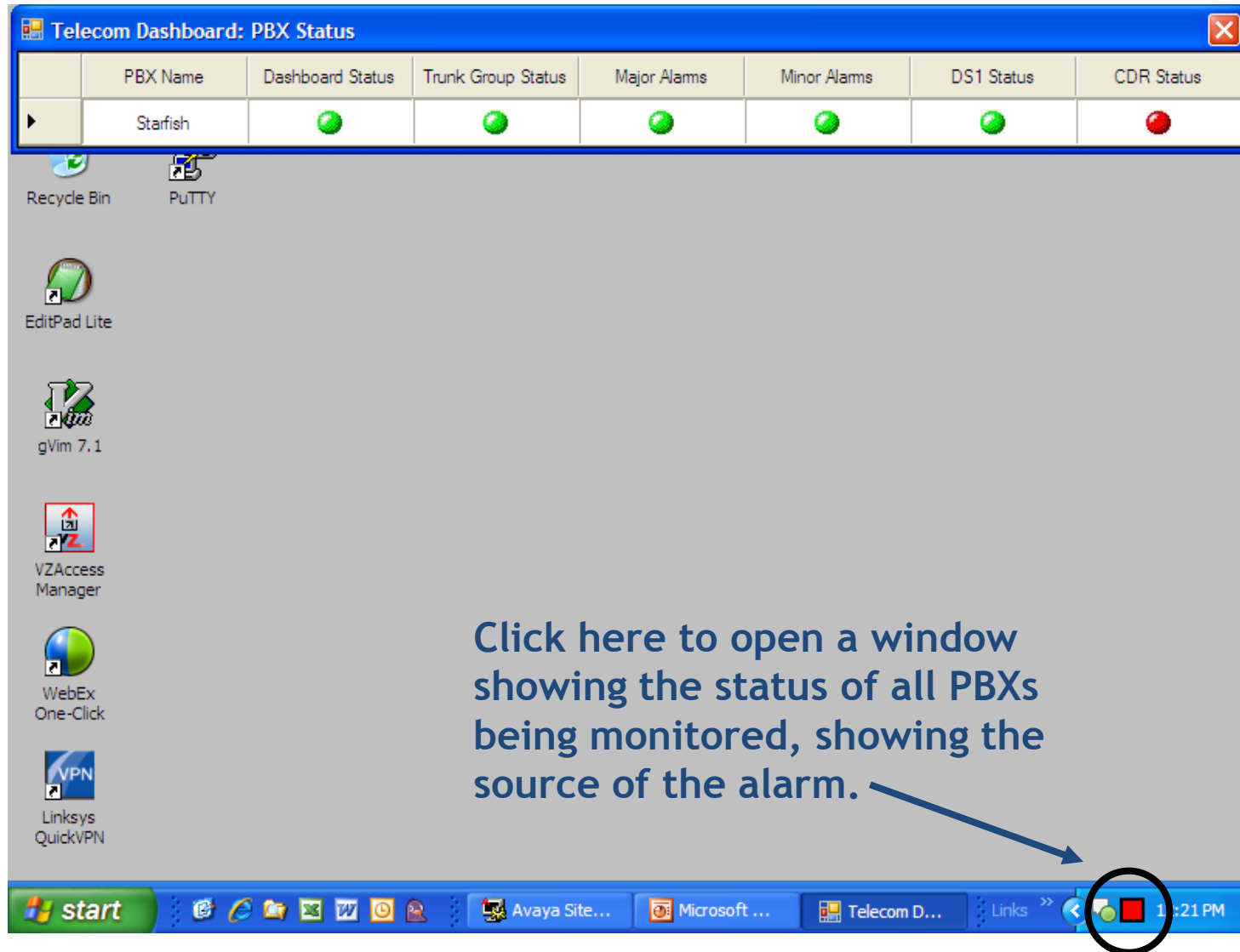
Linksys QuickVPN

start

Avaya Site Administr... Microsoft PowerPoint ... Links >>

12:20 PM

A Red Icon, and an Audible Alarm mean a problem has been detected!



Telecom Dashboard: PBX Status

	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish	●	●	●	●	●	●

Recycle Bin PuTTY

EditPad Lite

gVim 7.1

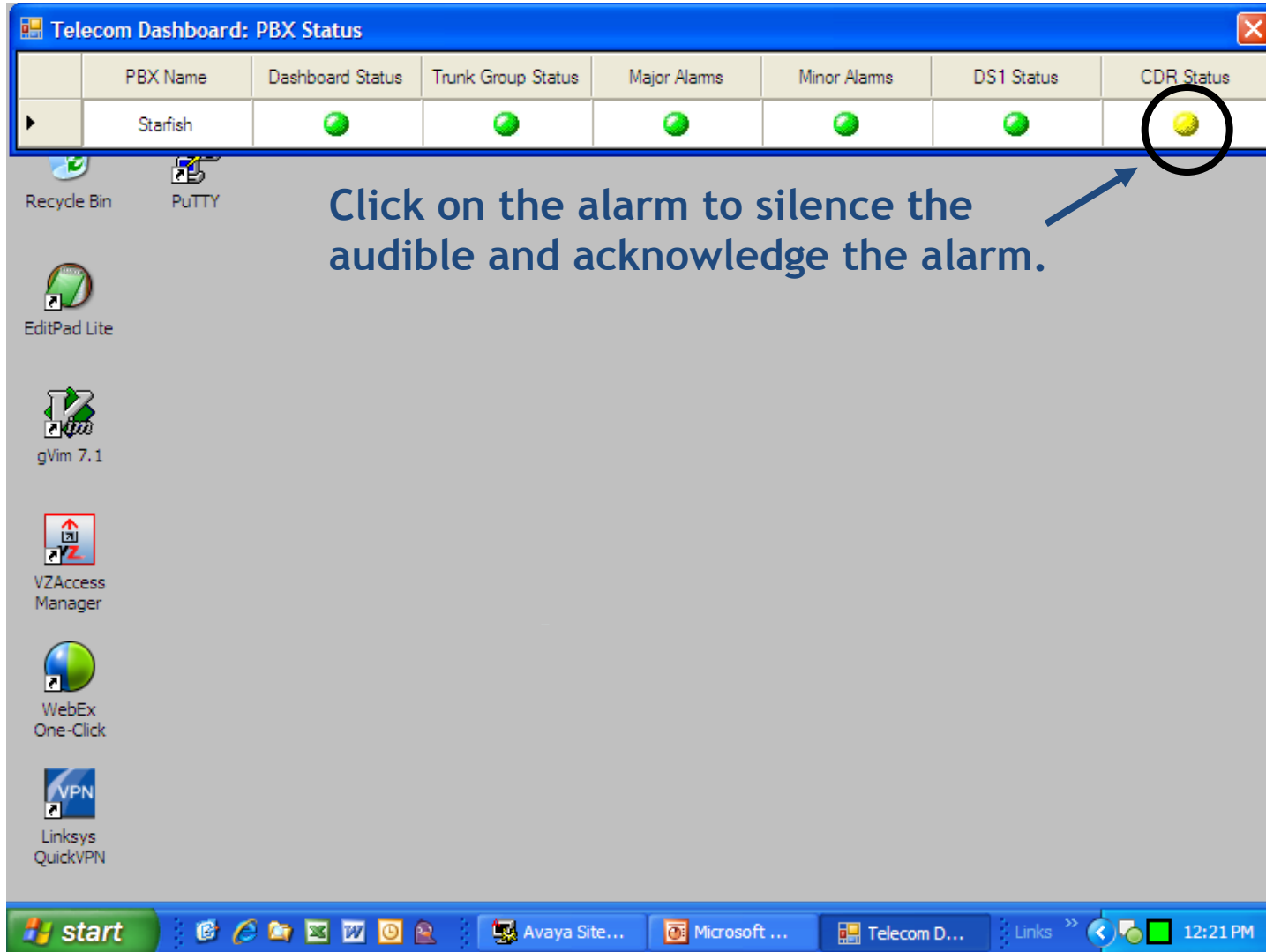
VZAccess Manager







WebEx One-Click

Linksys QuickVPN

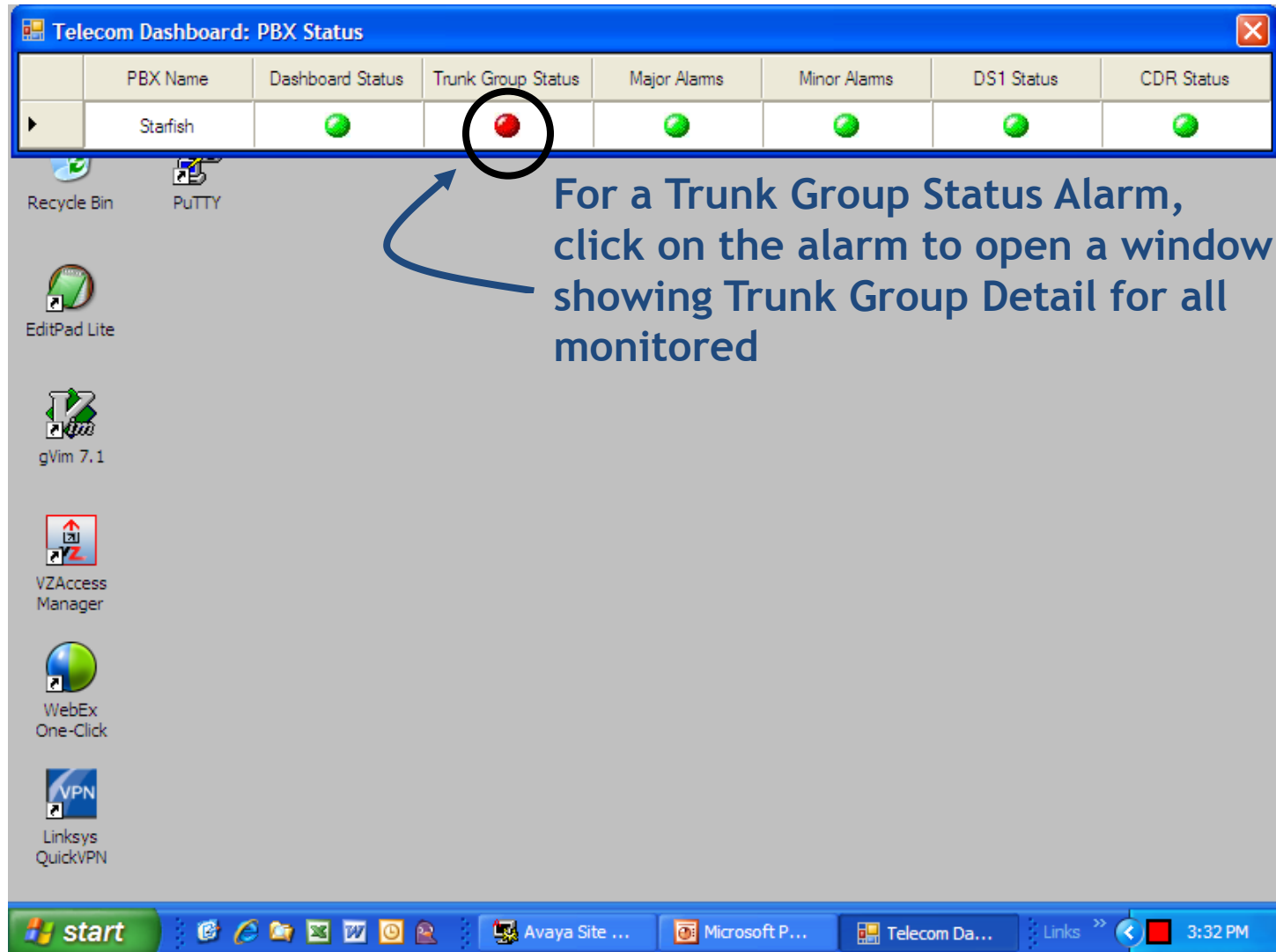
Click here to open a window showing the status of all PBXs being monitored, showing the source of the alarm.

start Avaya Site... Microsoft ... Telecom D... Links >> 1:21 PM



	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish						

Click on the alarm to silence the audible and acknowledge the alarm.



	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish	●	●	●	●	●	●

For a Trunk Group Status Alarm, click on the alarm to open a window showing Trunk Group Detail for all monitored

Recycle Bin

PuTTY

EditPad Lite

gVim 7.1

VZAccess Manager

WebEx One-Click

Linksys QuickVPN

start

Avaya Site ...

Microsoft P...

Telecom Da...

Links >>


3:32 PM

Telecom Dashboard: PBX Status
✕


	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish	●	●	●	●	●	●

Telecom Dashboard : Starfish TrunkGroup Measurements
✕


	TrunkGroup Name	TrunkGroup Number	Number Of Trunks	Out Of Service Trunk Count	Available Trunks	Percent All Trunk Busy	Current Utilization (%)	Average Available Trunks	Incoming Calls Last 10	Current Incoming Call Time	Incoming Abandoned Call Rate	Outgoing Calls Last 10 Mins	Current Outgoing Call Time	Dashboard Status
▶	Toolkit PRI 2	18	5	1	4	0	6	4.8	0	0	0	0	0	
	Toolkit_Main PRI	19	18	0	14	0	18.8	14.3	16	131.2	6.2	0	0	
	Toolkit IP	17	23	0	19	0	14.7	19.3	0	0	0	15	133.3	



VZAccess Manager



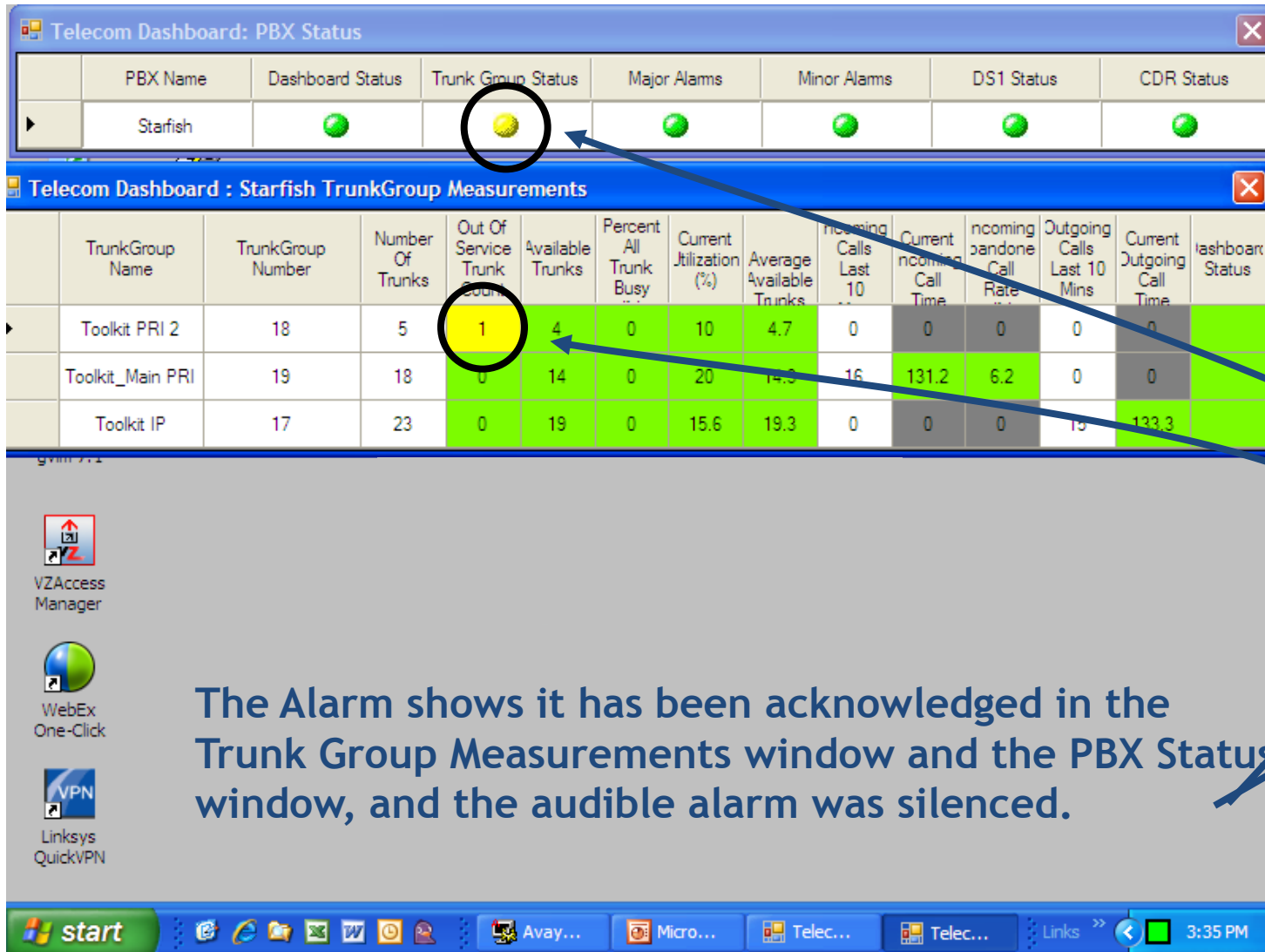
WebEx One-Click



Linksys QuickVPN

Click the specific alarm to silence the audible and acknowledge the alarm.

start
Avay...
Micro...
Telec...
Telec...
Links >>
3:33 PM



Telecom Dashboard: PBX Status

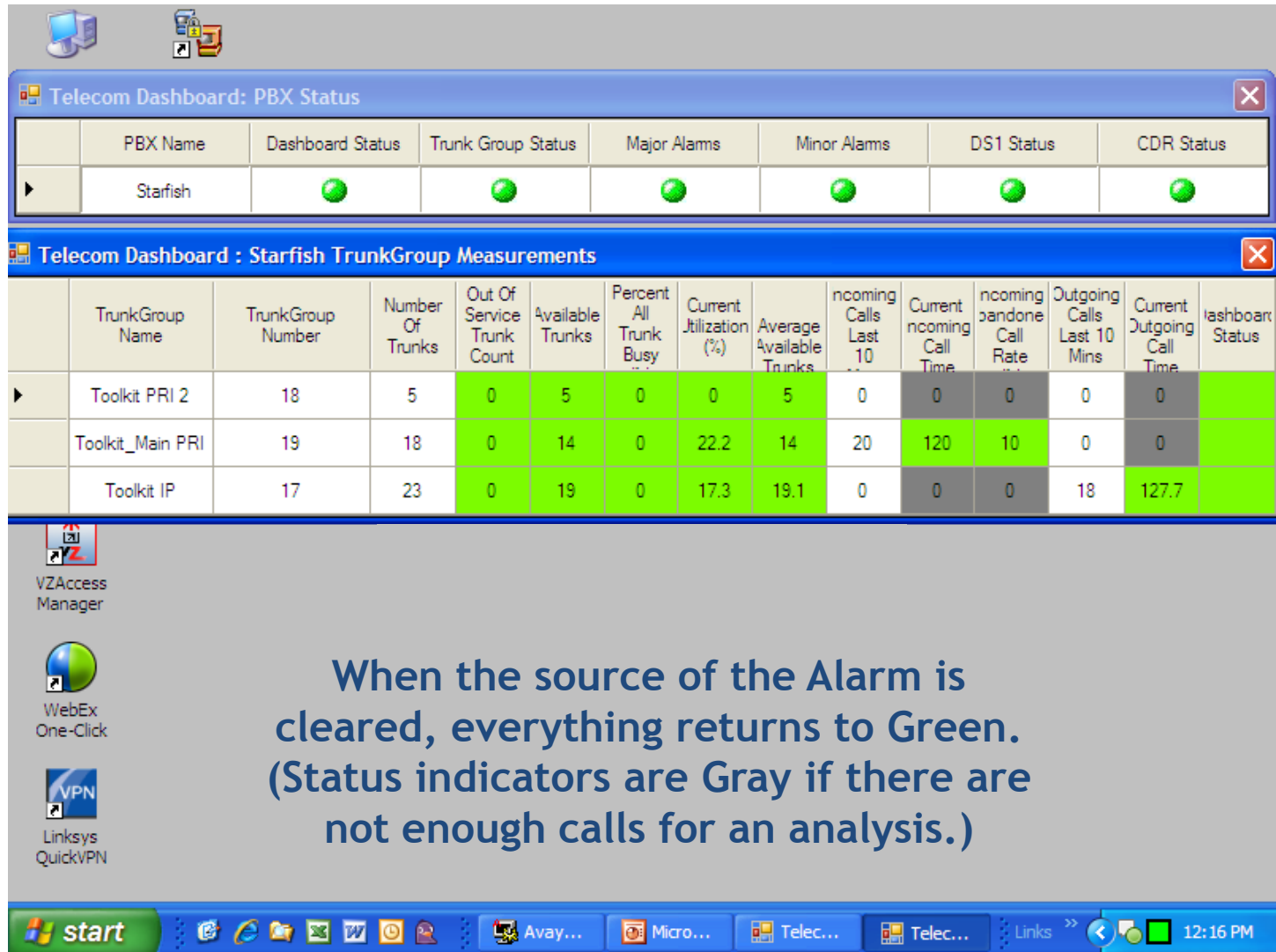
PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
Starfish						

Telecom Dashboard : Starfish TrunkGroup Measurements

TrunkGroup Name	TrunkGroup Number	Number Of Trunks	Out Of Service Trunk Count	Available Trunks	Percent All Trunk Busy	Current Utilization (%)	Average Available Trunks	Incoming Calls Last 10 Mins	Current Incoming Call Time	Incoming Abandoned Call Rate	Outgoing Calls Last 10 Mins	Current Outgoing Call Time	Dashboard Status
Toolkit PRI 2	18	5	1	4	0	10	4.7	0	0	0	0	0	
Toolkit_Main PRI	19	18	0	14	0	20	14.3	16	131.2	6.2	0	0	
Toolkit IP	17	23	0	19	0	15.6	19.3	0	0	0	15	133.3	

The Alarm shows it has been acknowledged in the Trunk Group Measurements window and the PBX Status window, and the audible alarm was silenced.

Taskbar: VZAccess Manager, WebEx One-Click, Linksys QuickVPN, Avay..., Micro..., Telec..., Telec..., Links, 3:35 PM



Telecom Dashboard: PBX Status

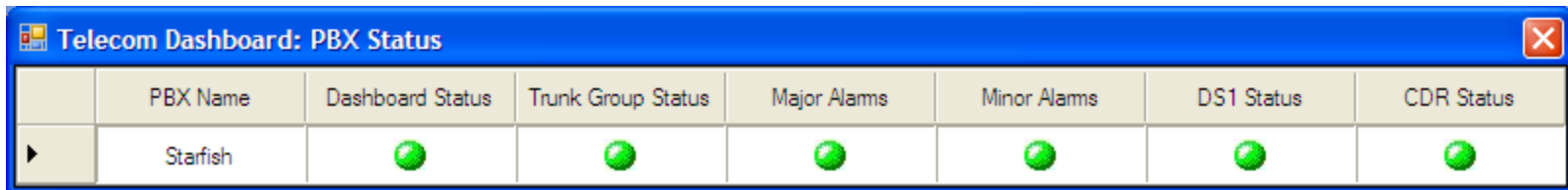
	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish	●	●	●	●	●	●







Telecom Dashboard : Starfish TrunkGroup Measurements

	TrunkGroup Name	TrunkGroup Number	Number Of Trunks	Out Of Service Trunk Count	Available Trunks	Percent All Trunk Busy	Current Utilization (%)	Average Available Trunks	Incoming Calls Last 10 Mins	Current Incoming Call Time	Incoming Abandoned Call Rate	Outgoing Calls Last 10 Mins	Current Outgoing Call Time	Dashboard Status
▶	Toolkit PRI 2	18	5	0	5	0	0	5	0	0	0	0	0	●
	Toolkit_Main PRI	19	18	0	14	0	22.2	14	20	120	10	0	0	●
	Toolkit IP	17	23	0	19	0	17.3	19.1	0	0	0	18	127.7	●

When the source of the Alarm is cleared, everything returns to Green. (Status indicators are Gray if there are not enough calls for an analysis.)

Windows Taskbar: start, Avay..., Micro..., Telec..., Telec..., Links, 12:16 PM



	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish						

Up-To-The-Minute Status

- There is one row for each PBX being monitored, up to 16.
- The Green Dashboard Status will assure you the Dashboard is analyzing real-time trunk and alarm data for the PBX.
- The Major and Minor Alarms, and the DS1 and CDR Status are all updated every 30 seconds. If there is a problem in any PBX, you will know it quickly.
- The Trunk Group Status will turn RED at the first sign of trouble on any Trunk Group in the PBX that the Dashboard is monitoring.

Telecom Dashboard : Starfish TrunkGroup Measurements														
	TrunkGroup Name	TrunkGroup Number	Number Of Trunks	Out Of Service Trunk Count	Available Trunks	Percent All Trunk Busy (%)	Current Utilization (%)	Average Available Trunks	Incoming Calls Last 10 Mins	Current Incoming Call Time	Incoming Abandoned Call Rate (%)	Outgoing Calls Last 10 Mins	Current Outgoing Call Time	Dashboard Status
▶	Toolkit PRI 2	18	5	0	5	0	4	4.5	0	0	0	0	0	
	Toolkit Main PRI	19	18	0	14	0	20.5	14.2	19	110.5	10.5	0	0	
	Toolkit IP	17	23	0	19	0	16.9	19.1	0	0	0	17	123.5	

Every 30 Seconds

- Basic Trunk Group Information is updated.
- Snapshot of Trunks Out Of Service, and Trunks available for calls.
- The percent of time all trunks were busy during the past hour.
- The percentage of trunks that were in use or busy over the last 5 minutes.
- The Average trunks that were available for calls over the last 10 minutes.
- The number of Incoming and Outgoing calls in the last 10 minutes.
- The average duration of calls ending in the last 10 minutes.
- The percent of incoming calls that were not answered in the last 10 minutes.

Telecom Dashboard: PBX Status							
	PBX Name	Dashboard Status	Trunk Group Status	Major Alarms	Minor Alarms	DS1 Status	CDR Status
▶	Starfish						

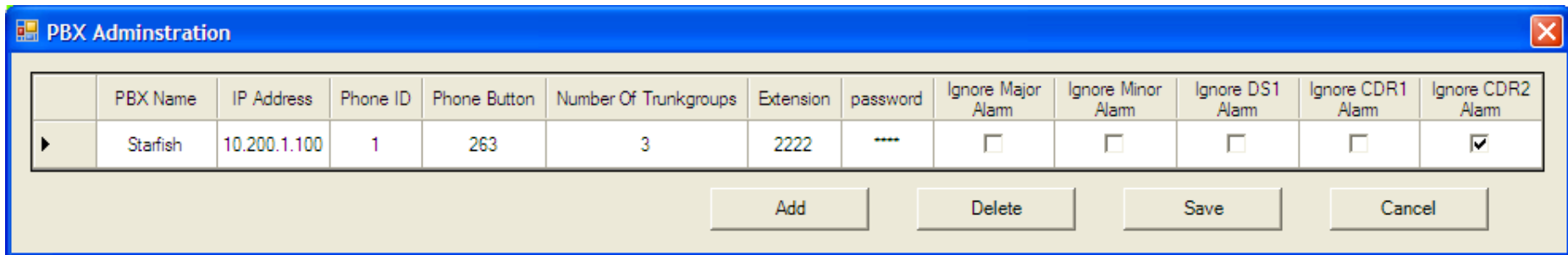
A Real Example

Noise on a T1 caused incoming callers to hang up before getting an answer. The callers redialed to try the call again, which had the same results.

- Incoming Abandoned Call Rate analysis saw the increase and raised the alarm.
- The Average Incoming Call holding time dropped, and the Current Utilization grew, but neither reached the alarm threshold.
- Incoming Calls Last 10 Minutes was significantly higher due to retries.

Telecom Dashboard : Starfish TrunkGroup Measurements														
	TrunkGroup Name	TrunkGroup Number	Number Of Trunks	Out Of Service Trunk Count	Available Trunks	Percent All Trunk Busy (%)	Current Utilization (%)	Average Available Trunks	Incoming Calls Last 10 Mins	Current Incoming Call Time	Incoming Abandoned Call Rate (%)	Outgoing Calls Last 10 Mins	Current Outgoing Call Time	Dashboard Status
▶	Toolkit PRI 2	18	5	0	5	0	2	4.9	0	0	0	0	0	
	Toolkit Main PRI	19	18	0	4	0	70	9.8	38	57.8	26.3	0	0	
	Toolkit IP	17	23	0	10	0	51.7	15	0	0	0	29	82.7	

PBX Administration Options



The screenshot shows a window titled "PBX Administration" with a table of PBX configurations. The table has 13 columns: PBX Name, IP Address, Phone ID, Phone Button, Number Of Trunkgroups, Extension, password, Ignore Major Alarm, Ignore Minor Alarm, Ignore DS1 Alarm, Ignore CDR1 Alarm, and Ignore CDR2 Alarm. There is one row of data for a PBX named "Starfish". Below the table are four buttons: Add, Delete, Save, and Cancel.

	PBX Name	IP Address	Phone ID	Phone Button	Number Of Trunkgroups	Extension	password	Ignore Major Alarm	Ignore Minor Alarm	Ignore DS1 Alarm	Ignore CDR1 Alarm	Ignore CDR2 Alarm
▶	Starfish	10.200.1.100	1	263	3	2222	****	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>


Buttons: Add, Delete, Save, Cancel

For each PBX, Check any alarm you do not wish to hear:

- Working on a new DS1? Ignore DS1 alarms until the work is complete.
- Only have one CDR link? Ignore CDR2 alarms on that PBX.

Trunk Group Configuration Options

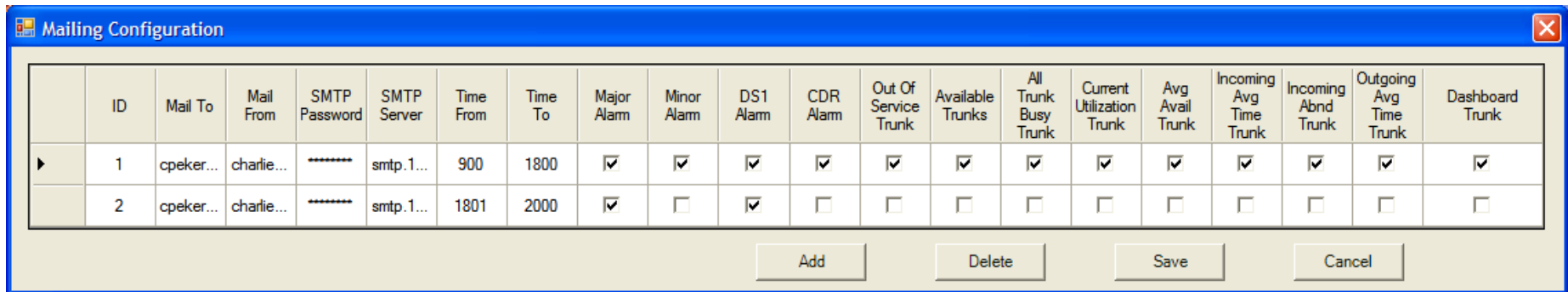
Starfish : TrunkGroup Configurations

	TrunkGroup Name	TrunkGroup Number	Trunkgroup Button	Max. All Trunk Busy (%)	Minimum Trunk Avail.	Minimum Avg. Trunk Avail.	Maximum Abandon Call Rate (%)	Minimum Avg. Call Time (Seconds)	Minimum Number Of Call to validate Alarm	Maximum Utilization (%)
	Toolkit PRI 2	18	268	0	0	1	20	30	5	95
	Toolkit Main PRI	19	269	0	1	3	20	30	5	95
	Toolkit IP	17	270	0	1	3	20	30	5	95

For each Trunk Group, set the threshold for each alarm:

- Set Alarms to complement each other. Minimum Trunks Available is for a single instant, while Average Trunks Available is over time.
- Not interested in a particular alarm for a Trunk Group? Set the threshold to never alarm. (Maximum All Trunks Busy = 100%, Minimum Trunks Available = 0, etc.)

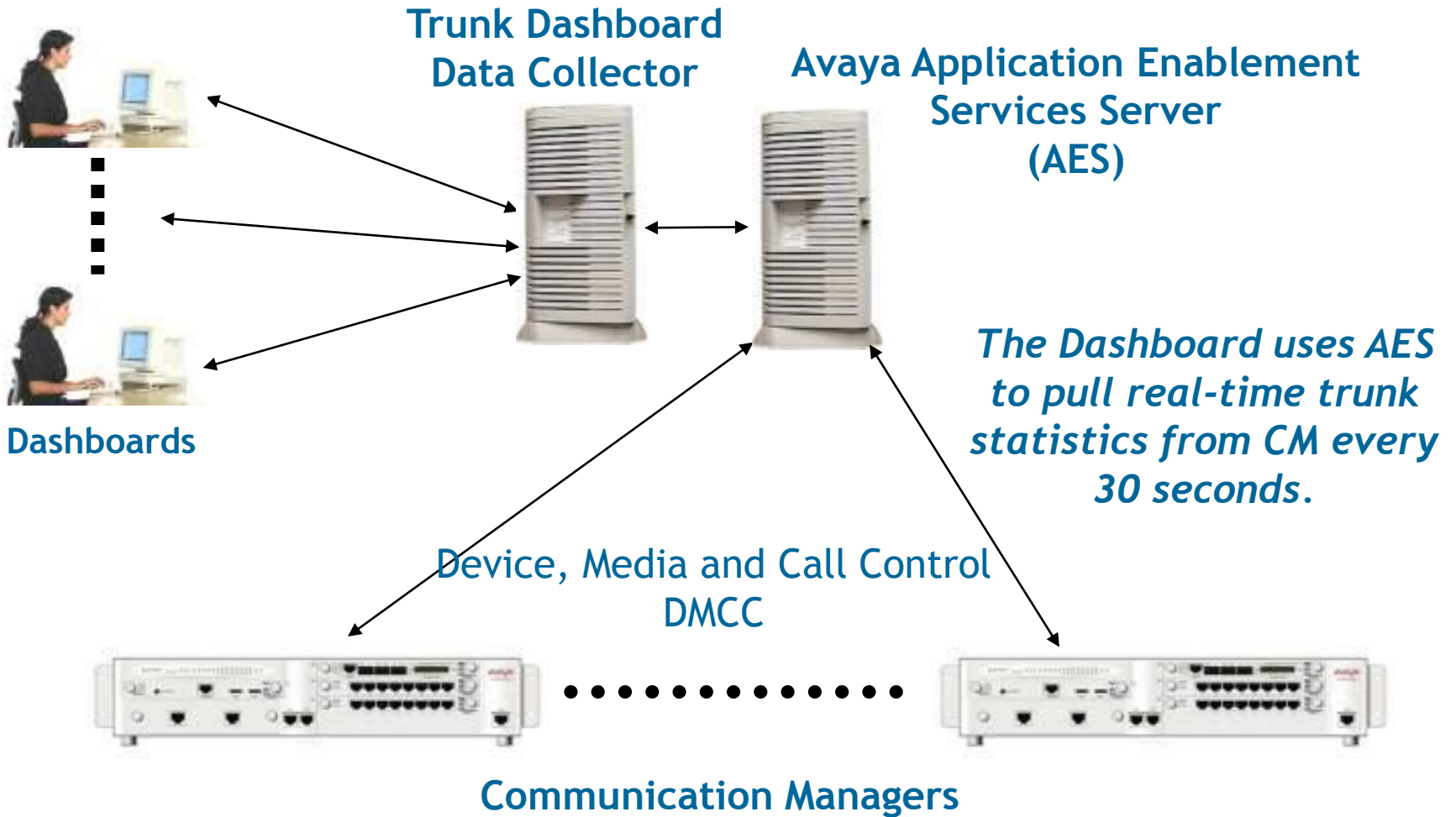
Email Configuration Options



	ID	Mail To	Mail From	SMTP Password	SMTP Server	Time From	Time To	Major Alarm	Minor Alarm	DS1 Alarm	CDR Alarm	Out Of Service Trunk	Available Trunks	All Trunk Busy Trunk	Current Utilization Trunk	Avg Avail Trunk	Incoming Avg Time Trunk	Incoming Abnd Trunk	Outgoing Avg Time Trunk	Dashboard Trunk	
▶	1	cpeker...	charlie...	*****	smtp.1...	900	1800	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	2	cpeker...	charlie...	*****	smtp.1...	1801	2000	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Configure who gets email for which alarms and when:

- Check off the alarms you want a email for, and the times you want those emails.
- Set multiple entries for an email address to be notified of all alarms during business hours and only critical alarms during the evening.
- The email will show the PBX name, the Trunk Group and the Alarm.



Reports

- Double-Click any Trunk Group Name for a menu to select a report.
- Select start and end date and time for report.
- Select the hours you wish to see.
- Select an individual report or a combination of all reports:
 - Hourly Calls (Total, Inbound, Outbound)
 - Hourly Maximum and Average Trunks in Use
 - Hourly Peak Trunks Out of Service
 - Hourly Shortest Average Call Times
 - Hourly Peak Abandoned Call Rates



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