HOW TO:

Distributed Report Processing

with **bt-LogAnalyzer**

Overview

Organizations with multiple sites are no longer required to utilize large amounts of expensive bandwidth in order to collect data from remote locations. Burstek's bt-LogAnalyzer is capable of providing your enterprise with an industry exclusive processing option that leverages the resources of remote sites to perform the complex data mining and report generation functions that your users demand.

Scenario

The Human Resources department of a Global manufacturing company has published a new Acceptable Use policy for the corporation. The CIO has been tasked with implementing this policy and providing the appropriate reporting to ensure compliance. The corporation has offices in five different countries with its corporate offices headquartered in New York. Each location has approximately one thousand users that access the internet via local firewalls.

Solution

The company's CIO employ's bt-LogAnalyzer in a Distributed configuration. In this setup, each site will process its own usage data at times designated by each sites requirement, for example, after all replenishment operations have been performed.

Once each remote site has completed its data logging and categorization, it waits until the report server in New York initiates the collection at which time it generates the reports and sends only the requested results thus eliminating high bandwidth utilization.

When the CIO arrives in the morning, he now has a daily report from each of his remote sites and is able to monitor compliance to the new Acceptable Use policy with minimal impact to his environment.
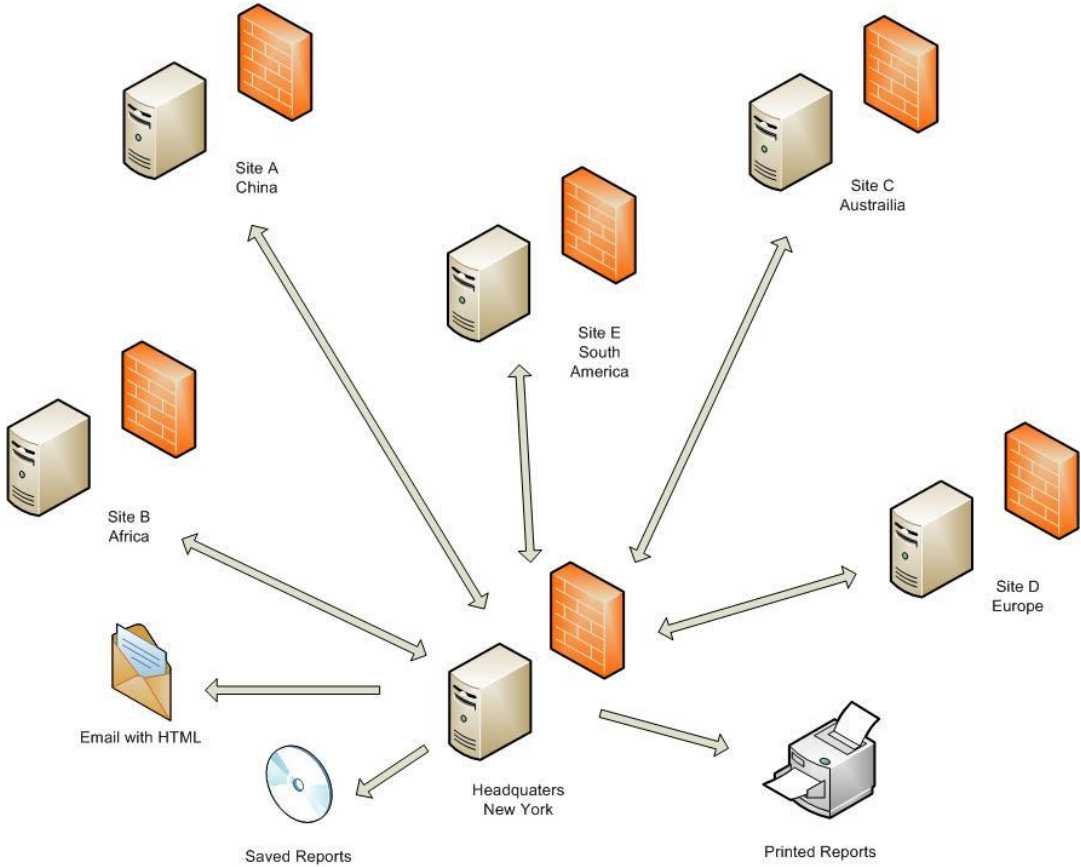
Figure 1 - bt-LogAnalyzer Distributed Report Processing

Installation

- bt-LogAnalyzer 7 needs to be installed on the Virtual Report Server <u>and</u> all Remote Report Servers (Quick Start Guide).
- Each server will need to have its own Log Source defined (Quick Start Guide).

Setting up the Distributed Report Processing feature

Prior to using the Distribute Report Processing feature, bt-LogAnalyzer 7 needs to be installed on the Virtual Report Server <u>and </u>on all the Remote servers. If you have not done so, please refer to the bt-LogAnalyzer 7 Quick Start Guide on your product download page. Each server will also need to have its Log Sources defined. Refer to bt-LogAnalyzer 7 Online-Help or Burstek's Online Help Desk for help in configuring your Log Sources.

Virtual Report Server Setup

- In the top, right-hand corner input the administrator password (default: 12345)
- Select 'Settings | Properties' from the drop-down menu (far right)
- Click the 'Distributed Reports' tab
- Select 'New Distributed Server' from the left navigation pane
- Enter the name of the Remote Report Server
- Click 'Ok'
- Repeat as necessary for multiple servers
- Select either 'Automatic replication' or 'Manual replication' for the URL Control List
- Click 'Ok'

Distributed Report Processing Setup

- Select 'Reports | Reports' from the drop-down menu
- Select the appropriate report from the list of reports or create your own new report (select 'New Report')
- Click the 'Properties' icon (far right, next to the red 'X')
- Click the 'Advanced' tab
- Check the box for 'Run this report at remote server(s)'
- Click 'Ok'
- Select 'Replicate Report Definitions' from the left navigation pane

NOTE: Replication does not affect the report's Log Sources.
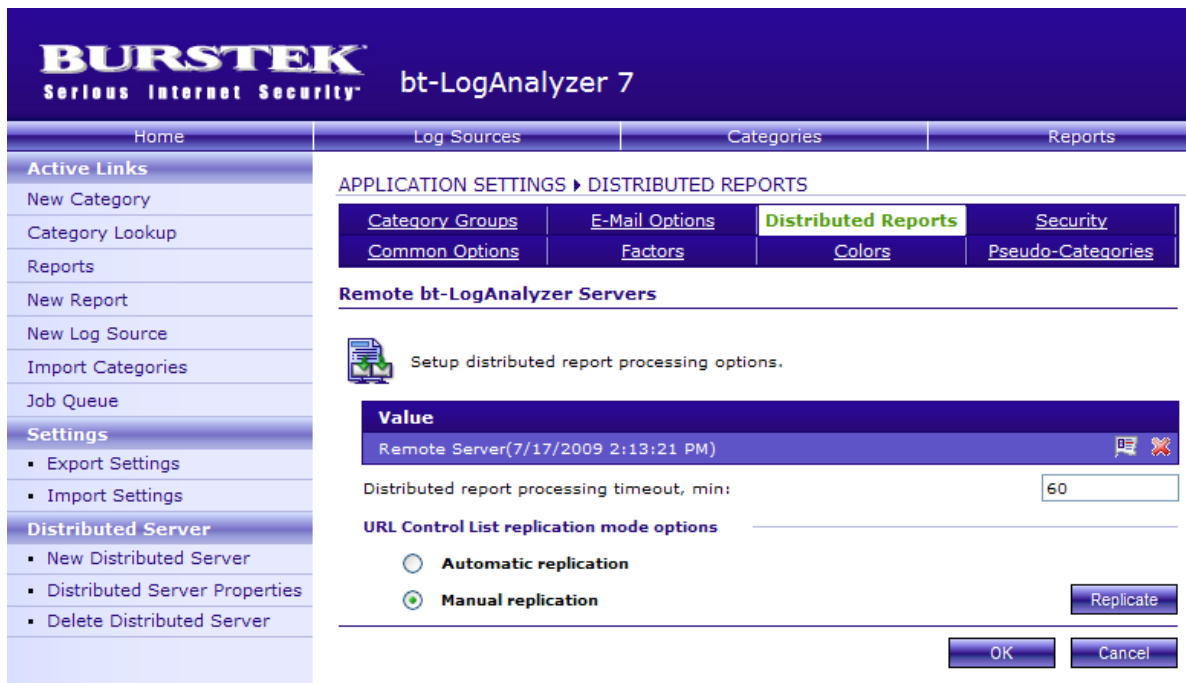
- Click 'Ok'
- Click 'Back'

Figure 2 - bt-LogAnalyzer Distributed Reports Interface

Generating a Distributed Report

There are three (3) ways to generate a Distributed Report

1. Automated Distributed Processing with Manual Generation start
2. Automated Distributed Processing with Scheduled Generation start
3. Manual Distributed Processing

Automated Distributed Processing with Manual Generation start

In this option, a report definition is created on the Virtual Report Server and 'pushed' out to the Remote Report Server then manually generated. The Virtual Report Server sends a 'start' command to the Remote Report Server(s). Each Remote Report Server automatically processes its logs and submits the results to the Virtual Report server. The Virtual Report Server will then combine the results into a single report

NOTE: The Virtual Report Server must be setup prior to these instructions.

1. Select the appropriate report from the list of reports or create your own new report (select 'New Report')
2. Click the 'Properties' icon (far right next to the red 'X'
3. Click the 'Advanced' tab
4. Check the box for 'Run this report at remote servers'

5. Click 'Ok'
6. Select 'Replicate Report Definitions' from the left navigation pane

NOTE: Replication does not affect the report's Log Sources

7. Click 'Ok'
8. Click the 'Start report generation' icon (green arrow, next to the Last Run Date on right)
9. Click 'Ok'

NOTE: The report status will remain at 99% until results from all Remote Report Servers are received.

Figure 3 - Enabling Remote Servers

Automated Distributed Processing with Scheduled Generation start

This option is similar to 'Automated Distributed Processing with Manual Generation' except that the report is initialized by the Virtual Report Server. Additional setup is required.

Following are the settings for the Virtual Report Server:

1. Select the appropriate report from the list of reports or create your own new report (select 'New Report')
2. Click the 'Properties' icon (far right next to the red 'X'
3. Click the 'Advanced' tab
4. Check the box for 'Run this report at remote servers'
5. Click the 'Customize' tab
6. Click the 'Edit' button for 'Date/Time'
7. Enter the desired selection criteria
8. Click 'Ok'
9. Click the 'Schedule' tab
10. Enter the schedule start time and frequency
11. Click 'Ok'
12. Select 'Replicate Report Definitions' from the left navigation pane

NOTE: Replication does not affect the report's Log Sources.

13. Click 'Ok'

NOTE: The report status will remain at 99% until results from all Remote Report Servers are received.

Manual Distributed Processing

1. This option allows the Virtual Report Server and the Remote Server(s) to process their 'tasks' at local times.
2. It does not require a report to be setup for Distributed processing.
3. Virtual Report Server does not connect to Remote Server(s). Instead, the Remote Server administrator processes their logs either manually or by schedule. The administrator then uploads the results to the Virtual Report Server.
4. Remote Server Administrators have the option to email results to the Virtual Report Server or to export the results in XML which can then be submitted to the Virtual Report Server for further processing.
5. Virtual Report Server Administrator is required to setup a Log Source for the 'XML Report Results' type (Log Files Format drop-down list).
6. Once the report results are uploaded from all the Remote Report Servers, the Virtual Report Server will process the aggregated report either manually or by schedule.

The following report snapshots are the results generated by the Remote server. (Fig. 4)

Number of Web Pages per Category

Type	Category Name	Web Pages	Percent	Users	Download Time	Viewing Time
	Computer/Internet	432	46%	6	26:54	1:48:00
	Search	154	16%	4	1:30	38:30
	Email	34	3%	1	3:38	8:30
	Government	28	3%	2	0:44	7:00
	General News	24	2%	1	0:15	6:00
	Business Services	18	1%	3	0:16	4:30

Figure 4 – Report Sample 1

The Virtual Report server combined its results and the Remote servers' results producing the following report. (Fig. 5)

Number of Web Pages per Category

Type	Category Name	Web Pages	Percent	Users	Download Time	Viewing Time	Kilo
	Computer/Internet	488	43%	7	34:31	1:21:20	
	Search	157	13%	4	1:50	26:10	
	Counting	69	6%	2	8:35	11:30	
	Availity	62	5%	2	8:13	10:20	
	Email	34	3%	1	3:38	5:40	
	Government	28	2%	2	0:44	4:40	
	General News	24	2%	1	0:15	4:00	
	Business Services	18	1%	3	0:16	3:00	
	Financial	15	1%	2	0:20	2:30	
	Intranet	11	<1%	1	0:32	1:50	

Figure 5 – Report Sample 2