



# Installation Guide

Version 6.X



**IMPACT**  
technologies

## **TRAFFIC ANALYST INSTALLATION GUIDE**

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# Overview

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This document contains sections on everything you need to know to install Traffic Analyst including estimated time of completion. It is organized into the following sections:

## ***Section 1: Switch Preparation***

Before you can poll, the switch may need to be prepared. Read the sections for those switch types you are interested in, and if necessary, take the actions required to get them ready.

The following table provides a list of the switch types supported by Traffic Analyst and the approximate time it takes to prepare them for polling.

Switch Type	Estimated Preparation Time
Unify OpenScape Voice	30 minutes
Unify HiPath 4000 Unify Openscape 4000	30 minutes
Cisco	30 minutes
Unify HiPath 3000/Siemens Hicom 150	30 minutes
Avaya – All Models	30 minutes

## ***Section 2: Software Installation***

This section takes you through installation of Traffic Analyst, which includes the Traffic Analyst Server and the Dashboard Component.

The following table provides the estimated time it takes to install the software.

PC Type	Estimated Preparation Time
Traffic Analyst Server and Dashboard Component	60 minutes

## ***Section 3: Installation of Additional Installation Components***

This section covers issues like FTP Servers and automatically starting Traffic Analyst. You may be able to skip all of these to Screenshots.

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## Section 1: Preparation

---

The preparation required for each type of switch is described in this section.

### 1.1. Server preparation for the Traffic Analyst Installer

- ☑ Make sure Internet Information Services (IIS) is installed on the Traffic Analyst server.
- ☑ Install Silverlight 5.X . The Utilities Folder has a copy you can install.
- ☑ Install C++ Runtime. The Utilities Folder has a copy you can install.
- ☑ Make sure Net Framework 4.6 or 4.7 is installed on the Traffic Analyst server. Should install with IIS

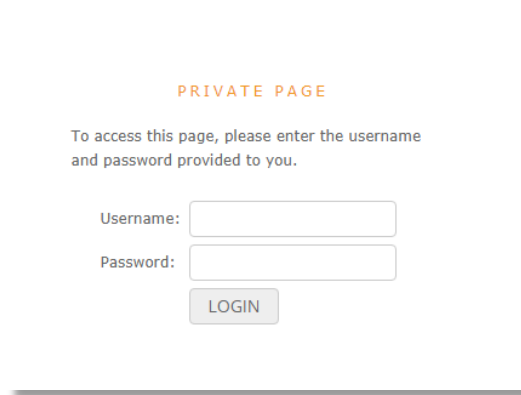
Refer to *Section 3: Installation of Additional Installation Components* for instructions

### 1.2. Downloading Traffic Analyst software from Web Page

<https://www.impacttech.com/support/customer>

Login as customer

Password request from Impact Technologies Support team



PRIVATE PAGE

To access this page, please enter the username and password provided to you.

Username:

Password:

After you have logged in the download page will display with the files available for downloading. Select the following files.

You will need to download all 3 of the files:

- TA-DLL
- Utilities.zip
- Current Load set TA65Bx-xxxxxxx

## CUSTOMER DOWNLOAD

---

Click on the file(s) below and download.

File	Date
<b>Traffic Analyst Load Set</b>	
<a href="#">TA-DLL</a>	3/13/18
<a href="#">Utilities.zip</a>	9/13/2016
<a href="#">TA65B3-20200602</a>	06/02/2020

## 1.3. Unify HiPath 4000

### 1.3.1. Pre-Installation Notes

- For the Unify HiPath 4000, Traffic Analyst will pull CDR data from the Unix-side or Linux-side of the switch. The software will configure the HiPath for data collection. For a list of AMO that will be configured please contact Impact Technologies Helpdesk. Data collection and switch configuration uses a TCP/IP connection. This must be allowed on both the server and from the HiPath 4000.
  - SFTP or FTP support for Cisco CUCM
  - SFTP or FTP supported for Openscape Voice
  - FTP required for HiPath 4000 V 1.0 – 4.0
  - Telnet required for HiPath 4000 V 1.0 – 4.0
  - SSH required for HiPath 4000 V 4.4 – 8.0
  - SFTP required for HiPath 4000 V 4.4 – 8.X
- Go to Section 2 titled “*Traffic Analyst Software Instructions*”. To use this setup you will need the following:
  - Access to a PC that is on the same network as the switch
  - Switch IP Address
  - Switch engr Password required
  - Browser (Microsoft Internet Explorer) on the PC

## 1.4. CISCO CUCM

### 1.4.1. Pre-Installation Notes

For a Cisco Unified Communications Manager switch, you need to make sure the switch is properly configured to prepare CDR data for Traffic Analyst. This involves configuring the **Cisco Communication Manager Administration**, as well as the **Cisco CDR Repository Manager**.

### 1.4.2. Cisco Communication Manager Administration

Configure these CDR parameters on the Enterprise Parameters Configuration window in Cisco Communications Manager Administration.

Access to **Enterprise Parameters Configuration** window  
Open **Cisco Unified Communications Manager** and choose **System > Enterprise Parameters**.

### 1.4.3. CDR Parameters

#### 1.4.3.1. CDR File Time Interval - Recommendation setting is 5

This parameter specifies the time interval for collecting CDR data. For example, if this value is set to 5, each file will contain 5 minute of CDR data (CDRs and CMRs, if enabled). The CDR database will not receive the data in each file until the interval has expired, so consider how quickly you want access to the CDR data when you decide what interval to set for this parameter. For example, setting this parameter to 60 means that each file will contain 60 minutes of data, but that data will not be available until the 60-minute period elapses, and the records are written to the CDR database. The default value specifies 1. The minimum value specifies 1, and the maximum value specifies 1440. The unit of measure for this required field represents a minute. You can set the parameter time interval to collect CDR data at any time you want. The newly set value comes into effect after generating the last flat file with the previous parameter value. You need not restart the Cisco Call Manager Service to generate flat files with the new value. In case the Cisco Call Manager Service restarts on a specific system, the flat file that is in the progress state is written successfully, irrespective of the existing interval. When the Cisco Call Manager Service resumes, it will use the newly set value to generate flat files.

#### 1.4.3.2. Cluster ID – If only 1 Cluster can leave at default

This parameter provides a unique identifier for the server or cluster. Because the parameter gets used in CDRs, collections of CDRs from multiple clusters can be traced to the sources. The default value specifies StandAloneCluster.

The maximum length comprises 50 characters and provides a valid cluster ID that comprises any of the following characters: A-Z, a-z, 0-9, . -.

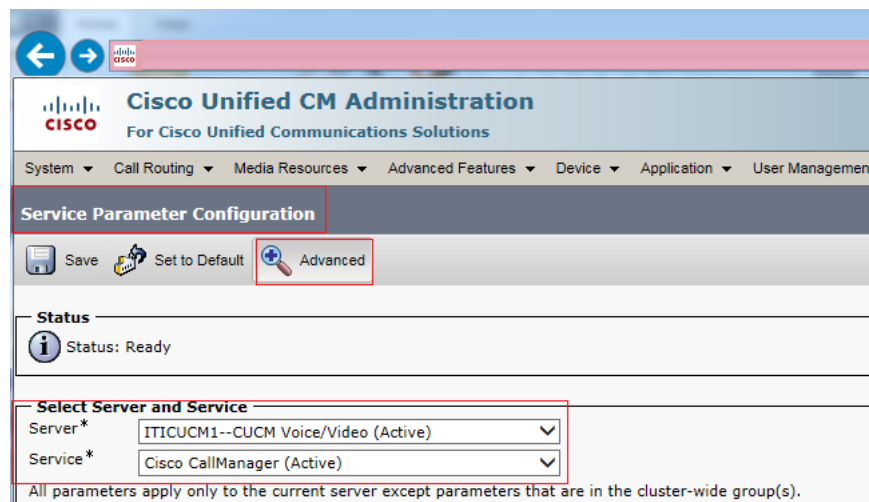
#### 1.4.4. CDR Service Parameters

Traffic Analyst relies on the data in both the CDR and CMR records. Traffic Analyst requires CDR records be available in flat files. To ensure the CDR records are generated you must enable certain Cisco Unified Communications Manager service parameters:

You configure these parameters on the **Service Parameters Configuration** window in Cisco Unified CM Administration.

To access the Service Parameters Configuration window, **open Cisco Unified CM Administration and choose System > Service Parameters.**

Choose the **Advanced button** to display the complete list of Service Parameters. The following list of service parameters can affect CDR/CMR records:





#### 1.4.4.1. System Parameters

- **CDR Enabled Flag - Recommend setting to True**

This parameter determines whether CDRs are generated. Valid values specify True (CDRs are generated) or False (CDRs are not generated). For this required field, the default value specifies False. Enable this parameter on all servers.

- **CDR Log Calls with Zero Duration Flag - Recommend setting to True**

This parameter enables or disables the logging of CDRs for calls which were never connected or which lasted less than 1 second. Cisco Unified Communications Manager logs unsuccessful calls (calls that result in reorder, such as might occur because of a forwarding directive failure or calls that attempt to go through a busy trunk) regardless of this flag setting. This represents a required field. The default value specifies False.

#### 1.4.4.2. Clusterwide Parameters (Device - General)

- **Call Diagnostics Enabled – Set to - Enabled Regardless of CDR Enabled Flag -**

This parameter determines whether the system generates call management records (CMRs), also called diagnostic records. Valid values specify Disabled (do not generate CMRs), Enabled Only When CDR Enabled Flag is True (generate CMRs only when the CDR Enabled Flag service parameter is set to True), or Enabled Regardless of CDR Enabled Flag (generates CMRs without regard to the setting in the CDR Enabled Flag service parameter). This represents a required field. The default value specifies Disabled.

- **Show Line Group Member DN in finalCalledPartyNumber CDR Field – Set as True**

This parameter determines whether the finalCalledPartyNumber field in CDRs shows the directory number (DN) of the line group member who answered the call or the hunt pilot DN. Valid values specify True (the finalCalledPartyNumber in CDRs will show the DN of the phone that answered the call) or False (the finalCalledPartyNumber in CDRs will show the hunt pilot DN). This parameter applies only to basic calls that are routed through a hunt list without feature interaction such as transfer, conference, call park, and so on. This parameter does not apply to Cisco Unified Communications Manager Attendant Console. The default value for this required field specifies False.

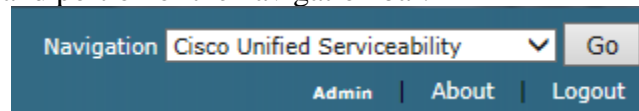
- **Display FAC in CDR - Recommend setting to True** - This parameter determines whether the Forced Authorization Code (FAC) that is associated with the call displays in the CDR. Valid values specify True (display authorization code in CDRs) or False (do not display authorization code in CDRs) for this required field. The default value specifies False.

- **Add Incoming Number Prefix to CDR - Recommend setting as Enable** - This parameter determines whether Cisco Unified Communications Manager adds the incoming prefix (as specified in the National Number Prefix, International Number Prefix, Subscriber Number Prefix, and Unknown Number Prefix service parameters) to the calling party number in the CDRs for that call. If the prefix is applied on the inbound side of the call, it

always will be added to the calling party number in the CDRs for that call, even if this parameter is set to False. If the prefix is applied on the outbound side, the prefix will be added to the calling party number in the CDR(s) for that call, only if this parameter is set to True. If the destination of the call is a gateway, Cisco Unified Communications Manager will not add the prefix to the CDRs even if this parameter is enabled. This parameter applies cluster wide. The default value for this required field specifies False.

### 1.4.5. Cisco CDR Repository Manager

Access the Cisco Unified Serviceability function via the pulldown menu on the right-hand portion of the navigation bar.



1. Choose **Tools > CDR Management**.
2. The **General Parameters** can be left at their default values.
3. Set the amount of disk space to allocate to call detail record (CDR) and call management record (CMR) files.
4. Configure the high-water mark (HWM) and low water mark (LWM).
5. Configure the number of days to preserve CDR/CMR files before deletion.
6. Disable CDR/CMR files deletion based on the HWM.
7. Under the Billing Application Server Parameters, click on the Add New button to add a new Billing Application Server.
8. Enter or modify all the parameters for the FTP server to which you want the CDR files sent:
  - 8.1. Host Name/ IP Address
  - 8.2. User Name / Password
  - 8.3. Protocol = SFTP
  - 8.4. Directory Path
9. When you click on Add it will try and make the connection

The CDR Repository Manager sends CDR files to up to three preconfigured destinations (billing servers) using FTP/SFTP. It also maintains files on disk to make sure the storage usage does not exceed predefined limits. If you exceed the predefined limits, the CDR Repository Manager deletes old files to reduce the disk usage to the preconfigured low mark. Files get preserved for a certain number of days based on configuration. Files that are old enough to fall outside of the preservation window get automatically deleted.

### 1.4.6. Cisco Application User Permission

Username and password are required as part of the Traffic Analyst configuration data collection requirements. Traffic Analyst requires access to the CUCM “Administrative XML Layer” (AXL) API, which is SOAP API based. Traffic Analyst only uses the

“executeSQLQuery” command, so it does not have the ability to modify data on the switch.

Below are the CUCM permissions required by the Traffic Analyst application user.

**Permissions Information**

Groups

AXL DB ACCESS  
Standard CCM Admin Users  
Standard CCM End Users  
Standard CCM Read Only  
Standard Packet Sniffer Users

▲

☰

▼

[View Details](#)

Add to User Group

Remove from User Group

Roles

AXL DB ACCESS  
Standard AXL API Access  
Standard CCM Admin Users  
Standard CCM End Users  
Standard CCMADMIN Read Only

▲

☰

▼

[View Details](#)

**Permissions Information**

Groups

Standard CCM End Users  
Standard CCM Read Only  
Standard Packet Sniffer Users  
Standard RealtimeAndTraceCollection  
Standard TabSync User

▲

☰

▼

[View Details](#)

Add to User Group

Remove from User Group

Roles

AXL DB ACCESS  
Standard AXL API Access  
Standard CCM Admin Users  
Standard CCM End Users  
Standard CCMADMIN Read Only

▲

☰

▼

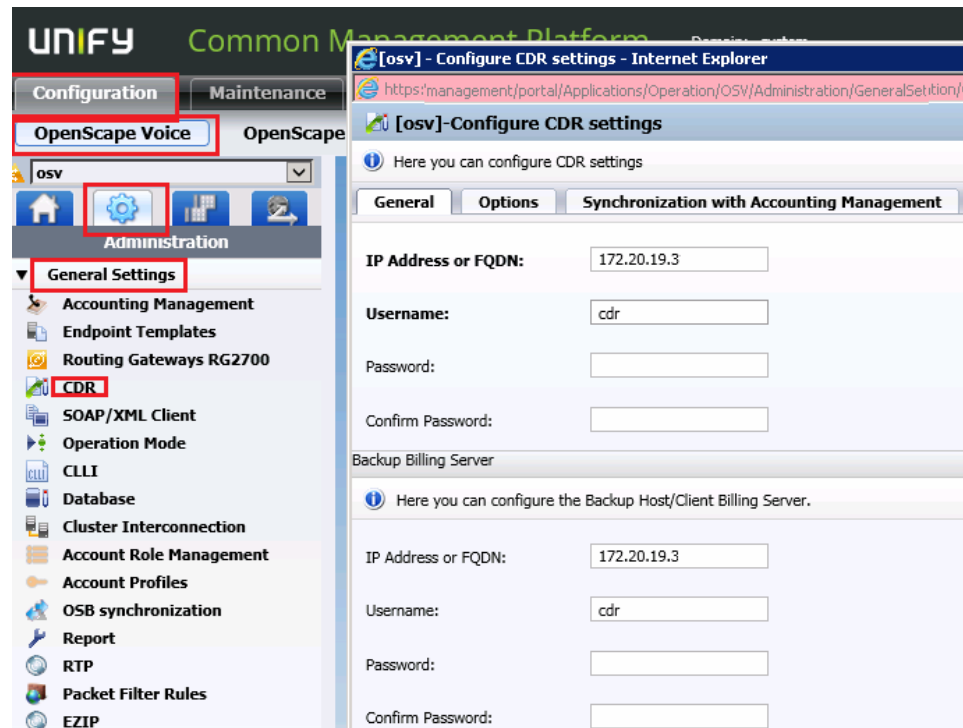
[View Details](#)

## 1.5. Unify Openscape

### 1.5.1. Pre-Installation Notes

For an OpenScape Voice switch, you may need to configure the switch to prepare CDR data for Traffic Analyst. This is the case if you have more than one OpenScape Voice switch, or if your OpenScape Voice switch is networked with a HiPath 4000 switch.

In Common Management Portal. Log in as “Administrator”. Once you access the software, go to the Configuration then click on the OpenScape Voice tab.



Next, select the “Administration” option under the OpenScope Voice tab.

This is Gear Icon

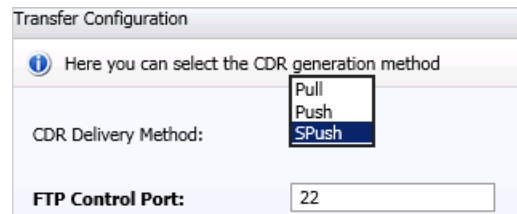
Click on the arrow for “General Settings” option from the list of the left. (If you have more than one OpenScope Voice switch, choose the appropriate switch and repeat the following steps for each of the OpenScope Voice.)

Click on ‘CDR’.

You will see a Configure CDR settings window display.

On the Configure CDR settings window, select “Pull” if the billing Files are to reside on the OSV server, as the “CDR Delivery Method”.

If you need to “Push” the Billing Files to a FTP server then select “PUSH” and enter the IP address where they will be pushed to and the directory they will be written to, as the “CDR Delivery Method”. You will select SPush for an SFTP connection using port 22.



**[osv]-Configure CDR settings**

Here you can configure CDR settings

**General** Options Synchronization with Accounting Ma

**Transfer Configuration**

Here you can select the CDR generation method

CDR Delivery Method: SPush

**FTP Control Port:** 22

**PISN ID:** 27 7 20

**Generate PISN ID**

**Primary Billing Server**

Here you can configure the Primary Host/Client Billing Server

**IP Address or FQDN:** 172.20.19.3

**Username:** cdr

Here you can configure the Backup Host/Client Billing Server.

**IP Address or FQDN:** 172.20.19.30

**Username:** cdr

**Password:**

**Confirm Password:**

You will also need a login and password for FTP / SFTP retrieval and deletion of the files after they have been retrieved by Traffic Analyst.

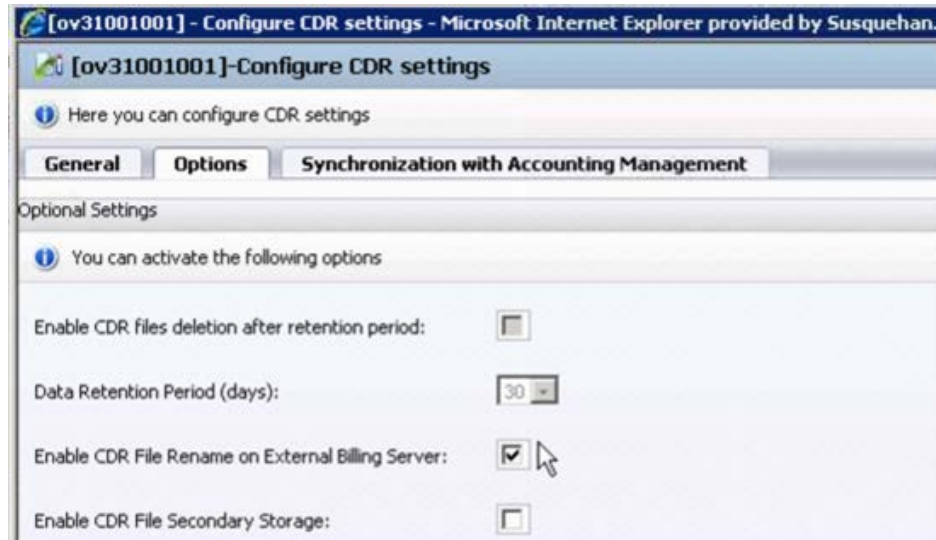
The PISN ID is the same as the Node ID in Traffic Analyst, so you can set those three fields to anything you wish, but the same three values separated by dashes must be set on the OpenScape Voice Switch Properties Communication tab in Traffic Analyst for the Node ID.

Fill in the fields if Pushing to another server including a username and password.

You can check the fields on the Options tab, but they don't normally need to be changed. If you have multiple Nodes you may want to Check the "Enable CDR File Rename on External Billing Server" this will rename the files from extension .BF to .DAT.

The default of 30 days for the data retention period is good unless you are worried about disk space and want to lower it. Normally, Traffic Analyst will collect this data daily regardless, so this data retention period here is only helpful if Traffic Analyst hasn't collected for some reason and needs to go back and get older data.

Also Traffic Analyst can be setup to Not delete the files after it polls them so if you have another application that needs to retrieve them as well they are left behind for that purpose.

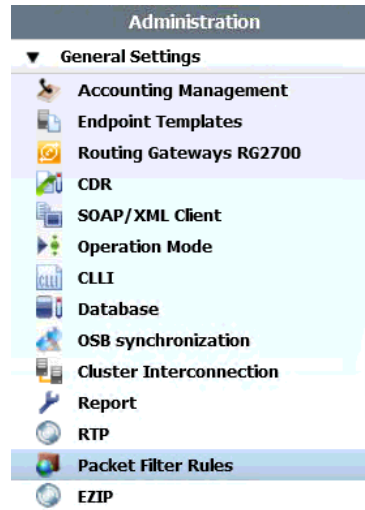


Select "OK" when you are finished.

## 1.6. Setup a Packet Filter Rule

This allows the Traffic Analyst API access to the OpenScape Voice Switch.

The Packet Filter Rule is also setup from the General Settings. Click on Packet Filter Rule to create a new Rule.



### Example

[oucosv] - Edit Packet Filter Rule ?

Here you can configure the parameters of a Packet Filter Rule

General

Name: Traffic\_Analyst\_Rule

Description:

Transport Protocol: ALL

Direction: Both Ways

Action: Allow

Local Host

Alias: bond\_node\_alias

Alias' Interface/IP Address(es): Admin IPv4 172.17.0.6 172.17.0.7

Port Begin: 0

Port End: 0

Remote Host

FQDN or IP Address: 172.17.0.177

Netmask: 255.255.255.255

Port Begin: 0

## 1.7. Unify HiPath 3000/Siemens Hicom 150

### 1.7.1. Pre-Installation Action Items

For these switches, Traffic Analyst does not actually poll the data as in making a connection to the switch and getting data. Instead the switch constantly sends data that Traffic Analyst will retrieve. Once a day Traffic Analyst processes the previous day's data, in addition to hourly data processing.

Traffic Analyst will retrieve data from the switch, HiPath Manager or HiPath 5000 RSM. If retrieving the data directly from the switch, you will use a TCP/IP connection. If retrieving the data from HiPath Manager or HiPath 5000 RSM, you may use a TCP/IP connection or network file access. If you will be retrieving data from HiPath Manager or HiPath 5000 RSM via TCP/IP, the File Transfer Protocol (FTP) must be used.

If the data is sent via TCP/IP connection, the TCP/IP protocol must be unimpeded. In particular no router, firewall, or other network device should restrict use. Ask your network administrator for further details.

- **Note:** Consoles and Console Groups are not supported.

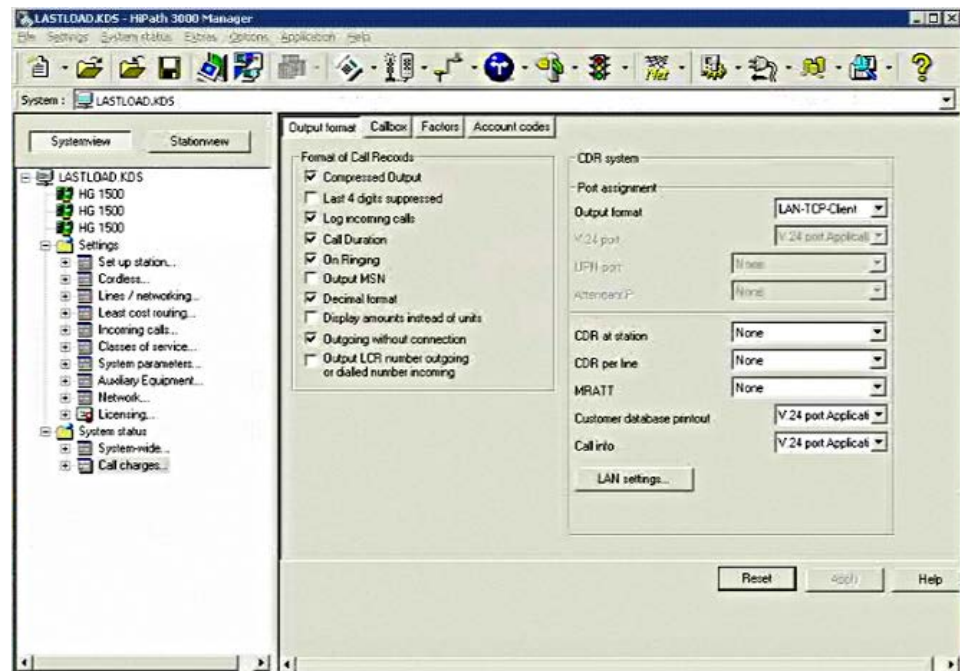
If retrieving data from the switch, HiPath Manager, or HiPath 5000 RSM, there are settings that must be configured on Hicom Assistant or HiPath Manager or before Traffic Analyst can poll.

- **Note:** Siemens Hicom 150 is administered by Hicom Assistant or HiPath Manager. Unify HiPath 3000 is administered by HiPath Manager.
- **Note:** Only OfficeCom and OfficePro are supported when using Hicom Assistant.

Below are the settings for Hicom Assistant or HiPath Manager.



### 1.7.1.1. Configure Call Charges Output Format



When configuring the call charges output format, make sure the Format of Call Records section is filled out as such:

**Compressed Output** – checked

**Last 4 digits suppresses** – optional

**Log incoming calls** – checked

**Call Duration** – checked

**On Ringing** – checked (option not available in Hicom Assistant)

**Output MSN** – unchecked

**Decimal Format** – checked

**Display amounts instead of units** – unchecked

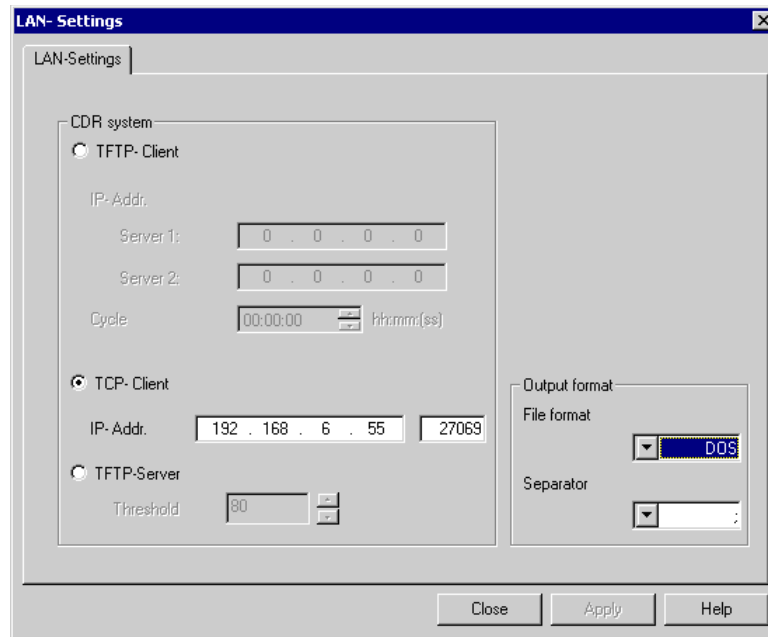
**Outgoing without connection** – checked

**Output LCR number outgoing or dialed number incoming** – unchecked

Next, in the **Output format** dropdown (located in the CDR systems section of the window), select LAN-TCP-Client (or None if using HiPath 5000 RSM).

You must click the Apply button to save the changes. (All changes must be sent to the HiPath before data collection can begin.)

Click the **Lan settings...** button to access the following display:



The LAN settings must be as follows:

**TCP-Client** – selected

**IP-Addr** – IP address of the Traffic Analyst server (or of the HiPath 5000 RSM)

**(port)** – **27069** (This is the switch port. If this must be something different please contact Impact Technologies for assistance.)

**File format** – DOS

**Separator** - ;

You must click the Apply button to save the changes.

If retrieving data from HiPath 5000 RSM, it must be configured to receive CDR data from the switch.

When the above activities are done, go to the section entitled “*Traffic Analyst Software Installation*”.

## 1.8. Avaya – All Models

### 1.8.1. Pre-Installation Notes

Avaya switch CDR data is retrieved either from the switch’s hard disk (called Survivable CDR) or the CDR may be streamed to a buffer box. CDR parameters should be configured to output CDR in the “Expanded” format.

- **NOTE:** If CDR has not already been configured on your switch, we recommend you request support from your switch manufacturer to help set up your switch for CDR output.

Avaya switch Network data is retrieved using the ASA (Avaya Site Administration) tool. There are 2 steps to prepare the ASA to collect data from the switch, **Defining A Voice System Connection** and **Data Collection Scheduling**. All data is retrieved from the switch using ASA and stored on the local hard drive or network drive. Traffic Analyst then uses these files to create data. A decision as to the frequency of when data will be collected, hourly or daily, needs to be made before switch setup and then Traffic Analyst will have to be setup accordingly. If data will be polled hourly, the trunk groups need a flag turned on to allow hourly measurements.

- NOTE: ASA must be running at all times for Network data collection from the switch to occur.

## 1.8.2. Installation Instructions (Call Accounting)

After CDR data collection is set-up on your switch, you will need to activate retrieval of it in the Traffic Analyst Administrative Tool. You can do this on the Communications screen while setting up your switch. On the bottom portion of this screen, you will designate where the CDR data is being retrieved from. For detailed instructions on setting up your Avaya switch in Traffic Analyst, please see the section entitled “Avaya Data Directory Communications” in the *Traffic Analyst Administrative Guide*.

## 1.8.3. Installation Instructions (Network)

As you complete the following activities, put a check mark in the box next to each of the following items:

### 1.8.3.1. Configuring ASA (Avaya Site Administration)

Data Collection may be scheduled daily or hourly with Traffic Analyst. Data collection will be scheduled hourly when an hourly alarm is assigned to a switch. Follow the appropriate instructions below based on how data collection is scheduled within Traffic Analyst.

#### 1.8.3.1.1.1. Hourly Scheduling

Four reports must be polled from the switch in order to perform Hourly Polling of Traffic Analyst. They are summarized below:

##### **Traffic Data Reports**

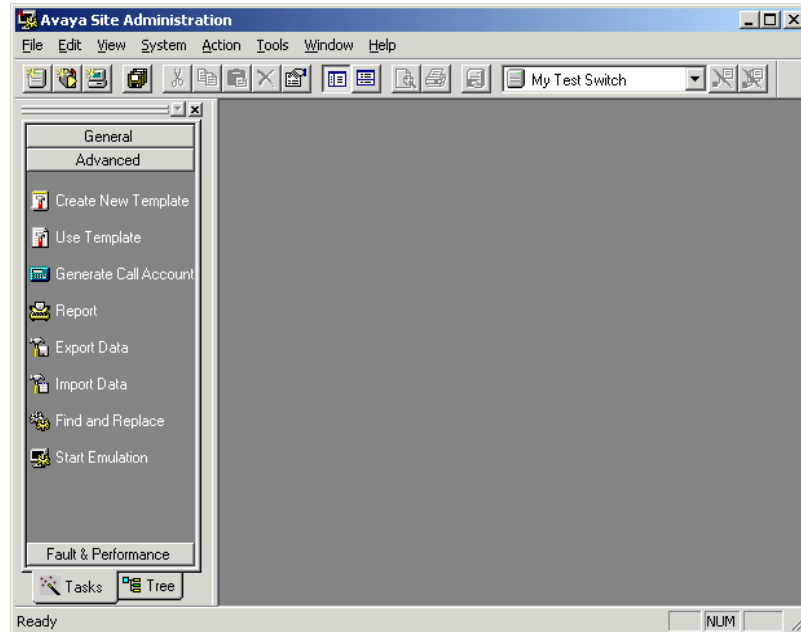
<u><b>Report</b></u>	<u><b>Data Description</b></u>
aca-parameters	Trunk Group listing.
trunk-group summary	Hourly summary of traffic on all trunk groups except Personal Central Office Line Groups.

##### **Alarm Reports**

<u><b>Report</b></u>	<u><b>Data Description</b></u>
outage-trunk	Lists a maximum of five trunks in each group that were out of service when sampled.
lightly-used-trunk	Lists the five trunk members with the lowest number of calls.

## Scheduling Hourly Reports

1. Open ASA.
2. If more than one switch is defined select System | Target System.. | <desired switch>
3. In the Tasks tab, under the Advanced section, click on Report.



4. In the **Command(s)** field enter:

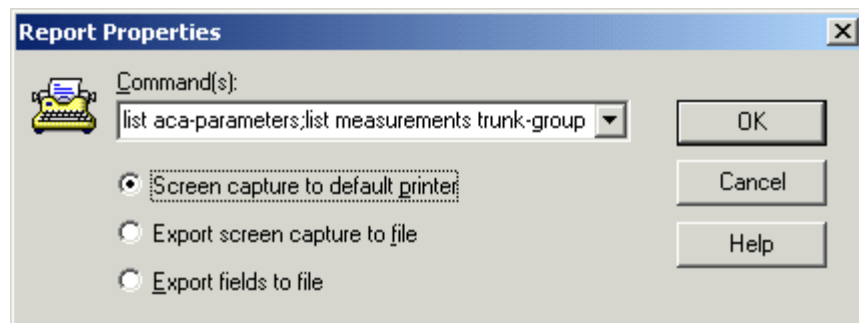
list measurements trunk-group hourly <group #>;list aca-parameters;list  
measurements outage-trunk last-hour;list measurements lightly-used-trunk last-hour;

Note: The first command “list measurements trunk-group hourly <group>;” must be entered for each trunk group.

### Example:

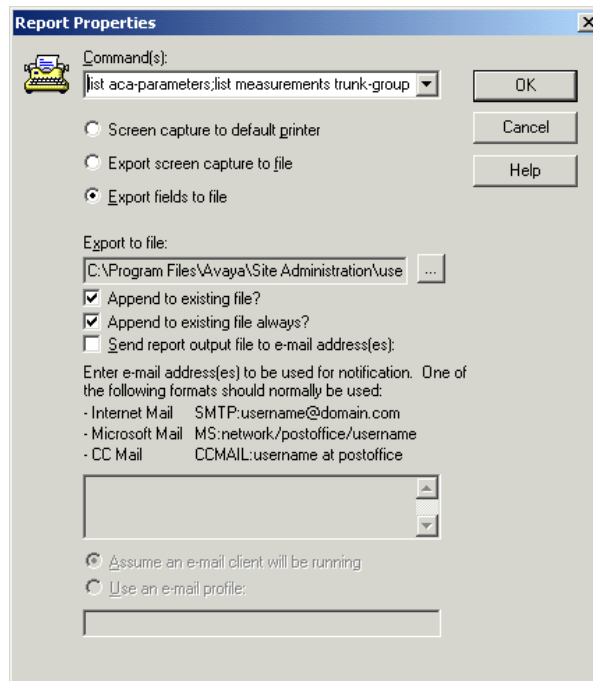
A switch has 5 trunk groups with trunk group number 1,2,3,10,15. The **Command(s)** list would be:

**list measurements trunk-group hourly 1; list measurements trunk-group hourly 2;list measurements trunk-group hourly 3;list measurements trunk-group hourly 10;list measurements trunk-group hourly 15;list aca-parameters;list measurements outage-trunk last-hour;list measurements lightly-used-trunk last-hour;**

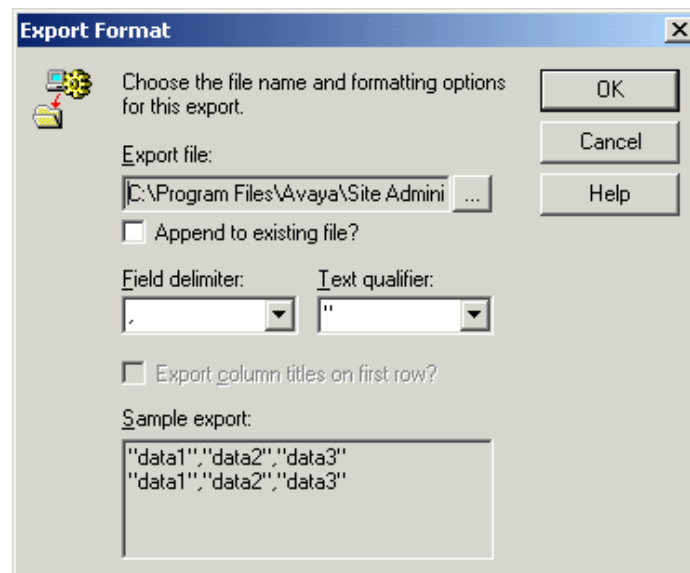


The first command “list measurements trunk-group hourly <group #>” must be entered for each trunk group.

5. Select **Export fields to file** then select **OK**.
6. Select **Append to existing file**.
7. Select **Append to existing file always**.

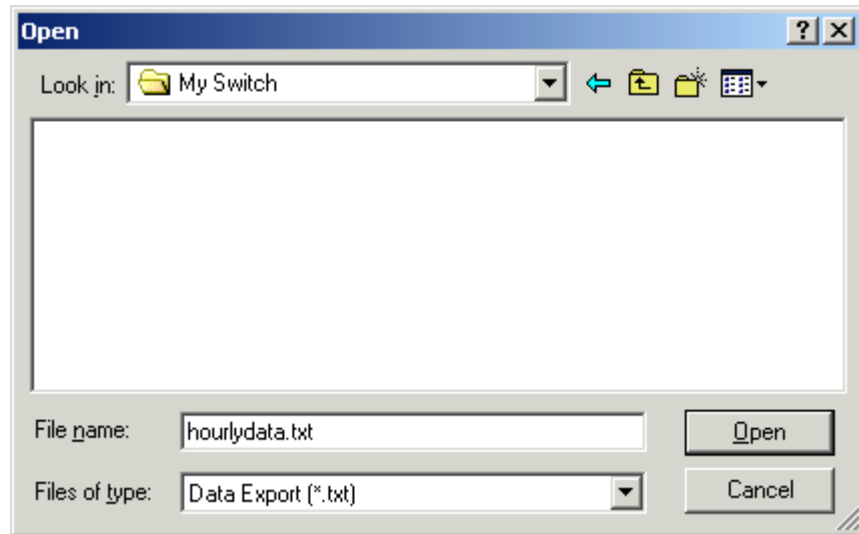


8. Select the **Browse (...)** button next to **Export to file** field.



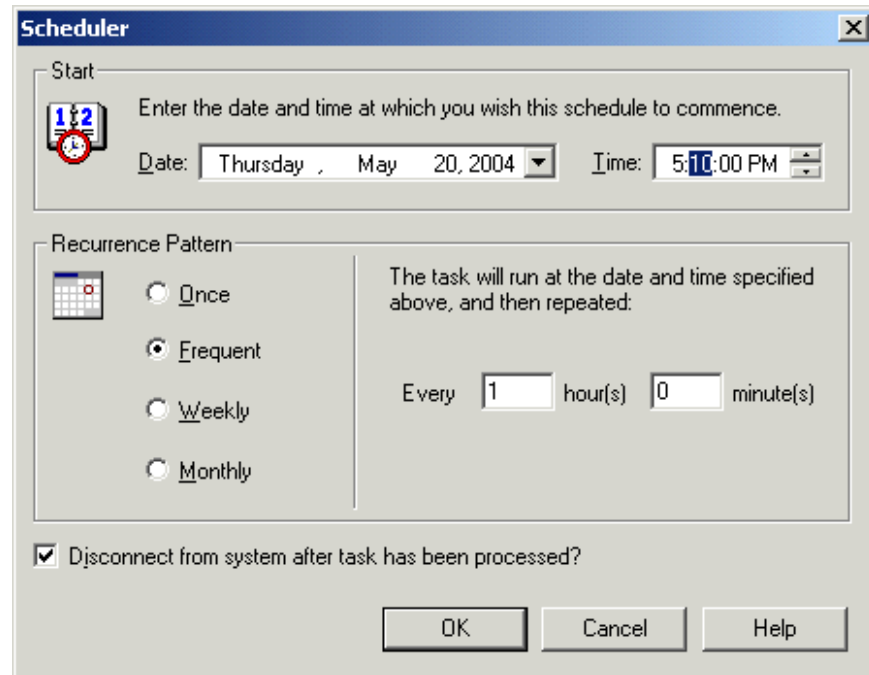
9. Select **Append to existing file**.

10. Select the **Browse (...)** button next to **Export file** field.
11. Change the **File name** to **hourlydata.txt**. If multiple switches, either create a separate folder for each switch or make the filename unique (e.g. ChicagoHourlyData.txt, BostonHourlyData.txt, etc.).



12. Select the target directory from which Traffic Analyst will retrieve the file.
13. Select **Open**.
14. Select **OK**.
15. Select **OK**.

16. Enter the desired start date. This should be the first date you want to start doing Traffic analysis.



17. Enter a 12:10:00 AM for the Time. If your start date is today you will need to readjust the time of day to be 10 minutes after the next hour. This allows the switch time generate the data for the previous time interval. So if it is currently 1:40 PM set the time to 2:10:00 PM.
18. Select **Frequent** as the **Recurrence Pattern**.
19. Enter **Every 1 hour(s)** and **0 minute(s)**.
20. Select **Disconnect from system after task has been processed**.
21. Select **OK**.

#### 1.8.3.1.1.2. Daily Scheduling

Four reports must be polled from the switch in order to perform Daily Polling of Traffic Analyst. They are summarized below:

##### Traffic Data Reports

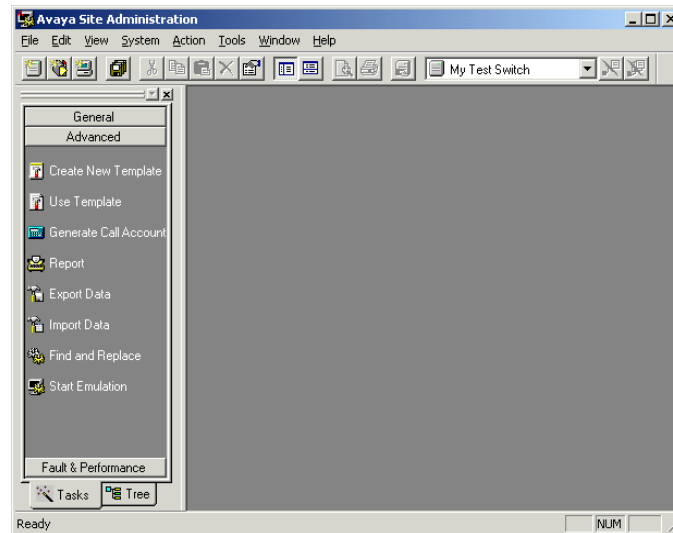
<u>Report</u>	<u>Data Description</u>
aca-parameters	Trunk Group listing.
trunk-group hourly	24 Hour summary of traffic on all trunk groups. Must be run for each Trunk Group

##### Alarm Reports

<u>Report</u>	<u>Data Description</u>
outage-trunk	Lists a maximum of five trunks in each group that were out of service when sampled.
lightly-used-trunk	Lists the five trunk members with the lowest number of calls.

## Scheduling Daily Reports

1. Open ASA.
2. If more than one switch is defined select System | Target System.. | <desired switch>
3. In the Tasks tab, under the Advanced section, click on Report.



4. In the **Command(s)** field enter:

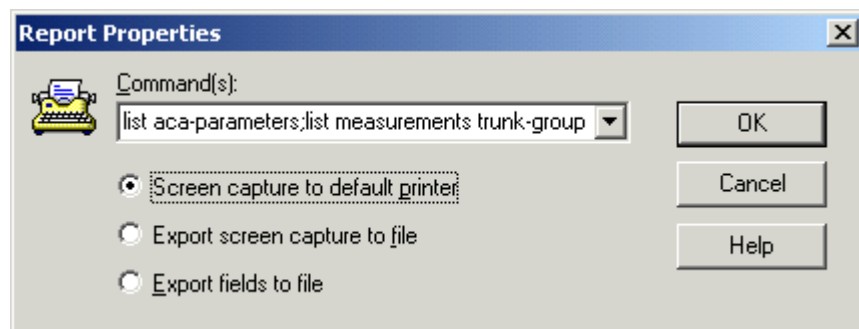
list measurements trunk-group hourly <group#>;list aca-parameters;list measurements outage-trunk yesterday;list measurements lightly-used-trunk yesterday

Note: The first command “list measurements trunk-group hourly <group>;” must be entered for each trunk group.

### Example:

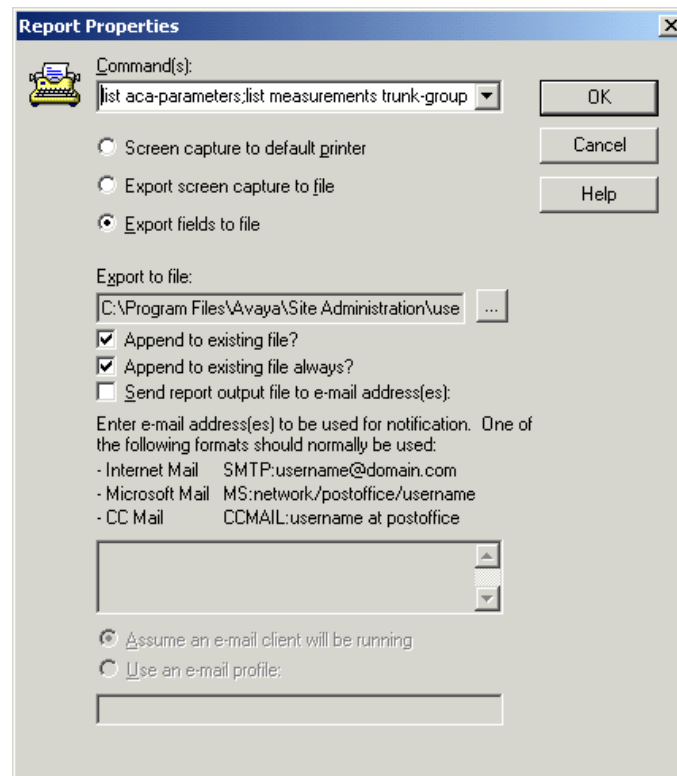
A switch has 5 trunk groups with trunk group number 1,2,3,10,15. The **Command(s)** list would be:

**list aca-parameters;list measurements trunk-group hourly 1;list measurements trunk-group hourly 2;list measurements trunk-group hourly 3;list measurements trunk-group hourly 5;list measurements trunk-group hourly 11;list measurements trunk-group hourly 41;list measurements outage-trunk yesterday;list measurements lightly-used-trunk yesterday**

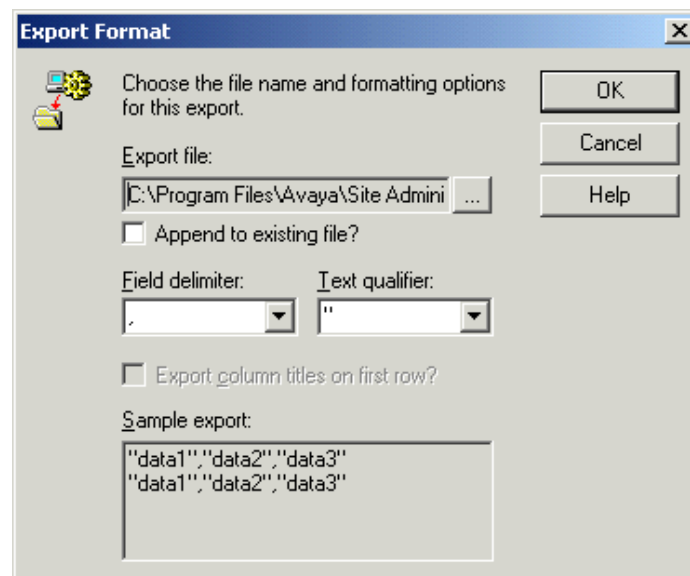




5. Select **Export fields to file**.

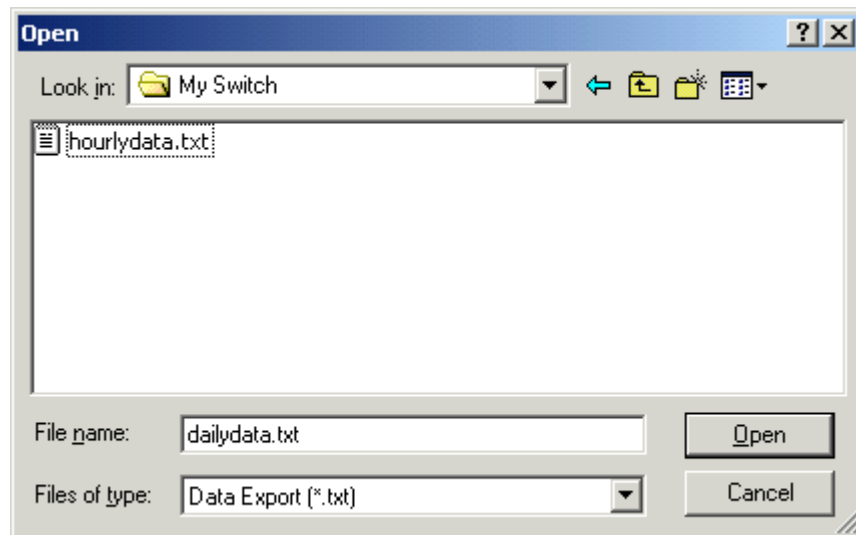


6. Select **Append to existing file**.
7. Select **Append to existing file always**.
8. Select **Browse (...)** next to the **Export to file** field.

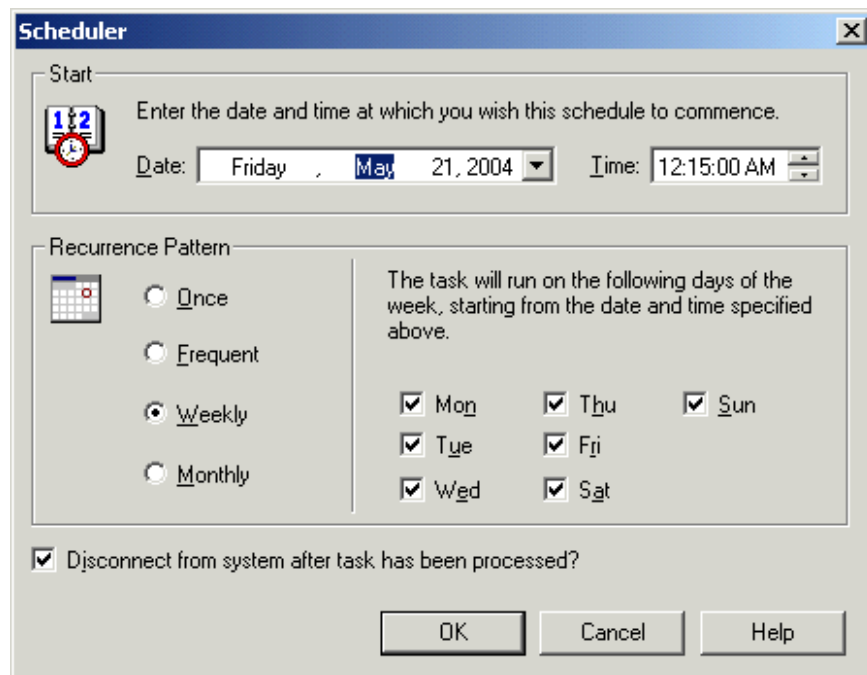


9. Select **Append to existing file**.
10. Select **Browse (...)** next to the **Export file** field.

11. Change **File name** to **dailydata.txt**. If multiple switches, either create a separate folder for each switch or make the filename unique (e.g. ChicagoDailyData.txt, BostonDailyData.txt, etc.).



12. Select the target directory from which Traffic Analyst will retrieve the file.
13. Select **Open**.
14. Select **OK**.
15. Select **OK**.
16. Enter the desired start date (tomorrow or later). This should be the first date you want to start doing Traffic analysis.



17. Enter **12:15:00 AM** for the **Time**. You will need to adjust the time of day if the switch is in a different time zone. You will want to poll 15 minutes after midnight on the switch.
18. Select **Weekly** for the **Recurrence Pattern**.
19. Select all days of the week.
20. Select **Disconnect from system after task has been processed**.
21. Select **OK**.

---

## Section 2: Traffic Analyst Software Installation

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Before installing the software, the switch(es) should be prepared for polling.

Make sure all required Windows components have been installed. It is advised to double check for these.

- . Net Framework 4.6 or 4.7
- IIS 7 or 8 if using Windows 2012 or Windows 2016
- IIS 10 when installing a Windows Server 2019
- Silverlight 5.X
- C++ Redistributable

**Important Note for Windows 2008, 2012, 2016:** You must have administrative privileges to successfully install. Log onto Windows with an administrative user name and password before beginning the installation.

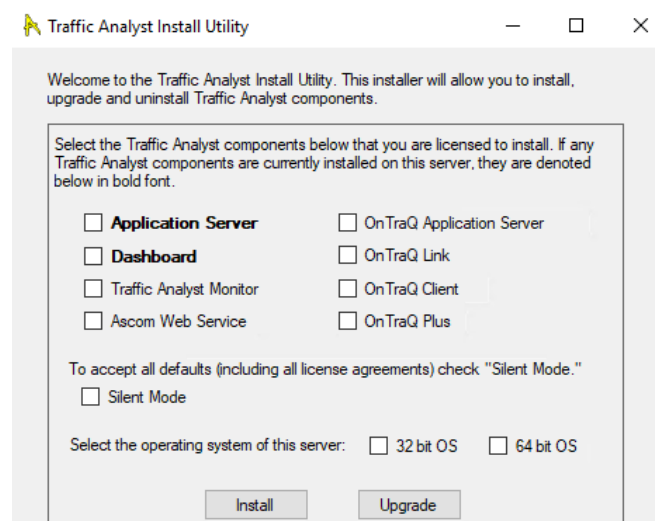
### 2.1. Installing a Traffic Analyst Server

Follow the steps below to install a Traffic Analyst configuration. Please note that if the Setup program finds DLL files on your system that are older than the DLLs it will install, it asks you if you want to replace them. Select the "Install new and keep old DLL" option in this event.

Unzip the files that were downloaded earlier. Make sure to Unzip the Dll file into the directory you unzipped the TA65BX files to. Unzip the Utilities to their own Utilities folder.

Run the **ImpactInstall.exe** program. **Note: Right-click ImpactInstall.exe and select "Run as Administrator."** This is done so that proper security access is given to the install process.

The following windows appears:

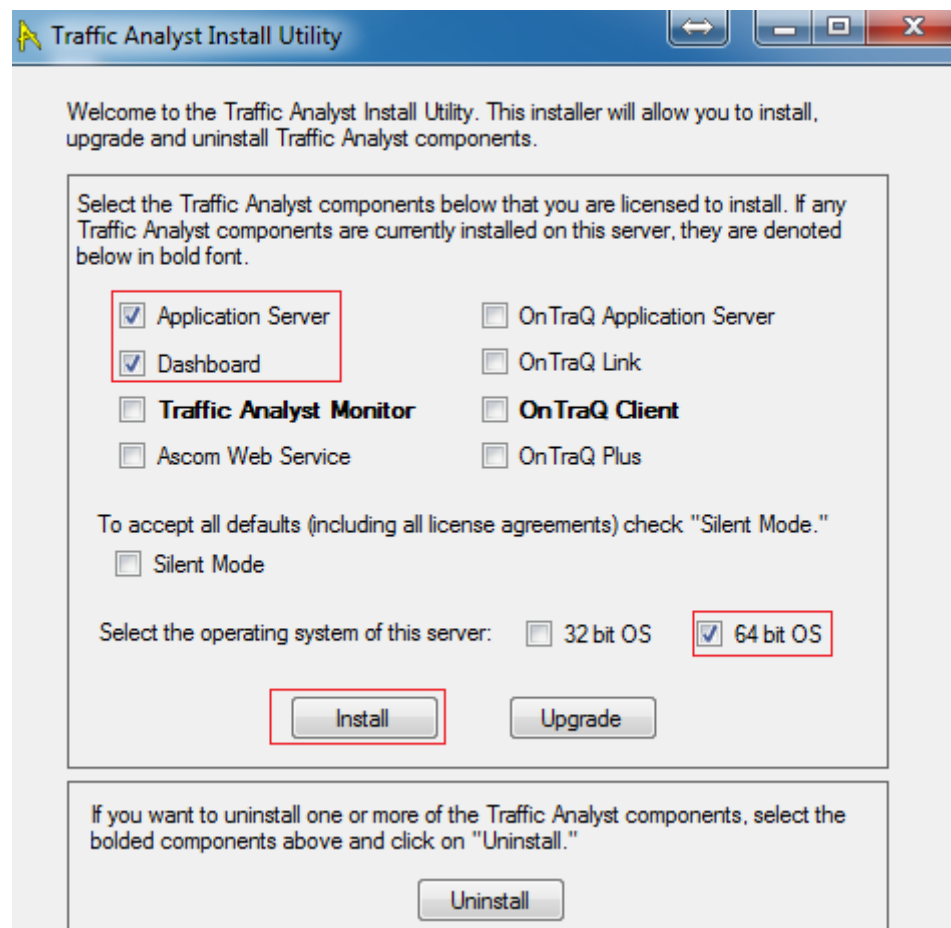


Licensed	Network	Console	CDR	OnTraQ
Application Server	X	X	X	X
Web Server	X	X	X	
Dashboard	X		X	
OnTraQ Application Server				X
OnTraQ link				X
OnTraQ Client				X
OnTraQ Plus				X

**You must select an operating system.** 32 bit or 64 bit. If you are not sure go to Start – Accessories-System Tools – System Information System Type will tell you if 32 bit or 64 bit. X86 based PC = 32 bit

Click on **Install** for first time installation.

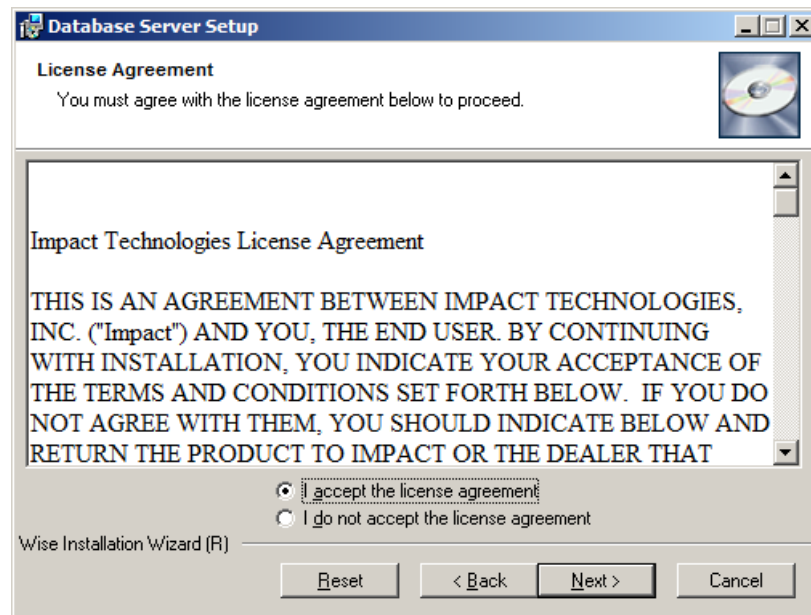
In this example we are going to install the Application Server and Dashboard on a 64 bit OS.



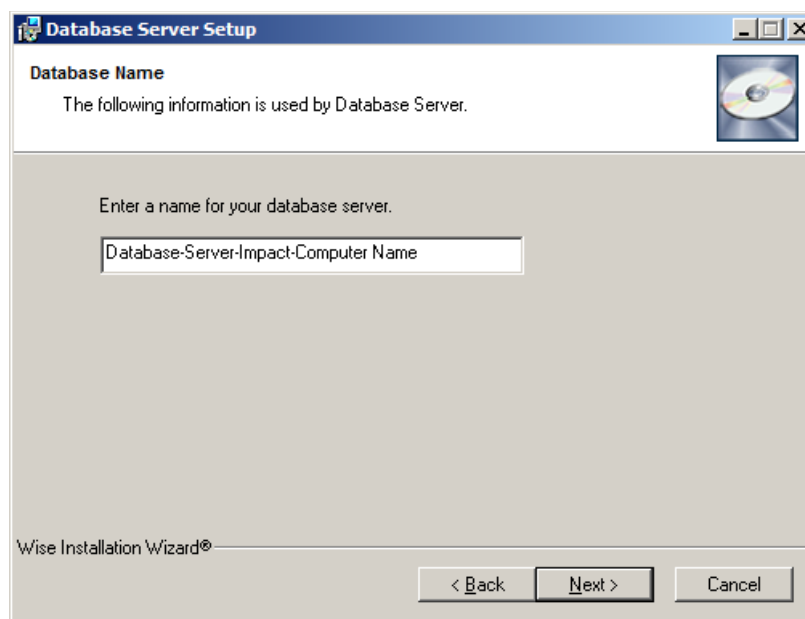
**Click on Application Server and Dashboard, 64 bit OS and click on Install**



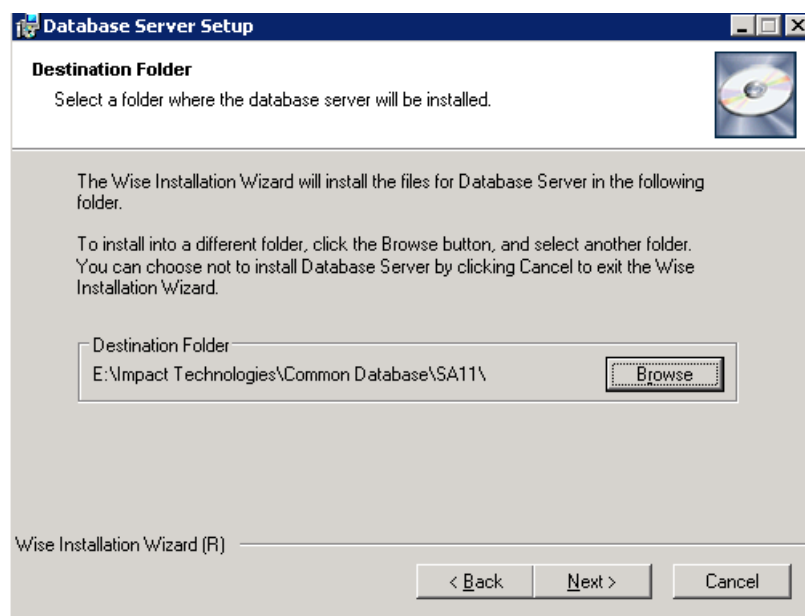
**Click Next**



**Accept license agreement and click on Next**

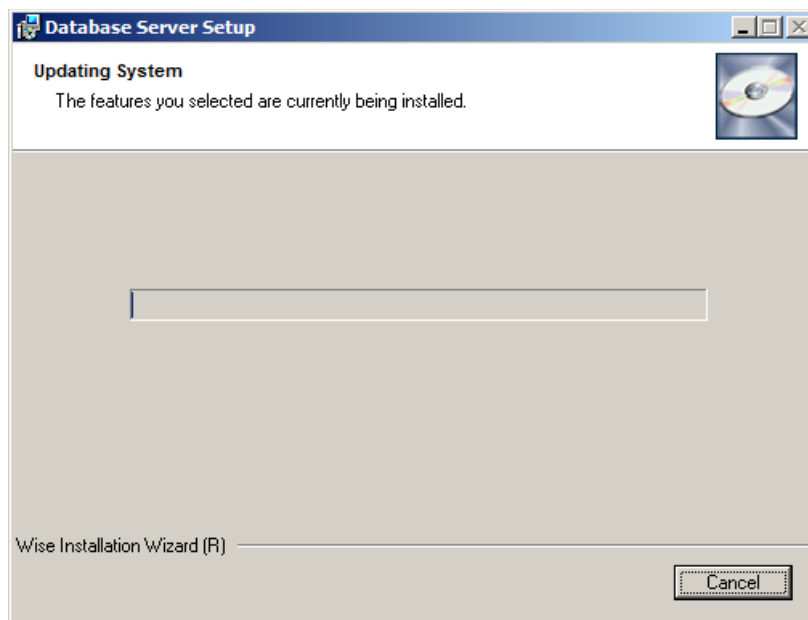


**The computer name will append to the default database name Database-Server-Impact, it is suggested to accept this name and click Next. If you change the name just make a note of the new name as you cannot have two installations with the same database name.**

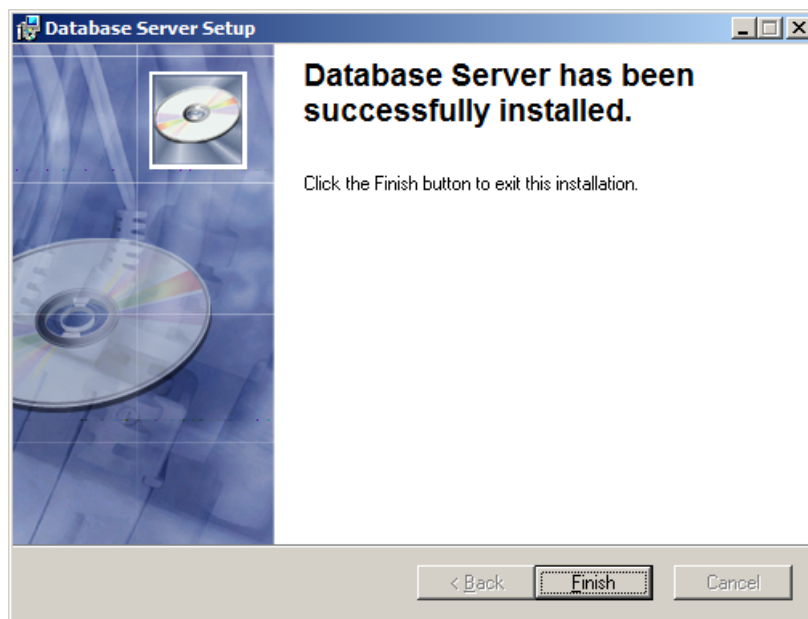


**Click on Next. If you need to change the drive you will do so here.**

**Must be a local drive.**

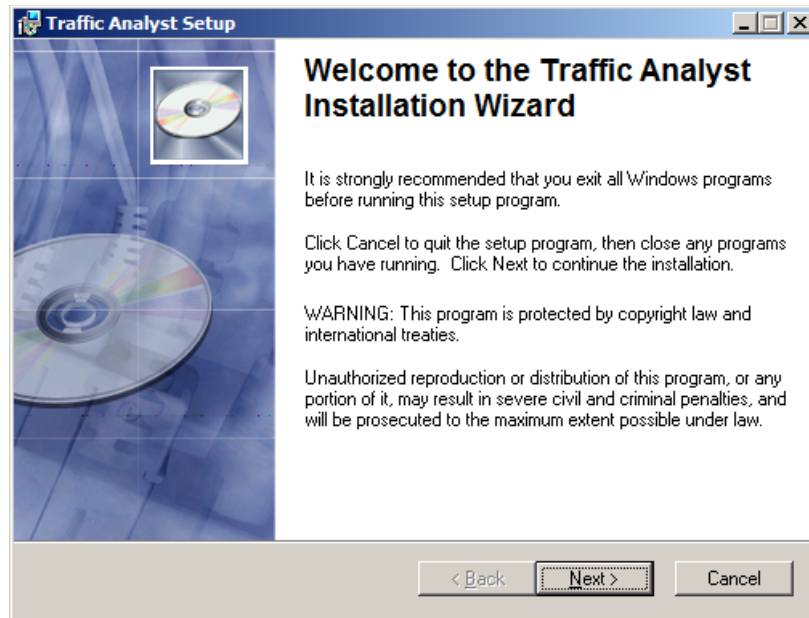


**Installation will start.**

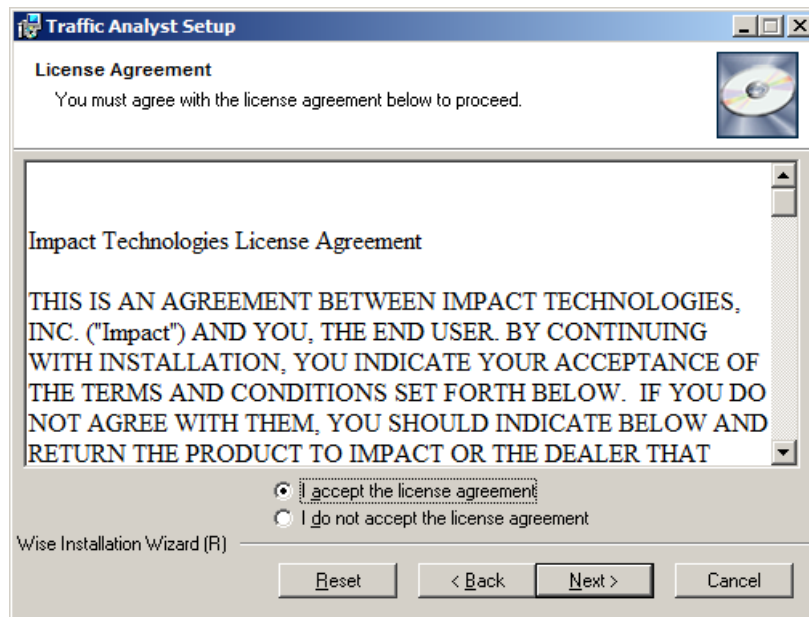


The first step has completed now it will start the application installation.

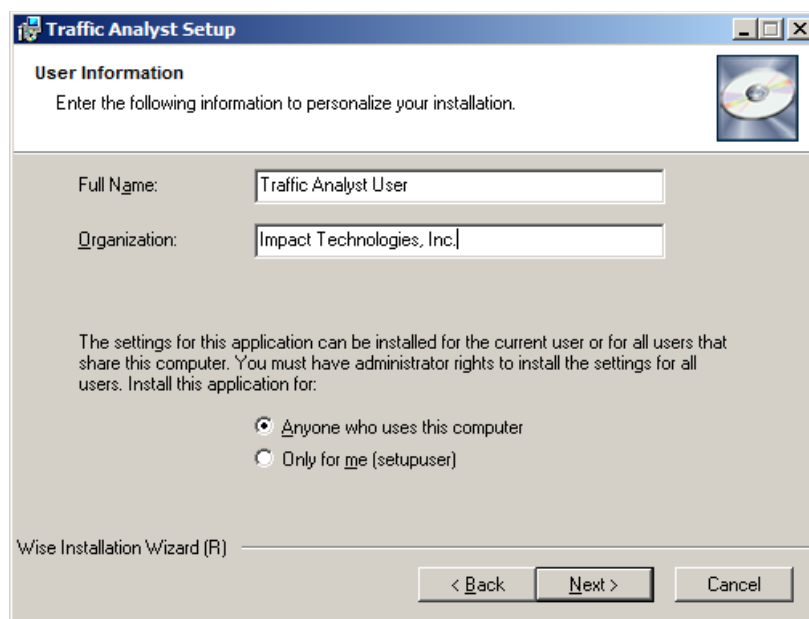




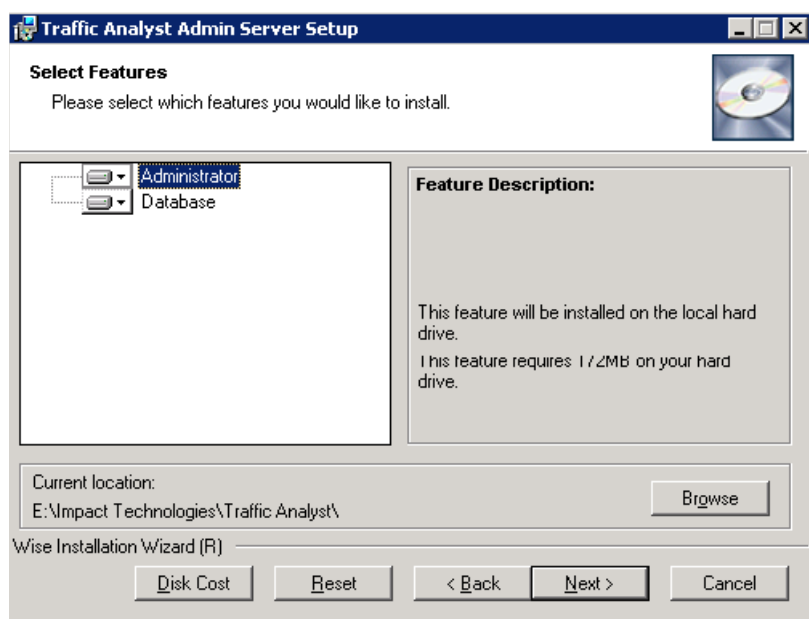
Click on Next



Accept the license agreement and click on Next



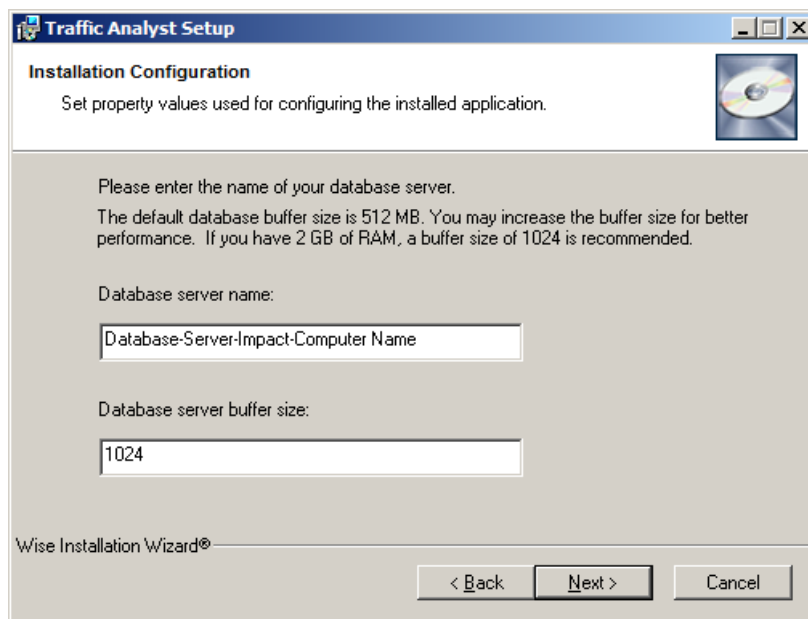
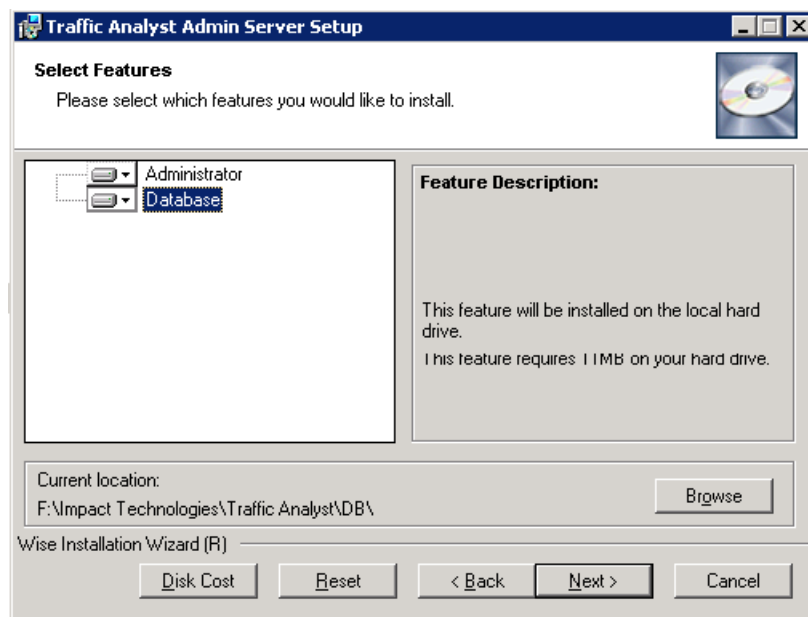
Click on Next



**If you have two physical disk drives they are normally setup that the C drive is used for your Operating System and the other drive is reserved for your applications. You will want to install the application on the drive for applications.**

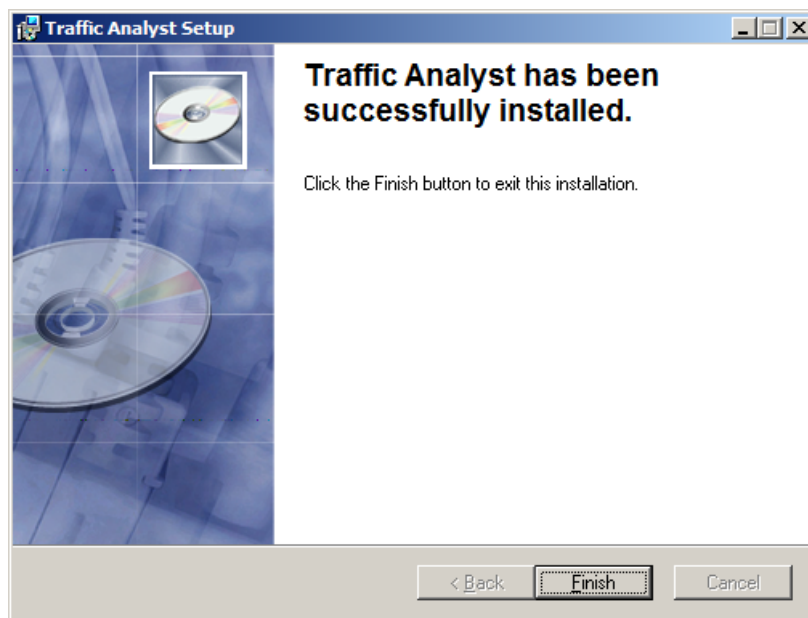
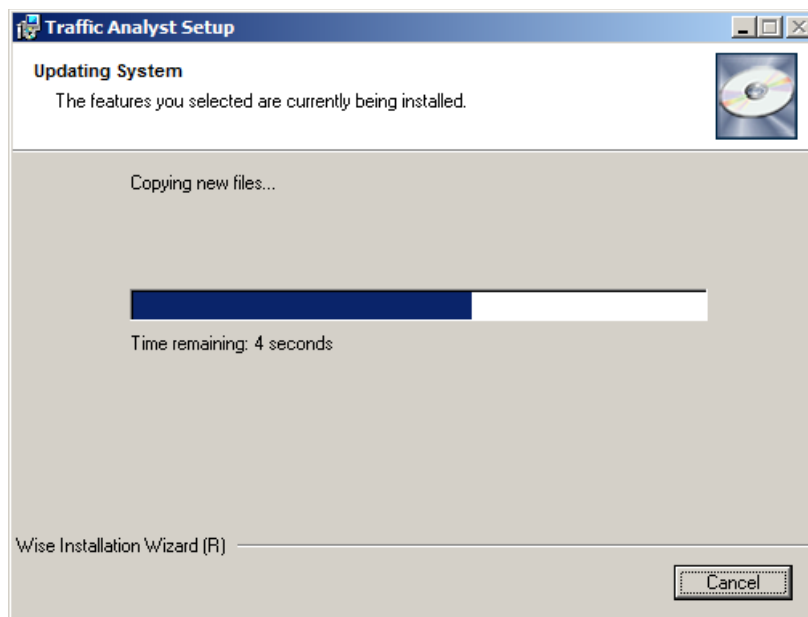
**The drives must be local not a network drive!**

**After setting both Administrator and Database Click on Next.**



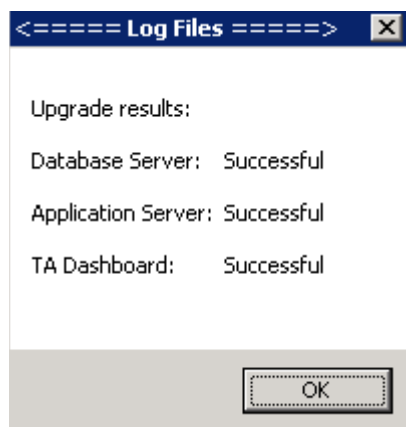
**Default is 512. If you have 8GB RAM enter in 4096.**

**Click on Next**

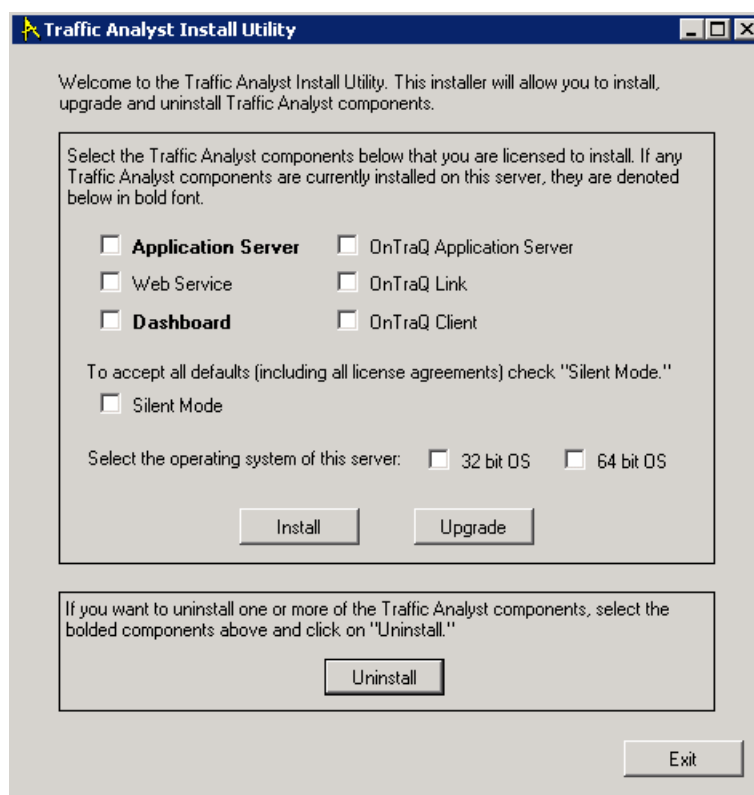


Application server is now completed.

See Section 2.2 “*Installing Dashboard*” for step by step instructions.



Click on OK

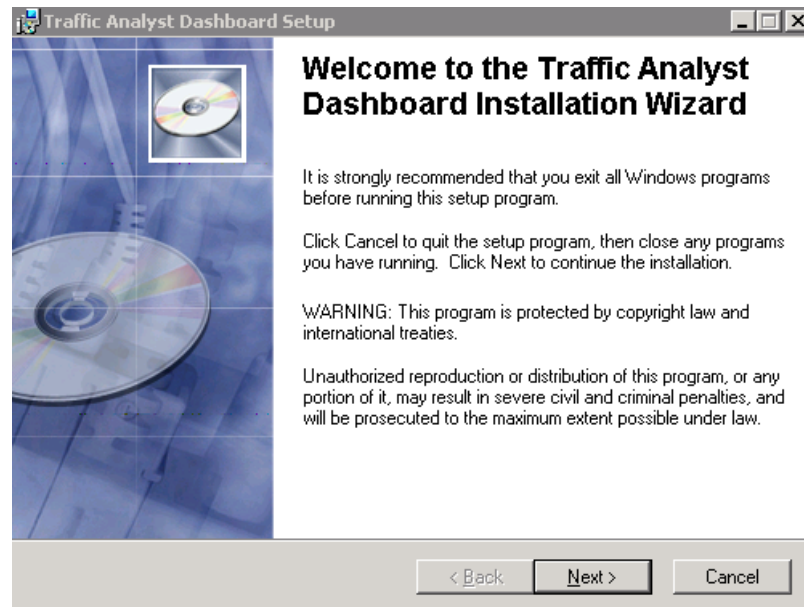


If no other components are to be installed click on Exit

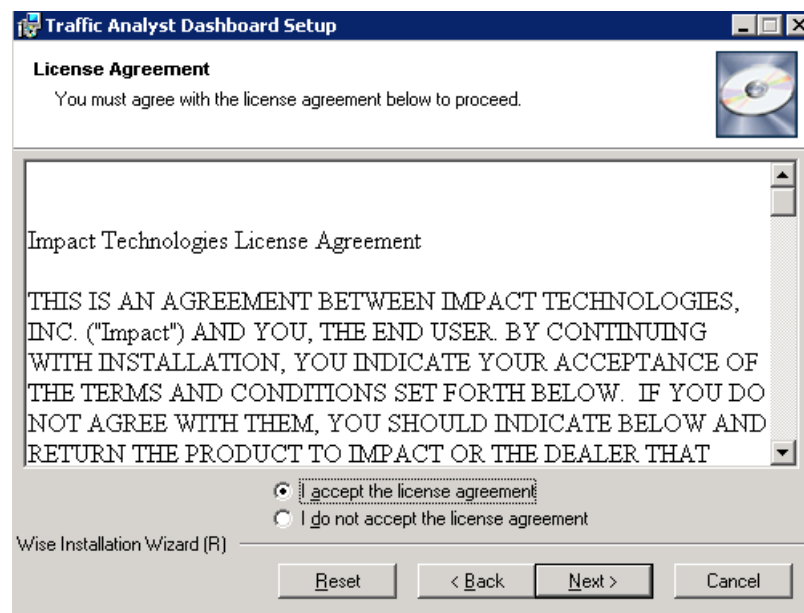
## 2.2. Installing Dashboard

Before the Dashboard can be installed make sure that IIS is installed.

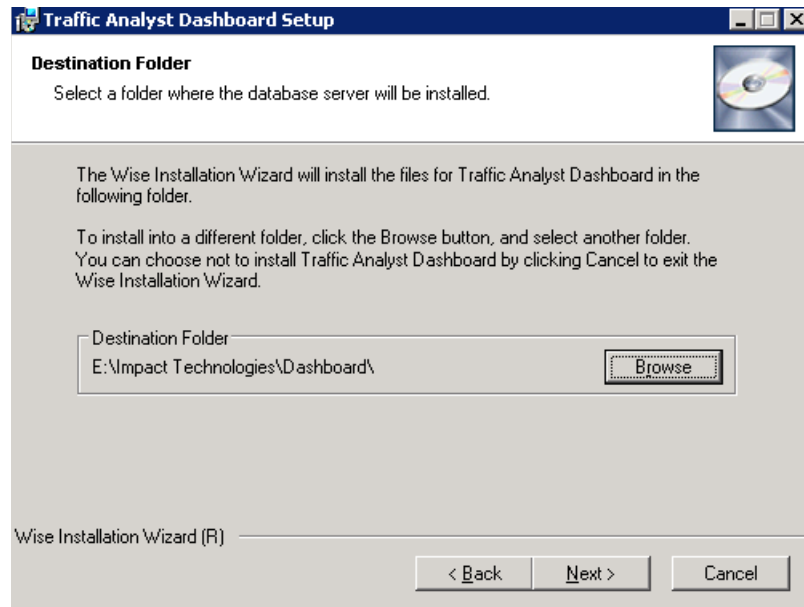
The following windows appears:



Click on Next



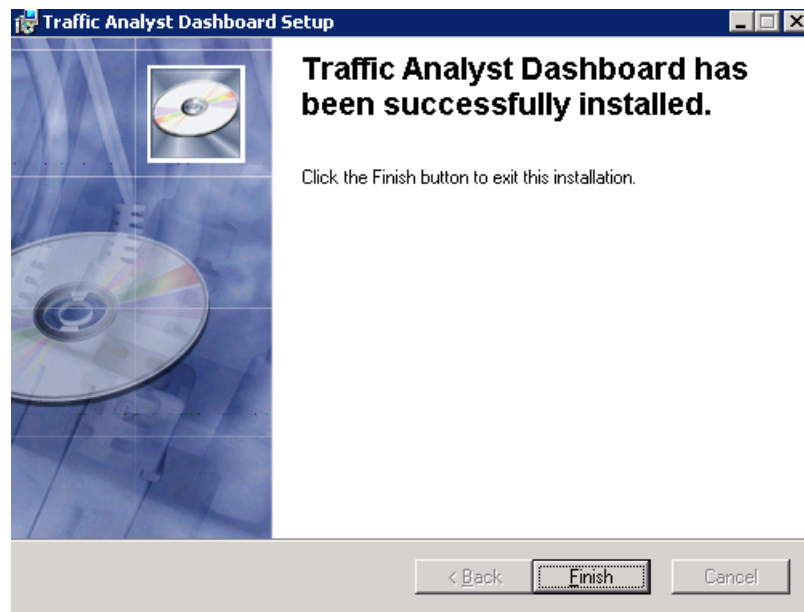
Accept the license agreement and Click on Next



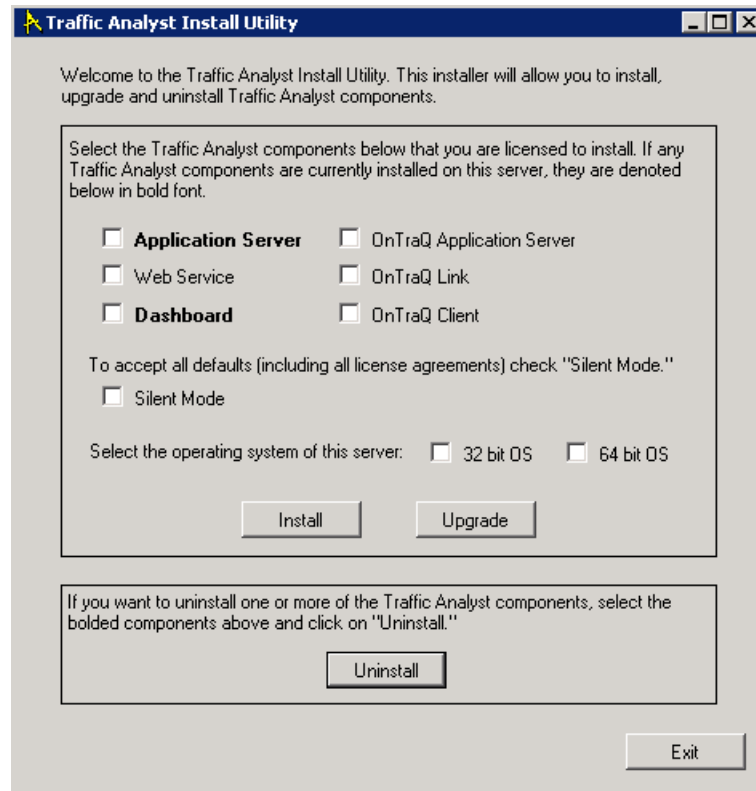
It is recommended to install the dashboard on the same drive as the Traffic Analyst Application server.

Verify the Path is correct and Click on Next

The installation will begin when completed you will Click on Finish



When completed you will get the Utility screen again all installed components are now displayed in “Bold” letters.



Click on Exit to Close

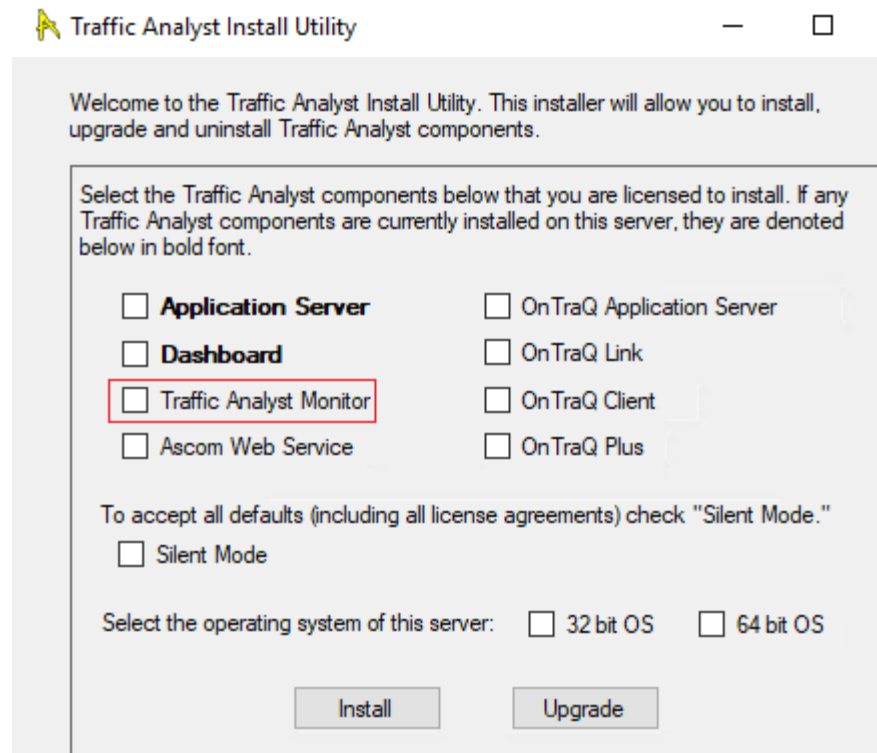
To start Traffic Analyst Web browser enter the URL

<http://server ip addressor DNS name/TrafficAnalyst.Web>



## 2.3. Installing Traffic Analyst Monitor

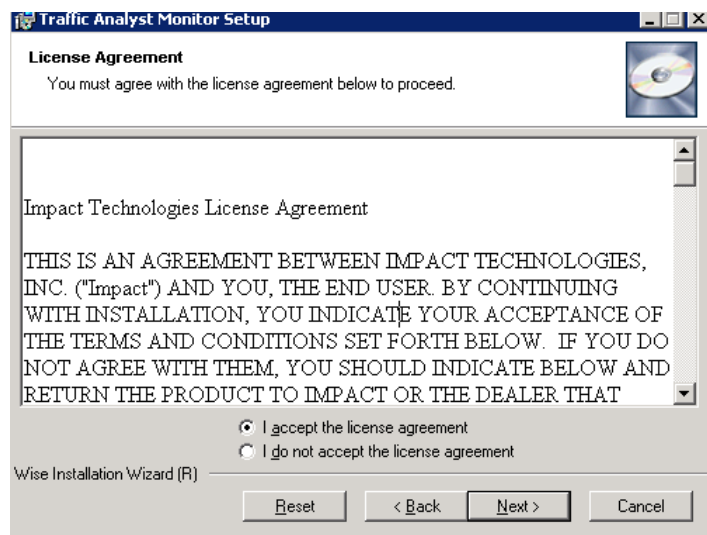
Click on **Traffic Analyst Monitor** in the Install Utility screen



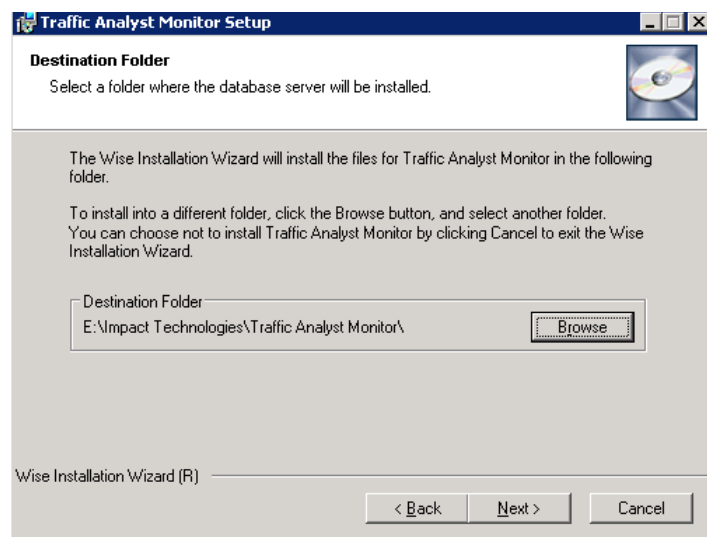
Follow the install wizard:



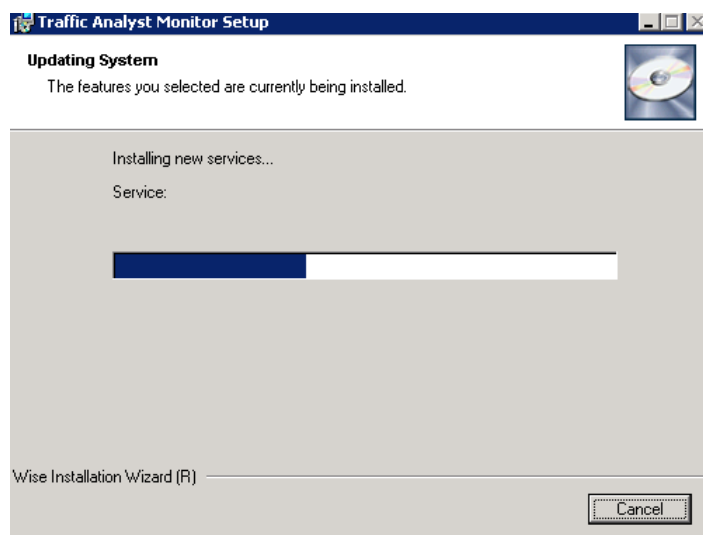
Click on Next



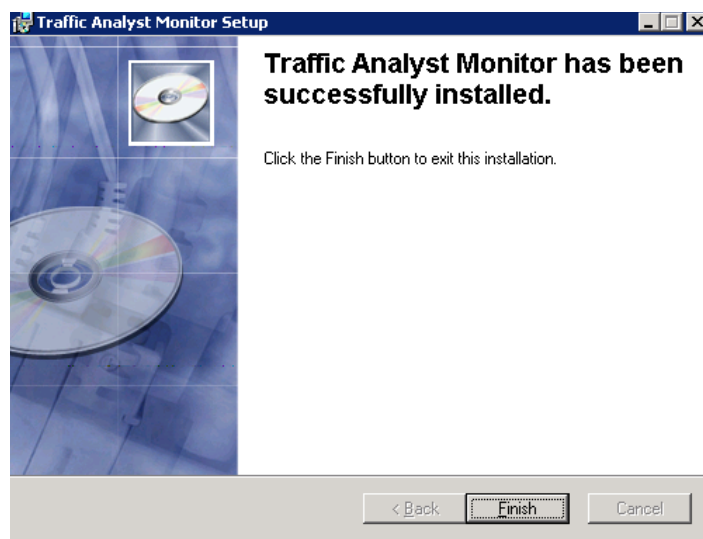
Accept the license agreement and click on Next



Verify the install Path. To edit click on the Browse button. Then click on Next



When Finished click on Finish



To verify Service has started go tot Administration Tools and select Services

Check the Traffic Analyst Monitor service. Is should be set to Automatic

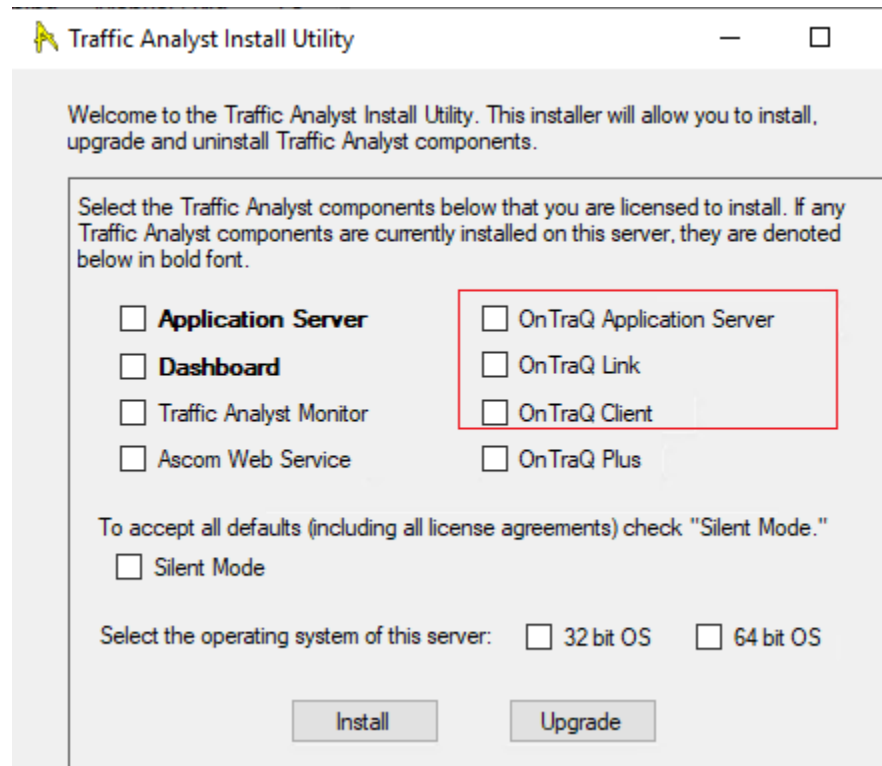
The Local System must have permissions to run this.

Name ^	Description	Status	Startup Type	Log On As
Telephony	Provides T...		Manual	Network S...
Thread Ordering Se...	Provides or...		Manual	Local Service
TPM Base Services	Enables ac...		Manual	Local Service
TrafficAnalystMonitor	Traffic Ana...	Started	Automatic	Local System

## 2.4. Installing OnTraQ

OnTraQ has 3 components. **Only install if this Module has been purchased.**

1. **OnTraQ Application Server** for a HiPath 4000 or Openscape 400 this must be installed on the same server as the CAP Server software from Unify
2. **OnTraQ Link** – This must be installed on the same server as Traffic Analyst
3. **OnTraQ Client** – This may be installed on any desktop



Select the OnTraQ component to install and also the OS then click on Install for a fresh new install or Upgrade if the component has been installed before. Each component has an install that runs. It is best practice to take the defaults. If the defaults have a different disk drive then you will want to change it to the drive you want it installed on.

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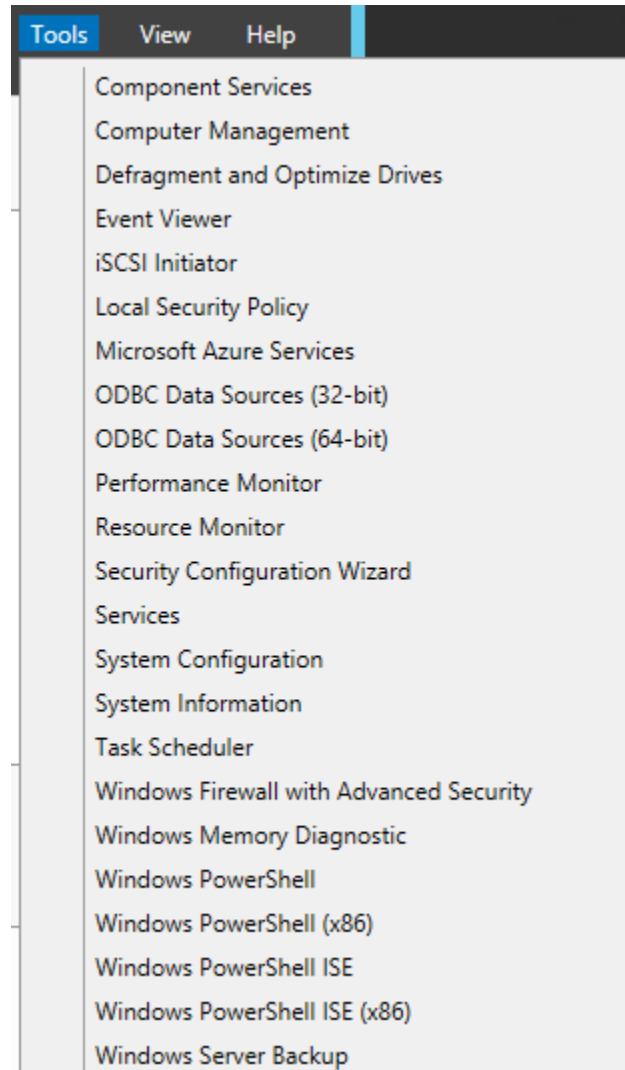
## Section 3: Additional Installation Components

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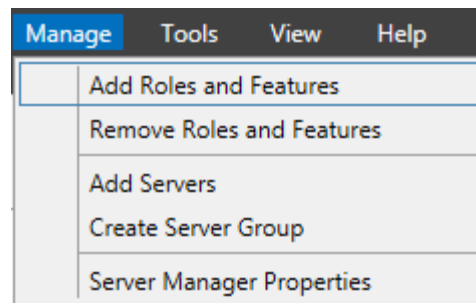
### 3.1. Installing IIS

To check if IIS is installed, open Administrative Tools from the Server Manager and then look for Internet Information Server in the list. If it is not there you must install it before installing the Traffic Analyst.

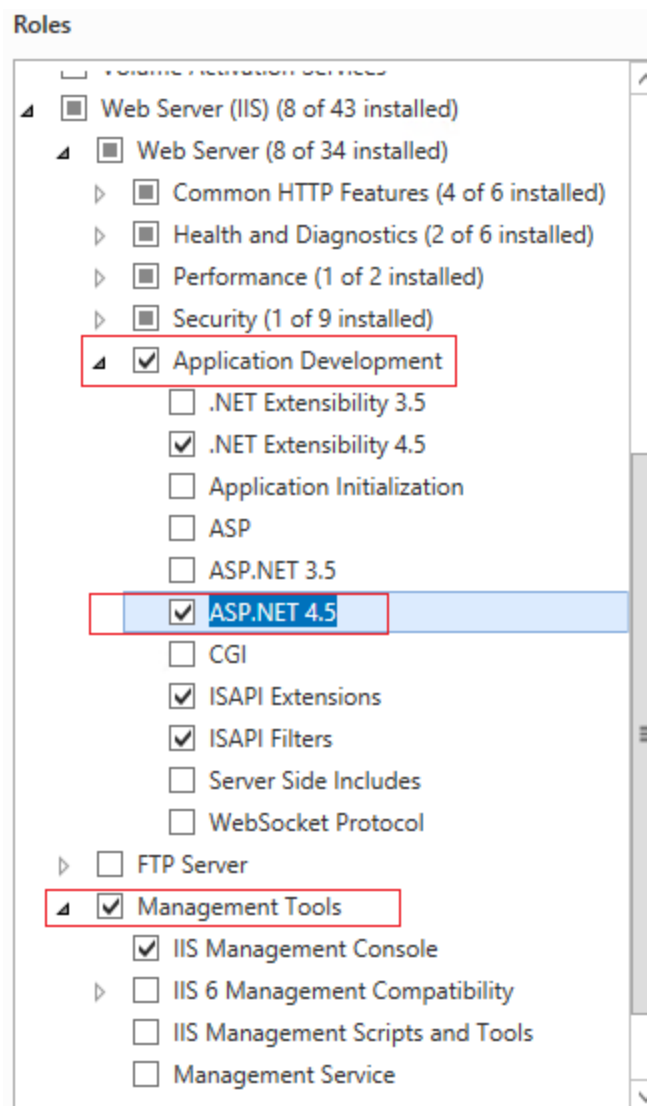
*In this example it is not installed*



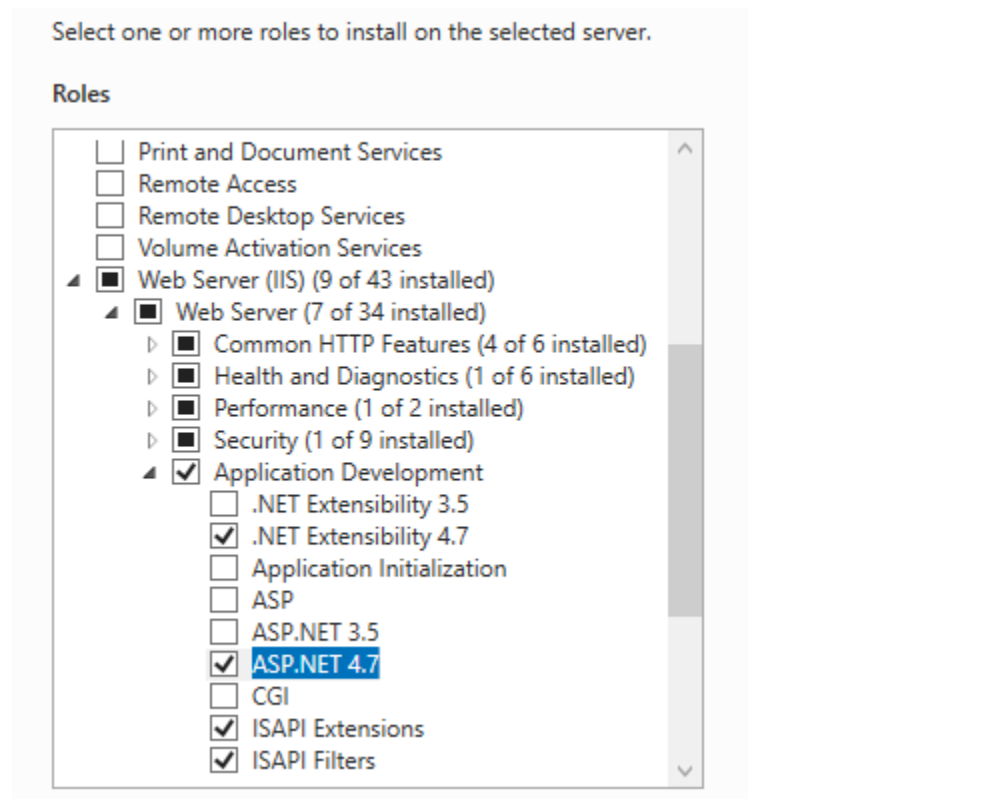
### 3.1.1. Adding Roles and Features



In this example the ASP.NET is 4.5 choose the version available to you



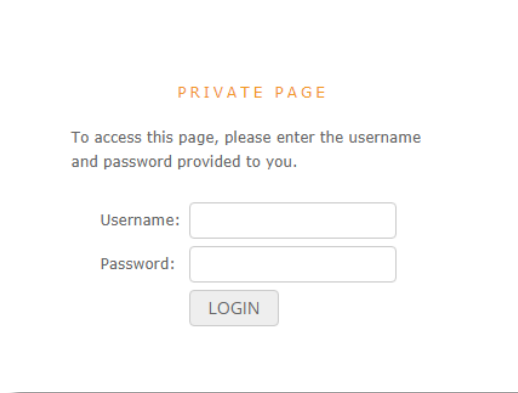
In this example the ASP.NET is 4.7; choose the version available to you



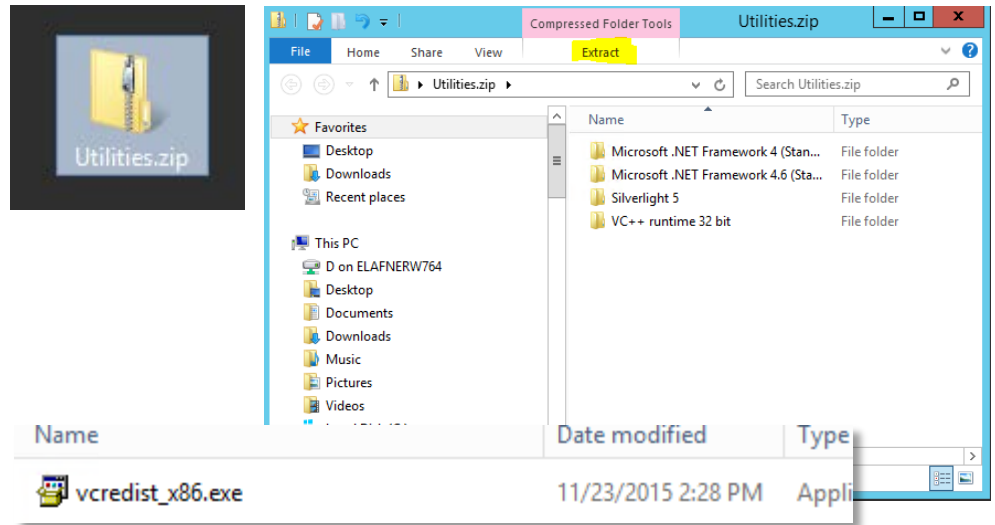
### 3.1.2. Installing Silverlight and C++

1. To install Silverlight the first thing we need to do is obtain the utilities folder

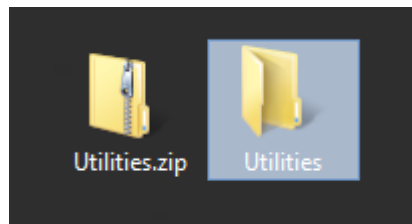
This can be found at <https://www.impacttech.com/support/customer>



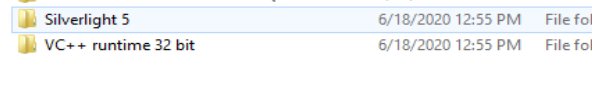
2. Once we have the utilities folder we are going to need to unzip the file.



- Under Compressed Folder tools select Extract.



- Go into the unzipped Utilities folder



Let's start with Silverlight.

- Open up the Silverlight 5 file



- Run the Silverlight\_x64.exe and follow the prompts on screen

Now let's go back to the unzipped Utilities folder and install C++

- Select the VC++ runtime 32 bit folder
- Inside the folder run the vcredistX86.exe and follow the prompts on screen

Silverlight and C++ are now installed.