ActiveAnalytics A Business Intelligence Solution for MFT Server

Installation Guide August 2021: Version 1.0

Advanced Systems Concepts, Inc. <u>http://www.advsyscon.com</u>

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Introduction

ActiveAnalytics is a BI reporting and analytics platform that allows you to track the performance of your managed file transfers. You can monitor key performance indicators through the dashboard, and easily drill down into the supporting reports for in-depth data. Key performance indicators include MFT Server triggers, logins and transfers.

This guide covers how to install, uninstall, and configure ActiveAnalytics and its related components. The installation includes detailed instructions on how to install the application on a Windows and Linux operating system. The assumption is the individual performing the installation is familiar with the systems they are working with.

Installation Prerequisites

MFT Server Requirements

- 1) The MFT Server application must be running on version 12.1.22 or higher.
- 2) The MFT Server system database must be one of the following types:
 - Microsoft SQL Server
 - MySQL
 - Oracle
 - Postgres

See the image below, taken from the MFT Server Admin web application. In the Settings > Datastore tab you will find information that identifies the MFT Server system database.

Status Domains Ke	eys Settings Help -	
Manager Service	Datastore	
Datastore	DATABASE	
Web	JDBC URL*	jdbc:sqlserver://localhost:1433;databaseName=MFTDB
JDBC Drivers	Username*	Test
🗟 Email	Password	•••••
Failover	Pool	100 🛟 connections
🗟 Search Index	Pool timeout	10 🔷 sec
₪ JMX	Synchronize data every	1 🛟 min 🗸

- 3) The domain-level Logging > Service > "Log to" field must be configured in one of two ways for ActiveAnalytics to include the domain in its reports:
 - a) Set the Log to field to "system database" (easiest option)

-or**b)** Set the *Log to* field to "database", then configure the logging JDBC URL field to match the MFT Server system database URL, depicted in the image above.

 This option is most beneficial for existing MFT Server environments where the *Log to* field is already configured this way. Nothing will need to be changed for the domain to be included in the ActiveAnalytics reporting.

Data for the domain will not be included in ActiveAnalytics if the *Log to* field is set to "file", or "database" *and* the database is not the same as the MFT Server system database. Configuring a separate database for logging is supported, just as using a file is supported, but it is not supported by ActiveAnalytics. System and logging data must be stored in the same database to be compatible with ActiveAnalytics.

See the image below taken from the MFT Server Admin UI. It depicts the "Log to" field that the above description is referring to.

Overview	Running Search	Results Service Syslog Settings
😽 Services		
🖧 Keys	Log to	system database
	Clear records	database is lif selected, the JDBC URL must be the same as Settings > Datastore
In Reports		system database

Please note, it is recommended that you set the "Clear records older than" field. When enabled, old log records will automatically be deleted by the system. If the log file grows unchecked over a long period of time, it may negatively affect dashboard performance.

Log to	system database	
Clear recor	rds older than 30	¢ day(s)

Since logging is a domain-level setting, this means that multiple MFT Server domains are supported by ActiveAnalytics, providing the *log to* property adheres to the requirements specified above. The ActiveAnalytics reports will provide the domain name in tabular data where appropriate.

Multiple MFT Server instances

You can configure a single installation of ActiveAnalytics to report on multiple MFT Server instances. The MFT server version and logging considerations described above apply.

One caveat is the ActiveAnalytics dashboard and reports (stored in a "YFX" file) must be imported for each instance of MFT server you wish to report on. By default, multiple MFT Server imports will have the same ActiveAnalytics dashboard name. To distinguish one dashboard from another, an ActiveAnalytics Administrator should change the dashboard name(s), which is described in the <u>Multiple Instances of MFT Server</u> section of this guide.

General information

In many cases a source database for the MFT Server you are generating reports for may exist prior to ActiveAnalytics being provisioned. The requirements are different based on the type of database system in use, and the amount of data in the system. For example, a MySQL instance with 10,000 rows of data, will provide much faster query times than a MySQL instance with 10,000,000 rows of data on the same hardware.

It is important that the MFT server's database system can handle the queries that ActiveAnalytics will generate. It is also important to understand that a single ActiveAnalytics dashboard, with 5 reports, will generate 5 concurrent database queries on a source database. Ensuring these queries can be completed quickly will ensure that the dashboard loads in a reasonable time.

ActiveAnalytics Application Server Requirements

The ActiveAnalytics application manages all of the functions of the environment. It is only necessary to install the ActiveAnalytics application on a single computer that can be accessed by all ActiveAnalytics users.

The ActiveAnalytics server requirements are largely dependent on the types of reports run and the browsing habits of concurrent users. It is important to provision an environment that is capable of delivering a responsive environment for users based on these factors.

It is highly recommended that ActiveAnalytics be installed on a server that is separate from the main application (i.e. MFT Server).

Below you will find minimum functional application server requirements (1st table), followed by recommended functional requirements (2nd table).

The ActiveAnalytics service will start on the following server specification described below.

Requirement	Minimum Functional Specification
Processor	1 x single core 1GHz 32-bit CPU or equivalent
RAM	3 GB (2.5 GB allocated to ActiveAnalytics)
Hard Disk	1 GB free space
Operating System	Any operating system that can support a JRE 9 installation
Database	Local database on the same server

Note: This specification is only recommended for a single concurrent user. Use of reports on large volumes of data may slow the machine and cause ActiveAnalytics to use more memory than available. 32-bit machines are not recommended, as it enforces a hard limit on the amount of memory that can be allocated to ActiveAnalytics.

The recommended server configuration below would suit an environment of up to roughly 25 concurrent users with average content complexity.

Requirement	Recommended Minimum Specification
Processor	1 x quad core (8 thread) 3GHz 64-bit CPU or equivalent
RAM	8 GB (7.5 GB allocated to ActiveAnalytics)
Hard Disk	5 GB HDD free space
Operating System	Windows Server, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, or Ubuntu Server LTS
Java	JRE 9
Database Driver	The driver used by ActiveAnalytics to communicate with the MFT Server database. The database types supported include MySQL, MS SQL Server, Oracle and Postgres. Note: ActiveAnalytics comes bundled with a MS SQL Server database driver. Therefore, you do not need to upload a driver to your ActiveAnalytics system when using SQL Server, but you do for the remaining database types.
Web Application Server	Tomcat
Web Server	Tomcat

Note: The specifications above are for a dedicated ActiveAnalytics Server, with no other significant software running on the server other than the operating system. Running a database or other software on the same server would require additional RAM and CPU to meet the recommended minimum specification.

ActiveAnalytics Repository Database Requirements

ActiveAnalytics uses a database to store its configuration and operational information, including metadata, such as user permissions, report structure, and data connections. This database is known as the ActiveAnalytics database. This is separate from the main application's source data (MFT Server database) used for your ActiveAnalytics reports, dashboards, etc. Note: The ActiveAnalytics database does not have to be the same type as the MFT Server database.

If installing ActiveAnalytics on a laptop or notebook computer for personal evaluation, it is recommended that the database server hosting the ActiveAnalytics database should also be installed on the same laptop/notebook. Similarly, for a shared evaluation, the database server hosting the ActiveAnalytics database can be hosted on the same server as the ActiveAnalytics application, or on a different server.

For a production environment, it is strongly recommended that the database server hosting the ActiveAnalytics database is not on the same server as the ActiveAnalytics application.

Requirement	Recommended Minimum Specification
Processor	1 x dual core (4 thread) 3 GHz 64-bit or equivalent
RAM	4 GB
Hard Disk	15 GB (preferably SSD or RAID based storage)
Database	One of the following: MySQL 5 Oracle Database 9+ Microsoft SQL Server 2000+

Recommended Repository Database Requirements

ActiveAnalytics ships with a Microsoft SQL Server database driver bundled with the installer. Drivers for MySQL and Oracle are not included with the installer and must be downloaded before you begin the installation process. You can download the JDBC driver (jar file) for MySQL or Oracle from your preferred database provider's website. During the installation, you will be prompted to enter the location of the driver.

The database server information you will need to enter during the installation will vary depending on the type of database selected. See the table below, which identifies what you will need to know when you reach the database portion of the installation. This chart offers a high level look at database detail requirements. More information about database details can be found in the Installation section of this guide.

Installation Details	MySQL	MS SQL Server	Oracle
Database server host address	~	>	v
Database server port number	>	>	v
Database name	v	>	
Database username/password	v	✓ ¹	✓ ²
Instance Type: Default or Named		>	
Create new database (optional)	v	>	
Create new database user (optional)	v	>	
DB Administrator username/password (required only if "create new database" or "create new database user" is selected)	~	~	
SID or Service name			v

¹ MS SQL Server supports database or Windows authentication.

² Oracle supports database or Kerberos authentication.

License File

The ActiveAnalytics application requires a licence key to enable the software. This license allows access to your purchased software plan.

You will receive a license as a .LIC file. Download and save this file on your computer. You will need the location and name of this license key during the installation process. Please note if the license file is not readily available during the installation, it can be added later. You will be prompted to add the license when you launch the ActiveAnalytics web user interface. Instructions on how to apply the license post-installation are described in this <u>section</u>.

Installation and Post Installation Files

The files required to install and configure ActiveAnalytics can be downloaded from the Advanced Systems Concepts, Inc. website. <u>www.advsyscon.com</u>. Login to MyASCI and navigate to the Product Updates page.

Installation File

For a Windows installation, download ActiveAnalytics.exe For a Linux/Unix or Mac OS X installation, download ActiveAnalytics.jar

Post Installation File

Post Installation configuration requires importing the ActiveAnalytics dashboard and reports. The import file is a "YFX" file. You must download the YFX file that matches the database type you are using for the MFT Server system database.

Download one of the following:

MFT - MySQL.yfx MFT - Oracle.yfx MFT - Postgres.yfx MFT - SQL Server.yfx

Installation

Standard Graphical Installer - Windows, Unix/Linux and Mac OS X

The standard graphical installer must be used to install ActiveAnalytics on a Windows system. For Unix/Linux and Mac OS X environments, you have two installation options, a GUI or command-line installer. This section provides step-by-step instructions for the GUI installation.

There are a few minor differences when using the GUI to install ActiveAnalytics on a Windows system versus a non-Windows system.

- The installer file names are different.
- The look and feel of the GUI installer (e.g font type, size, etc.) is different.
- You will not be asked if you would like to run the application as a Windows service when installing the application on a non-Windows system.

Start the Installer

To start the Windows installer, run **ActiveAnalytics.exe** as an administrator. To start the Linux/Unix or Mac OS X installer, run **ActiveAnalytics.jar**.

The images in this example were taken when performing a Windows installation.

A User Account Control (UAC) window will appear, prompting you "Do you want to allow this app from an unknown publisher to make changes to your device? - ActiveAnalytics.exe" Click Yes.

Start Window

ActiveAnalytics	1.0 Installer		_		×
	🛃 Please read the following information:				
<u></u>					
0					
<i>»</i>	<i>Active</i> Analytics				
0					
	Critical insights To Optimize Your Automation & MFT				
09	Platforms: Windows, Mac OS X, Linux, Unix				
	• Java: Java SE 9 or later				
Advanced Sys	tems Concepts				
		Next		<mark>8</mark> Qui	t

The welcome screen describes installation prerequisites. Review the information and click the Next button to continue, or click the Quit button at any time to exit the installation.

Terms and Conditions

ActiveAna	alytics 1.0 Installer	_		\times
	🔌 This software product is subject to a license agreement.			
ñ	END-USER SOFTWARE LICENSE AGREEMENT			^
	PLEASE READ THIS END-USER SOFTWARE LICENSE AGREEMENT ("EULA") C BEFORE DOWNLOADING, INSTALLING, COPYING, ACCESSING OR OTHERWISE PRODUCT (DEFINED BELOW) AND DOCUMENTATION TO WHICH THIS EULA RE	AREFULI USING LATES.	LY THE BY	
0	ACCEPTING THIS EULA, WHICH YOU CAN DO SO BY CLICKING THE ACCEPT DOWNLOADING, INSTALLING, COPYING, ACCESSING OR OTHERWISE USING YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS SET OUT BELOW	BUTTON THE PRO	N, ODUCT,	
<i>></i>	THIS EULA IS A LEGAL AGREEMENT BETWEEN YOU AND YELLOWFIN INTERN LTD A.C.N. 107 122 234 ("YELLOWFIN") AND EACH REFERRED TO AS A	ATIONAI "PARTY'	L PTY ". IN	
0	THIS EULA "YOU" REFERS TO THE INDIVIDUAL WHO HAS ACCEPTED THE T EULA. IF THE INDIVIDUAL WHO HAS ACCEPTED THE TERMS OF THIS EULA ON BEHALF OF AN ENTITY. THEN "YOU" ALSO REFERS TO THAT ENTITY.	ERMS OF IS DOT	F THIS ING SO ARE	
	ACCESSING THE PRODUCT ON BEHALF OF AN ENTITY, YOU REPRESENT AND YOU HAVE THE AUTHORITY TO ALSO AGREE TO THESE TERMS ON ITS BEHA	WARRAN	NT THAT	
09	"YOU" COMPRISES TWO (2) OR MORE PERSONS, THEN EACH OF THE PERSO "YOU" ARE BOUND BY THIS AGREEMENT SEVERALLY. THE EULA WILL ALSO APPLICABLE TO THE USE OF THE PRODUCT ON A TRIAL BASIS.	BE	PRISING	,
	IF YOU DO NOT AGREE TO THESE TERMS AND CONDITIONS: DO NOT INSTA PRODUCT; OR IF YOU ACCESSED THE PRODUCT ELECTRONICALLY, CLICK	LL OR (JSE THE	:
	I accept the terms of this license agreement.	N ALL (JUPIES	*
	\bigcirc I do not accept the terms of this license agreement.			
Advanced Sy	stems Concepts	Next	🚫 Qu	it

When you have read the license agreement, select the "I accept the terms of this license agreement" option to agree, and click the Next button to continue.

License File

ActiveAna	lytics 1.0 Installer	_		×
	A valid ActiveAnalytics license file is required to install and use ActiveAnalytics. If you do not have a license ActiveAnalytics supplier.	file, plea	se see yo	Jr
	Culletive Applytics License Telder/License Lic		Province	
	C. AcuveAnalyucs License Folden License.lic		browse.	
Advanced Sys	stems Concepts			
	Previous	Next	🙁 Qi	uit

Select the ActiveAnalytics license file that you received from Advanced Systems Concepts, Inc. by clicking on the Browse button and locating it. Once selected, click the Next button to continue.

Note: If you do not have the license file readily available, you can skip this step and upload the file after the installation, using the ActiveAnalytics web interface. For more details, see the <u>Post</u> <u>Installation</u> section of this guide.

General Options - Port, Windows Service, Memory

ActiveAnalytics 1.0 In:	staller –	-		\times
	General Options			
<u></u>				
0	Web Server Port			
P	Web Server Port: 8080			
0	Windows Service			
9	ActiveAnalytics can be installed as a Windows service, allowing it to automatically run when the se	erver s	tarts.	
	Application Memory ActiveAnalytics should be configured to use at least 2GB of Memory. By default the installer will al of the system's memory to the application. If you are running other applications on the system, o low memory environment, you may need to configure this setting.	llocate r runni	75% ng in a	
	Memory (in MB): 6656			
Advanced Systems Concep	pts			
	Previous Nex	t	💙 Qı	uit

This screen enables you to select main configuration options for ActiveAnalytics.

<u>Web Server Port</u> - This configuration option allows you to set the port number to which the ActiveAnalytics application will listen for web browser requests. By default, all web browsers send requests using port 80. Select a port number which is not currently in use by another application on the machine. Port numbers like 8080, 8081 and so on are good candidate port numbers. If there are no other web servers on the machine that ActiveAnalytics is being installed on, accept the default port

number of 8080. If there are already web servers installed on the machine that ActiveAnalytics is being installed on, then there may be port clashes and ActiveAnalytics will fail to function correctly.

<u>Windows Service</u> - This configuration enables you to install ActiveAnalytics as a Windows Service on the server. This option will only appear during an installation on a Windows platform.

<u>Application Memory</u> - This configuration lets you specify a memory size (in MB) that should be used by ActiveAnalytics. ActiveAnalytics should be configured to use at least 2GB of memory. By default, the installer will allocate 75% of the system's memory to ActiveAnalytics, but this size can be changed here. A warning message will pop up if the memory size is less than 2GB.

Click the Next button to continue.

Database selection

ActiveAnalytics 1.0 In	nstaller – 🗆	\times
ñ	ActiveAnalytics Database Details	
<u>_</u>		
0	Please select the type of database you will be installing ActiveAnalytics into.	
<i>P</i>	Database type: Microsoft SQL Server Microsoft SQL Server MySQL Oracle	
0	Urdue	
S		
Advanced Systems Conce	epts	
	C Previous Next S Qu	it

This is the database that stores all the ActiveAnalytics content definitions, configuration information, and event details.

Three types of databases are supported for the ActiveAnalytics database: Microsoft SQL Server, MySQL and Oracle. If MySQL or Oracle is the selected database, the next window will prompt you to upload a JDBC driver, since they are not packaged with the ActiveAnalytics installer. A driver for MS SQL Server is packaged with the installer, so when that database type is selected, the JDBC driver selection window will be skipped.

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After selecting the desired database type, click the Next button to continue.

Click on the link below to continue with the installation instructions, which will vary depending on the type of database you are using.

<u>MySQL</u> configuration details <u>Microsoft SQL Server</u> configuration details <u>Oracle</u> configuration details

MySQL Database

Database Driver

A	ActiveAnalytics 1.0 Ins	taller				_		×
	ñ	ActiveAnaly	rtics Databa	ise Det	ails			
:								
	i	Please select the type of d	atabase you will be install	ing ActiveAnaly	tics into.			
	P	Database type:	MySQL	~				
	~	A valid JDBC Driver is requi	ired to connect to this dat	abase type.				
	\mathbf{O}	Select the JDBC Driver	file(s):					
	0					Prow:	se	
	3							
Ad	vanced Systems Concep	ots				Nevt		iit
					Frevious	MEAL	₩ Q	are

When MySQL is selected, you will be prompted to upload the JDBC driver required to connect to the ActiveAnalytics MySQL database. Click on the Browse button and choose the location where the driver is stored. Note, if you skip this step the installation will fail with an error message that states: "An error occurred during installation: java.lang.Exception: Error creating DBinterface: couldn't load driver".

After selecting the driver, click the Next button to continue. The window below is what you will see, which requires you enter MySQL configuration details.

MySQL Database

ActiveAnalytics	s 1.0 Installer – 🗆 🗙
	ActiveAnalytics Database Details
	Database Server Location
1	Server Host:
	Server Port:
	Database Name:
	Create new database
	Database User
~	Username:
	Password:
	Create new user
0	Administrator User
S	A database administrator user is required to create the database. Please enter credentials of a user that has administrator-level access to the database server.
	Username:
	Password:
Advanced Systems	s Concepts
	Previous

By default, "Create new database" is checked. The "Administrator User" section is visible only when "Create new database" and/or "Create new user" is checked. The MySQL database details (fields) depicted in this image are defined <u>here</u>.

MS SQL Server Database

The window below is what you will see when you select MS SQL Server as the database type. You will need to enter database configuration details.

n	Patabase Server Location
	Server Host
	Server Post
A	Instance Type: Default Instance
	O Named Instance
	Database Name:
	Create new database
~	
	Authentication Dataile
_	
	Windows Authentication
<u>ğ</u>	Database User
	Username:
	Password:
	Create new user
	Administrator User
	A database administrator user is required to create the database. Please enter credentials of a user that has
	administrator-level access to the database server.
	Username:
	Password:

By default, "Create new database" is checked. The "Administrator User" section is visible only when "Create new database" and/or "Create new user" is checked. The SQL Server database details (fields) depicted in this image are defined on the next page.

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MySQL and MS SQL Server Database Details - Defined

MySQL and MS SQL Server require several of the same database details. The details for both database types are defined in this section. Any option that applies to one type of database and not the other will be noted.

Database Driver - *MySQL only*. Enter the location to the previously downloaded JDBC driver jar file. Please note, this file should be available at your preferred database provider's website.

Database server host address - The hostname or IP address of the database server hosting the ActiveAnalytics database. If the database is on the same computer as the ActiveAnalytics application, enter localhost.

Database server port number - The network port number - (e.g. 3306 if using MySQL) of the database hosting the ActiveAnalytics database.

Database name - The name of the ActiveAnalytics database.

Database username/password - The username and password of the database user that has full read and write privileges on the new ActiveAnalytics database. *For MS SQL Server only*, a Windows or SQL Server database account can be specified.

Confirm Password - Re-enter the password of the database server user account that has access to the ActiveAnalytics database. This is only required if creating a new database user.

Authentication - *MS SQL Server only.* The type of authentication being used to access the ActiveAnalytics database. If Windows is selected, you must also provide the user's Logon Domain, as depicted in the image below.

Authentication Details			
Authentication: O SQL Server Authentication			
	Windows Authentication		
Logon Domain:			

Instance Type: Default instance or Named instance - *MS SQL Server only*. This is the default SQL Server instance name or a "named instance". When "named instance" is selected, you must enter a SQL Server instance name, as depicted in the image below.

Instance Type:	O Default Instance
	Named Instance
Instance Name:	

Create new database - If the database does not exist on the database server, this option (checked by default) will allow the ActiveAnalytics installer to create a new database to host the ActiveAnalytics database using the database name previously entered. When this option is checked, you must enter a database Administrator username and password.

Create new user - If the database user does not exist on the database server, check this option to allow the ActiveAnalytics installer to create a new database user account to access the ActiveAnalytics database. When you check this option you must enter a database Administrator username and password.

Note: *For MS SQLServer only*, this option is available when SQL Server authentication has been selected. It does not apply when using SQL Server Windows authentication.

Administrator Username/password - The Administrator username and password for the account that has administrative privileges on the database server that will host the ActiveAnalytics database. You are only required to enter this information if the "create new database" option and/or the "create new user" option is checked.

After configuring the fields, click here to continue with installation instructions.

Oracle Database

Database Driver

ActiveAnalytics 1.0 Installer		_		×
ñ	ActiveAnalytics Database Details			
0	Please select the type of database you will be installing ActiveAnalytics into.			
P	Database type: Oracle ~			
n	A valid JDBC Driver is required to connect to this database type.			
		📔 Browse		
S				
Advanced Systems Conce	epts			
	S Previous	Next	🔕 Qui	t

When Oracle is selected, you will be prompted to upload the JDBC driver required to connect to the ActiveAnalytics Oracle database. Click on the Browse button and choose the location where the driver is stored. Note, if you skip this step the installation will fail with an error message that states: "*An error occurred during installation: java.lang.Exception: Error creating DBinterface: couldn't load driver*".

After selecting the driver, click the Next button to continue. The window below is what you will see, which requires you enter Oracle configuration details.

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Oracle Database

A ActiveAn	lytics 1.0 Installer – 🗆	\times
	ActiveAnalytics Database Details	
n	Database Server Location	-
	Server Host: Server Port:	
Ô	 Connect using Oracle SID Connect using Oracle Service Name 	
>	SID:	_
0	Authentication Details	
-	Authentication: () Username/Password	
	() Kerberos	
03	Database User Username:	
	Password:	
Advanced Sy	tems Concepts Previous Next Quit	

The above image depicts the details required when you select the Oracle database type. The fields will be defined shortly. But first, know that if the "Connect using Oracle Service Name" option is selected, and/or if "Kerberos" is selected, you will see the installation window updated as depicted in the image below.

A ActiveA	nalytics 1.0 Installer			_		×
	ActiveAnalyt	ics Database	e Details			
п	Database Server Loc	ation				
	Server Host:					
	Server Port:					
		O Connect using Oracle S	ID			
U		Connect using Oracle S	ervice Name			
	Service:					
6						
n	Authentication Detail	s				
	Authentication:	O Username/Password				
\odot		 Kerberos 				
\leq	Kerberos File Path:					
9						
-						
_						
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			••••••			

Oracle Database - Includes Service Name and Kerberos File Path

The Oracle database details (fields) depicted in the above two images are defined on the next page.

Oracle Database Details - Defined

Database Driver - Enter the location to the previously downloaded JDBC driver jar file. Please note, this file should be available at your preferred database provider's website.

Database server host address - The hostname or IP address of the database server hosting the ActiveAnalytics database. If the database is on the same computer as the ActiveAnalytics application, enter localhost.

Database server port number - The network port number of the database hosting the ActiveAnalytics database.

Connect using Oracle SID or Connect using Oracle Service Name - The SID or Service Name for the Oracle database.

Authentication

- **Database** The username and password of the database user that has full read and write privileges on the new ActiveAnalytics database.
- **Kerberos File Path** The file with the Kerberos account that has full read and write privileges on the new ActiveAnalytics database. When Kerberos is selected, the database username and password fields are removed and replaced with a field to specify the Kerberos file.

After configuring the fields, click here to continue with installation instructions.

Validate the Database Connection

After configuring the ActiveAnalytics Database details and clicking Next, you will be prompted to validate the connection details. It is recommended that you test the connection to make sure a connection to the database can be established. Click Yes to validate, No to Continue, or Cancel to remain on the current page of the installer.

Validate	Validate Connection Details X						
?	Do you wish to validate the connection details entered? The installer will attempt to connect to the database using the inform	nation entered.					
	Yes No Cancel						

You will see a "Connection was successful" message if you test the connection, and it tests successfully.

Messag	e	Х
1	Connection was successful.	
	ОК	

Installation Path

The default installation path is Program Files\ActiveAnalytics. If you keep the default path, ActiveAnalytics must always run as an administrator.

ActiveAnalytics 1.0 Install	ler	_		
ñ				
6				
~	Select the installation path:			
0	C: \Program Files \ActiveAnalytics	실 Browse		
	Installing under Program Files requires that ActiveAnalytics is a Administrator.	lways run as an		
Advanced Systems Concepts	C Previous	> Next	🔀 Quit	

Enter the Installation Path. Click Next to continue. The installation will take place. A progress bar will update as the installation runs.

Installation in Progress

ActiveAnalytics 1.0 Installer	-		×
0			
Undating database			
Advanced Systems Concepts		•	
Previous Vext		🔇 Quit	1

Installation Complete

When the installation completes successfully, a completion window will appear.

Observe the details on this page that include how to start the application, and how to access it using your web browser. Also displayed on this page is the username and password of the ActiveAnalytics System Administrator. You will use this account when logging into the ActiveAnalytics application.

Please make sure you start the application, as it is not automatically started. The instructions are on the next page.



Start and Stop the ActiveAnalytics Application

After the installation, ActiveAnalytics needs to be started.

- 1) When the application is installed on a Windows system:
 - If "Install Windows service" was checked during the installation, you can use the Windows Services feature to start and stop the application. The service name is ActiveAnalytics. The service's display name is ActiveAnalytics Apache Tomcat 9.0.
 - If "Install Windows service" was not checked during the installation, you can start it by running the startup.bat file located in: installation folder > appserver > bin. You can stop it by running shutdown.bat located in the same folder.
- 2) When the application is installed on a non-Windows system, you can start and stop it by running startup.sh and shutdown.sh. Both files are located in the installation folder > appserver > bin directory.

After starting the application, you must perform an import of the ActiveAnalytics dashboard and reports. Click <u>here</u> for more information.

Command-line installer - Linux/UNIX and MAC OS X

This section describes how to install ActiveAnalytics on a non-Windows system using the command-line. This is not supported on a Windows system. The images in this example were taken when performing a linux installation.

Run the Installer

To run the installer using the command-line, type: java -jar ActiveAnalytics.jar -cmd

Installation Directory



Enter the name of the Installation directory (a directory of your choosing). Press enter to continue.

License File



Enter the location of the ActiveAnalytics license file. Press enter to continue.

Note: If you do not have the license file readily available, you can press enter, and when prompted as per the image below, select "y" to skip this item and continue with the installation. For details on how to provide license information after the installation, see the <u>Post Installation</u> section of this guide.

Continue without specifying a license file? (y/n) [n]
General Options - Port and Memory

Port

Enter the installation directory: /opt/ActiveAnalytics Enter the location of the ActiveAnalytics license file: /home/qal/License.lic Enter the ActiveAnalytics web server port: [8080]

This configuration option allows you to set the port number to which the ActiveAnalytics application will listen for web browser requests. By default, all web browsers send requests using port 80. Select a port number which is not currently in use by another application on the machine. If there are no other web servers on the machine that ActiveAnalytics is being installed on, accept the default port number of 8080. If there are already web servers installed on the machine that ActiveAnalytics is being installed on, then there may be port clashes and ActiveAnalytics will fail to function correctly.

Enter a port number, or press enter to accept the default value of 8080 and continue.

Memory

Enter the installation directory: /opt/ActiveAnalytics Enter the location of the ActiveAnalytics license file: /home/qal/License.lic Enter the ActiveAnalytics web server port: [8080] 8080 Enter the amount of memory to be used for ActiveAnalytics in MB: [2891] 2891

This configuration lets you specify a memory size (in MB) that should be used by ActiveAnalytics. ActiveAnalytics should be configured to use at least 2GB of memory. By default, the installer will allocate 75% of the system's memory to the ActiveAnalytics, but this size can be changed here. A warning message will pop up if the memory size is less than 2GB.

Enter the amount of memory in MB, or press enter to accept the default value and continue.

Database



Select the type of database. This is the database that stores all the ActiveAnalytics content definitions, configuration information, and event details. Three types of databases are supported for the ActiveAnalytics database: Microsoft SQL Server, MySQL and Oracle. Enter the number that corresponds to the database type you are using.

If MySQL or Oracle is the selected database, you will be prompted to upload a JDBC driver, since they are not packaged with the ActiveAnalytics installer. A driver for Microsoft SQL Server is packaged with the installer, so when that database type is selected, the JDBC driver selection prompt will be skipped.

Click on the link below to continue with the installation instructions, which will vary depending on the type of database you are using.

<u>Microsoft SQL Server</u> details <u>MySQL</u> configuration details <u>Oracle</u> configuration details

MS SQLServer Database

The intent in this section is to highlight what you will need to know when you select MS SQLServer as the ActiveAnalytics database. The details (fields) that you must enter are defined <u>here</u>.

When Microsoft SQL Server database type is selected (1), you will be prompted to enter the information depicted below, which includes Server Host, Port, and Instance Type.

You have two choices with the Instance Type requirement. When 1 is selected, the Default Instance is used and no further information is required.

```
Please select the type of database you will be installing ActiveAnalytics into.
  1 Microsoft SQL Server
  2 MySQL
  3 Oracle
Database type? (1-3) 1
Please enter the following database connection details.
  Server Host: localhost
  Server Port (leave blank for default): 1433
  Instance Type:
    1) Default Instance
    2) Named Instance
    Instance Type (1-2) [1] 1
```

Instance Type - When option 2 (Named Instance) is selected.

```
Instance Type:

1) Default Instance

2) Named Instance

Instance Type (1-2) [1] 2

Instance Name:
```

You must enter the SQL Server Instance Name, as depicted above.

Next, you will be prompted to Create new database (y/n) - Yes

```
ActiveAnalytics can be installed into an existing empty database, or the
installer can create a new database to install into.
Create new database? (y/n) y
Please enter the database name. The installer will create a new database
with this name.
Database Name: ActiveAnalytics
```

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If you select "y" for yes, as depicted above, you will be prompted to enter the new database name. In addition, later in the installation, you will be prompted to enter a database administrator's credentials, which will be used during the creation of the database.

Create new database (y/n) - No



If you select "n" for No, you will be prompted to enter the existing database name, as depicted above.

Next, you will be prompted to select the Authentication Type - SQL Server or Windows.

```
Please select the authentication type you wish to use to connect to
Microsoft SQL Server.

1) SQL Server Authentication

2) Windows Authentication
Authentication type? (1-2) [1] 1

ActiveAnalytics can use an existing database user to connect to the
configuration database, or the installer can create a new user.

Create new user? (y/n) y

Please enter the username. A new database user with this username will be
created and given full access to the database "ActiveAnalytics".

Username: UserA

Password:
```

When 1 is selected (SQL Server authentication) as depicted above, you will then be prompted to "Create new user?" (y/n). When "y" (yes) is selected, you will be prompted to enter the database username and password, as depicted above.

Next, when you select yes to create a new user, you are required to enter a database administrator's credentials. You will also be prompted to enter this information if you opted to create a new database.

ActiveAnalytics can use an existing database user to connect to the
configuration database, or the installer can create a new user.
Create new user? (y/n) y
Please enter the username. A new database user with this username will be created and given full access to the database "ActiveAnalytics".
Username: UserA Password:
A database administrator user is required to create the database and user. Please enter credentials of a user that has administrator-level access to the database server.
DBA Username: qal DBA Password:
Installing
Extracting distribution
Cleaning up installation[OK]
Updating configuration
Setting up database

After entering the database administrator user information and pressing enter, the installation will begin, as depicted above.

Alternatively, if you select "n" (no) to create a new user account, you are prompted to enter an existing database user, as depicted below.

ActiveAnalytics can use an existing database user to connect to the configuration database, or the installer can create a new user. Create new user? (y/n) N Please enter the username. This must be an existing database user that has full access to the database "ActiveAnalytics". Username: UserA Password:

The installation will begin after entering existing database credentials, providing "Create new database" is set to no. If it is set to yes, you will be prompted to enter a database administrator's

credentials. After the credentials are entered, no additional information is required and the installation will begin.

When Windows authentication type is selected (option 2), as depicted below, you must enter the logon domain and windows account. After doing so, if "create new database" is set to yes, you will be prompted to enter administrator credentials, and when complete, the installation will automatically begin. If "create new database" is set to no, the installation will begin after entering the windows credentials. Note, the installer does not have a "create new user" option when Windows authentication is selected.

```
Please select the authentication type you wish to use to connect to

Microsoft SQL Server.

1) SQL Server Authentication

2) Windows Authentication

Authentication type? (1-2) [1] 2

Please enter the logon domain: advsyscon

Please enter the username. This must be an existing database user. They

will be given full access to the database "ActiveAnalytics".

Username: UserA

Password:
```

Click here for MS SQL Server configuration details (defined).

MySQL Database

The purpose of this section is to highlight what you will encounter when you select MySQL as the ActiveAnalytics database. The details (fields) that you must enter are described <u>here</u>.

When MySQL is selected you will be prompted to enter the location of the JDBC driver. Note, this file should be available for download at your preferred database provider's website.



Next, you will be prompted to enter the Server Host and Server Port.



Next, you will be prompted to Create new database (y/n) - Yes



If you select "y" for Yes, as depicted above, you will be prompted to enter the new database name. When Yes is selected, you will also be required to enter a database administrator's credentials later in the installation.

Create new database (y/n) - No

```
ActiveAnalytics can be installed into an existing empty database, or the installer can create a new database to install into.
Create new database? (y/n) n
Please enter the database name. This should be an existing empty database. The installer will create the required tables in this database.
```

Database Name: ActiveAnalytics

When no is selected, you will be prompted to enter the existing database name, as depicted above.

Next, you will be prompted to Create new user (y/n) - Yes



If "y" (yes) is selected, you will be prompted to enter the new database username and password, as depicted below. You will also be prompted to enter a database administrator account when this is set to Yes. The administrator account is also required when "create new database" is set to Yes. In this example, both the database and database user are being created by the installer.

```
Please enter the username. A new database user with this username will be
created and given full access to the database "ActiveAnalytics".
Username: MyUser
Password:
A database administrator user is required to create the database and
user. Please enter credentials of a user that has administrator-level
access to the database server.
DBA Username: root
DBA Password:
```

Create new user (y/n) - No

```
ActiveAnalytics can use an existing database user to connect to the
configuration database, or the installer can create a new user.
Create new user? (y/n) n
Please enter the username. This must be an existing database user that
has full access to the database "localhost".
Username: root
Password:
```

When "n" (no) is selected, you will be prompted to enter the existing database username and password, as depicted above.

After the required credentials are provided (user name/password and possibly the Administrator credentials - depending on selections made), the installation will automatically begin.

The details (fields) that you must enter are defined here.

MySQL and MS SQL Server Database Details - Defined

MySQL and MS SQL Server require several of the same database details. The details for both database types are defined in this section. Any option that applies to one type of database and not the other will be noted.

Database Driver - *MySQL only*. Enter the location to the previously downloaded JDBC driver jar file. Note, this file should be available for download at your preferred database provider's website.

Server Host - The hostname or IP address of the database server hosting the ActiveAnalytics database. If the database is on the same computer as the ActiveAnalytics application, enter localhost.

Server Port - The network port number - (e.g. 3306 if using MySQL) of the database hosting the ActiveAnalytics database.

Database name - The name of the ActiveAnalytics database.

Database username/password - The username and password of the database user that has full read and write privileges on the new ActiveAnalytics database. *For MS SQL Server only*, a Windows or SQL Server user account can be specified.

Authentication - *MS SQL Server only.* The type of authentication being used to access the ActiveAnalytics database. If Windows is selected, you must also provide the user's Logon domain.

Instance Type: Default instance or Named instance - *MS SQL Server only*. This is the default SQL Server instance name or a named instance. When "named instance" is selected, you must enter a SQL Server instance name.

Create new database (y/n) - If the database does not exist on the database server, entering "y" (yes) means the ActiveAnalytics installer will create a new ActiveAnalytics database using the database name you will be prompted to enter next. When the installer creates the database, it is also required that you enter a database administrator user credential. You will be prompted for this information later during the installation. If a new and empty database has already been created prior to running the installation, then entering "n" (no) means the installer will update the existing database (add tables, etc.) whose database name you will provide.

Create new user (y/n) If the database user does not exist on the database server, entering "y" (yes) means the ActiveAnalytics installer will create a new database user account to access the

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ActiveAnalytics database. When yes is selected, you will also be prompted to enter a database administrator user credential. If a database user account has already been created prior to running the installation, then entering "n" (no) means the installer will use the existing database username and password that you will provide when prompted during the installation.

Note: *For MS SQLServer only*, this option is available when SQL Server authentication has been selected. It does not apply when using Windows authentication.

DBA Username/password - The Administrator username and password for the database account that has administrative privileges on the database server that will host the ActiveAnalytics database. You are only prompted to enter this information if the "create new database" option and/or the "create new user" option is "y" (yes).

Oracle Database

When Oracle is selected, you will be prompted to enter the location of the JDBC driver. Note, this file should be available for download at your preferred database provider's website.



Provide the location of the JDBC driver file, then press enter to continue.

Next, you will be prompted to enter the information depicted below, which includes Server Host and Port.



Server Host - The hostname or IP address of the database server hosting the ActiveAnalytics database. If the database is on the same computer as the ActiveAnalytics application, enter localhost.

Server Port - The network port number of the database hosting the ActiveAnalytics database.

Next, you will be prompted to enter the Oracle SID (1) or Service Name (2).

```
Please select the connection method you wish to use to connect to Oracle.

    Connect using Oracle SID
    Connect using Oracle Service Name
    Authentication type? (1-2) [1]
```

When (1) SID is selected, enter the SID.



When (2) Service Name is selected, enter the Service Name.



Next, you can specify the authentication type as Username/Password (1) or Kerberos (2).



If Username/Password (1) is selected.



Enter the username and password - This database user should have full read and write privileges on the ActiveAnalytics database.

If Kerberos is selected (2).



Enter the path to the Kerberos file. - The user account configured in the file should have full read and write privileges on the ActiveAnalytics database. The installation will automatically begin after entering the authentication information.

Installing	
Extracting distribution	[OK]
Cleaning up installation	[OK]
Updating configuration	[OK]
Setting up database	[OK]
Creating tables	[OK]
Creating sequences	[OK]
Updating database	[OK]
Loading data	[OK]
Updating configuration	[OK]
Updating database	[OK]
Updating database	[OK]
Updating database	[OK]
Installing Tutorial Data	[OK]
Closing database connections	[OK]

Installation Complete

After a successful installation, observe the details that will be displayed describing how to start/stop the application, and how to access it using your web browser. Also displayed is the username and password of the ActiveAnalytics System Administrator. You will use this account when logging into the ActiveAnalytics application.

Please make sure you start the application, as it is not automatically started. The instructions are on the next page.

```
--- Installation Complete ---
ActiveAnalytics 1.0 is now installed!
A Windows service has been installed, which can be used to run the
ActiveAnalytics server. Alternatively, start the server manually by
running the command:
/opt/ActiveAnalytics/appserver/bin/startup.sh
After starting the ActiveAnalytics server, open this link in your browser to login:
http://localhost:8080/
Username: ActiveAnalytics@advsyscon.com
Password: test
To access ActiveAnalytics documentation and support materials, visit our support portal:
https://www.advsyscon.com/en-us/myasci/log-in
```

Start and Stop the ActiveAnalytics Application

After the installation, ActiveAnalytics needs to be started.

To start the application, navigate to the ActiveAnalytics directory where the startup files are present. This will be specified on the "Installation Complete" page that appears when the installation finishes. If you missed it, the startup files are located in your installation path > appserver > bin directory.

To start the application, run the startup.sh file. See an example below.quit

[root@KORHEL8AA bin]#]	pwd
/opt/ActiveAnalytics/aj	ppserver/bin
[root@KORHEL8AA bin]#	./startup.sh
Using CATALINA BASE:	/opt/ActiveAnalytics/appserver
Using CATALINA HOME:	/opt/ActiveAnalytics/appserver
Using CATALINA TMPDIR:	/opt/ActiveAnalytics/appserver/temp
Using JRE HOME:	/usr/lib/jvm/jre-9.0.1
Using CLASSPATH:	/opt/ActiveAnalytics/appserver/bin/bootstrap.
Tomcat started.	

In the same installation path, run shutdown.sh to stop the application.

After starting the application, you must perform an import of the ActiveAnalytics dashboard and reports. Click <u>here</u> for more information.

Installation Log File

If you encountered any errors during the installation, please review the installation log file. The installation log file is located in the installation directory.

It is named ActiveAnalyticsInstallLog-YYYYMMDD.log.

Linux

```
[qal@KORHEL8AA ActiveAnalytics]$ pwd
/opt/ActiveAnalytics
[qal@KORHEL8AA ActiveAnalytics]$ ls *.log
ActiveAnalyticsInstallLog-20210623.log
[qal@KORHEL8AA ActiveAnalytics]$
```

Windows

This PC > Local Disk (C:) > Program Files > ActiveAnalytics >						
	Name	Date modified	Туре	Size		
	ActiveAnalyticsInstallLog-20210709.log	7/9/2021 10:42 AM	Text Document	32 KB		

Most problems that arise when installing the ActiveAnalytics application relate to database connectivity and administration issues.

The most likely problem will be the incorrect setting or misspelling of the parameters entered when configuring the database connection (eg. database name, port, IP address etc.).

Post Installation Configuration

YFX File - Defined

The YFX file contains the ActiveAnalytics dashboard and reports. This file must be imported into your ActiveAnalytics environment after a successful installation.

There are different YFX files, one for each MFT Server database type - SQL Server, MySQL, Oracle or Postgres. Make sure you are importing a YFX file that matches your MFT Server's system database type. Information about the system database can be found using the MFT Server Admin web application. Login to the application and click on the top button named Settings, then select the Datastore tab. On this page you will see the system database's JDBC URL and the Username that has rights to access the database. This information will be helpful during the YFX import.

Database Driver

ActiveAnalytics comes bundled with a database driver for MS SQL Server only. It does not come bundled with drivers for Postgres, Oracle or MySQL. If you do not have a driver installed on the ActiveAnalytics system for the database type you are using, then you will need to use the ActiveAnalytics "Plugin Management" feature to add the database driver. This must be done before importing the YFX file. Of course, the driver - Postgres, Oracle, or MySQL, will need to be uploaded to the ActiveAnalytics server first. If you do not do this, you will see an image as depicted below when you attempt to import the file (in this example, the Oracle YFX is being used). Observe the "Database Type" field is not preselected (a "Select" tip is in the field). This happens when the system does not detect the driver required for the YFX being imported. In addition, the remaining fields you need to configure on this page will not match what is documented in this guide.

MFT - Oracle		\times
Database Type:	Select	~
Username:	username	
Password:		
Schema:		~
Isolation Level:	Read Committed	~

Depicted in the image below is what you would expect to see (automatically) in the Database Type field when the MFT Server database driver is detected during the YFX import process.

MFT - Oracle		\times
Database Type:	Oracle	~

In summary, during the YFX import, the Database Type field should be prepopulated with the database type. If the system is prompting you to select the driver, cancel the import, upload the driver to the ActiveAnalytics system, and use the Admin Plugin Management feature described <u>here</u> before proceeding with the YFX import. But first, review the next section that discusses how to login to the ActiveAnalytics application. You will need to know how to do this to navigate to the Plugin Management section.

Login to ActiveAnalytics

Using your web browser, login to the entry page of your installation of ActiveAnalytics. This is accomplished by using a supported web browser and entering http://ActiveAnalyticsServer:port (e.g. http://localhost:8080). The ActiveAnalytics Server is the name of the server that ActiveAnalytics has been installed on. The port is set by the user who installed ActiveAnalytics.

Note: If you are uncertain whether your web browser is supported, please check the supported browsers listed in the ActiveAnalytics User Guide.

If you receive a "This site can't be reached message" when attempting to login, make sure the server name and port are correct, and the ActiveAnalytics application has been started. If that looks correct, then consider the error message suggestions (e.g firewall, etc.).

Below is an image of the ActiveAnalytics Login Page. This is what you will initially see. Login with the username ActiveAnalytics@advsyscon.com, and a password of test. This is the account that was displayed when the installation completed. It is an ActiveAnalytics System Administrator account.

Please note the version of ActiveAnalytics in the lower left hand corner of the image. Your version may be different depending on the version of the current release.

ActiveAnalytics X	+		• - • ×
\leftrightarrow \rightarrow C (i) localhost:8080			or ★ 📧 :
Apps 🖪 ActiveAnalytics			🗐 Reading list
Active Analytics		Username: «Type your User Id»	Password:
	Active Analyti	ics	
ActiveAnalytics 1.0	Critical Insights To Optimize Your Auto	mation & MFT	

After successfully logging in, click on the Browse More button, outlined in red in the image below.



Note: If you do not see the above image, but rather, this message appears: "The license file is missing or invalid. Please go to the License Management page for more information", this most likely means the license portion of the installation was skipped. You must add the license to continue. Click on the *License Management* link. At the bottom of the page click on *Upload License*. Click on the *Choose File* button, whereupon an Open window will appear. Navigate to the license file, select it, then click Open. Click the *Preview* button. At the bottom of the page, click the *Submit* button. Continue with the YFX import.

Plugin Management

The task described in this section is only required if you need to add a database driver so ActiveAnalytics can communicate with the MFT Server database. Click <u>here</u> to skip this topic if it does not apply to you. If you are uncertain if you need to add a database driver, click <u>here</u> to access the database driver section.

To access Plugin Management, click on the ActiveAnalytics Menu icon depicted in the image below.



Next, click on Administration, then select Plugin Management. Click on the Add button. A Plugin Window will pop up. Enter a plugin name and optional description. Next, drag and drop the desired database driver file onto the drop box panel. Alternatively, click on the drop box area to launch a window that will allow you to browse and select the file. After selecting the file, it will be processed. Click Submit when prompted.

The driver will appear in a list on the Plugin Management page.

Plu	ugin N	/lanag	jement	
			Name	Description
			Oracle Driver	Oracle Driver for ActiveAnalytics to access MFT Server database.

Continue onto the next page that describes the YFX import process. .

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Import the YFX File

Click on the menu icon outlined in red in the image below.

A	ctiveAnalytics					Logout
Ξ	Search Dashboards $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Sort By 🕔	5	Layout 🔡	(j)	
	y Content All Personal Broadcasts Recent Hidden Approval Required					
By	Folder -					No content found.
	-					

Next, select Administration.

ActiveAnalytics	Logout
My Dashboards 🗧 🗧	Sort By 🕚 🕥 Layout 🎛 🧻
Browse	
Browse All	
Dashboards	
Presentations	
Themes	
Reports	
Administration >	

Next, select the Import option.

Active Analytics	Logou Logou
My Dashboards 🔶	Sort By 🕚 🗂 Layout 🎛 👔
Browse	
Administration	
Admin Console	
Configuration	
Content Settings	
Import	
Images and Maps	
Email Template	No context found
Session Management	No content found.
Schedule Management	
Dashboard Management	
License Management	
Plugin Management	
System Information	
Logout	

You will now see a drop box panel where you can either drag and drop your YFX file directly, or use it to browse and search for your file.

ActiveAnalytics		Logout
		\times
	VFX/XML Drag your import file here, or click and browse for it.	

If you wish to browse for the file, click your mouse anywhere within the drop box area. A window will open allowing you to select the YFX file.

After the YFX file has been selected, the page will update as per the image below. At the top of the image you will see the YFX file name (yours may be different) and a high level summary describing what the YFX file contains. If you wish to remove the selected YFX file, click "Change". If you do so, the import drop box panel will appear, allowing you to select an import file again.

YFX/XML	MFT - SQL Server.yfx Export file contains: 1 Primary Items 34 Dependent Items	Change	
What do you want to do?			
what do you want to do?			
+			
Add Restore Custom			
Import All			
All items from this import file will be added to the system as new content.			
Continue			

Add - This is the default option that will be applied when you click the Continue button depicted above. It will import all the data from the YFX file; this includes the primary and secondary content. Note: If any of the data already exists, it will be added again.

For a first-time import, click the Continue button to "Import All" (the default "Add" option). You should also use this option if you are importing the YFX file a second time, which is something you must do for each MFT Server instance you wish ActiveAnalytics to report on.

After clicking the Continue button, you will initially see "MFT Analytics Dashboard" under the "Import List" heading, outlined in red below, on the left-hand side of the image. If you click on MFT Analytics Dashboard, the "Description" and "Linked content" list will expand (appear) as depicted in the image below. Clicking on "MFT Analytics Dashboard" again, or clicking on any item in the "Linked content" list or "Description" will cause the list to collapse (be removed).

Clear Import							U	>
Import Last Import Date	Changes Since Last Import	Primary Items in List	Total Items in List	35	Dashboard Storyboard Report Data Source View		Warnings Items in List	0
Import List								
Name		Last Modified		Linked Con	tent	Alerts		
MFT Analytics Dashboard		4/23/2021 9:48 AM	1	34				
Description								
ActiveAnalytics 1.0								
Linked content								
Data Source		MFT - SQL Server						
C View		MFT Combined View - SQL Server	r					
Report		Trigger KPIs						

Please note that the "Description" in the above image depicts the YFX version you are importing. Your version may be different, depending on the version that is currently available.

Connect ActiveAnalytics to the Source Database

While the "Linked content" list is expanded, observe the top item named "Data Source", in the image above. To the right of this item, in the "Alerts" column, you will see a gear (settings) icon, circled in red. Click on the gear icon, which will result in a pop-up window that requires information necessary for ActiveAnalytics to connect to the MFT Server database. The database information you need to enter will depend on the database type you are using: MySQL, Oracle, MS SQL Server or Postgres. Click on the appropriate link below for configuration details.

<u>MySQL</u> <u>Oracle</u> <u>MS SQL Server</u> <u>Postgres</u>

MySQL

The image below depicts the fields you will see when your MFT Server database is MySQL. This is the database that ActiveAnalytics will connect to. The fields are described below.

MFT - MySQL		\times	
Database Type:	MySQL	~	
Include Schema in SQL:	✓		
Database Host:	hostname		
Database Port:	3306		
Database Name:	database		
Use Custom Fetch Size:			
JDBC Driver:	com.mysql.jdbc.Driver	~	
Username:	username		
Password:	••••		
Schema:		~	
Isolation Level:	Read Uncommitted	~	
Test Connection			

Database Type - The default value is MySQL. The YFX you imported was designed specifically for your database type. Do not change this. Verify it is the database type you are expecting.

Database Host - Enter the host name or IP address of the server hosting the MFT Server database.

Database Port - Enter the port number for the MySQL database. The default will automatically appear, only change this if a different port is being used.

Database Name - Enter the name of the database.

JDBC Driver - ActiveAnalytics will automatically select the correct JDBC driver to talk to your MySQL database.

Username - Enter the username for the database.

Password - Enter the password for the database.

Fields to leave as-is - Include Schema in SQL, Use Custom Fetch Size, Schema, and Isolation level.

After populating the fields, click <u>here</u> to continue.

MS SQL Server

The image below depicts the fields you will see when your MFT Server database is MS SQL Server. This is the database that ActiveAnalytics will connect to. The fields are described below.

MFT - SQL Server		\times	
Database Type:	Microsoft SQL Server	~	
Include Schema in SQL:	 Image: A second s		
Database Host:	hostname		
Driver:	Microsoft JDBC Driver	~	
Use Named Instance:			
Database Port:	1433		
Database Name:	database		
Database Authentication:	SQL Authentication	~	
undefined:	Disabled	~	
Use Custom Fetch Size:			
JDBC Driver:	com.microsoft.sqlserver.jdbc.SQ	~	
Username:	username		
Password:			
Schema:		~	
Isolation Level:	Read Uncommitted	~	
Test Connection			

Database Type - Keep the default value of Microsoft SQL Server. The YFX you imported was designed specifically for your MFT Server database type. Do not change this. Verify it is the database type you are expecting.

Database Host - Enter the host name or IP address of the server hosting the MFT Server database.

Driver - From the Driver drop down list, select one of the two drivers available for SQL server.

Use Named Instance - When checked, a Name Instance field will appear, allowing you to enter a SQL Server Instance name.

Database Port - Enter the port number for the SQL Server database. The default will automatically appear, only change this if a different port is being used.

Database Name - Enter the name of the database.

Database Authentication - Select SQL Authentication or Windows Authentication. When Windows is selected, a Domain field will appear. Enter the domain name.

JDBC Driver - ActiveAnalytics will automatically populate this field based on the "Driver" field selection.

Username - Enter the username for the database.

Password - Enter the password for the database.

Fields to leave as-is - Include Schema in SQL, Undefined, Use Custom Fetch Size, Schema, and Isolation level.

After populating the fields, click <u>here</u> to continue.

Postgres

The image below depicts the fields you will see when your MFT Server database is Postgres. This is the database that ActiveAnalytics will connect to. The fields are described below.

MFT - Postgres		\times	
Database Type:	PostgreSQL	~	
Include Schema in SQL:	✓		
Database Host:	hostname		
Database Port:	5432		
Database Name:	database		
JDBC Driver:	org.postgresql.Driver	~	
Username:	username		
Password:			
Schema:		~	
Isolation Level:	Read Uncommitted	~	
Test Connection			

Database Type - Keep the default value of Postgres. The YFX you imported was designed specifically for your MFT Server database type. Do not change this. Verify it is the database type you are expecting.

Database Host - Enter the host name or IP address of the server hosting the MFT Server database.

Database Port - Enter the port number for the Postgres database. The default will automatically appear, only change this if a different port is being used.

Database Name - Enter the name of the database.

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JDBC Driver - ActiveAnalytics will automatically select the correct JDBC driver to talk to your Postgres database.

Username - Enter the username for the database.

Password - Enter the password for the database.

Fields to leave as-is - Include Schema in SQL, Use Custom Fetch Size, Schema, and Isolation level.

After populating the fields, click <u>here</u> to continue.

Oracle

The image below depicts the fields you will see when your MFT Server database is Oracle. This is the database that ActiveAnalytics will connect to. The fields are described below.

MFT - Oracle		×	
Database Type:	Oracle	~	
Include Schema in SQL:	✓		
Connection Method:	Service	~	
Database Host:	hostname		
Database Port:	1521		
Service:			
Use Custom Fetch Size:			
Authentication:	Username/Password	~	
JDBC Driver:	oracle.jdbc.OracleDriver (Oracle)	~	
Username:	username		
Password:	••••		
Schema:		~	
Isolation Level:	Read Committed	~	
Test Connection			

I

Database Type - Keep the default value of Oracle. The YFX you imported was designed specifically for your MFT Server database type. Do not change this. Verify it is the database type you are expecting.

Connection Method - SID, Service or TNSNAMES

- When SID is selected, a SID field will appear. Enter the SID.
- When Service is selected, a Service field will appear. Enter the Service name.
- When TNSNAMES is selected, a TNSNAMES field will appear, with a tip in the field on how to format the information.

Database Host - Enter the host name or IP address of the server hosting the database.

Database Port - Enter the port number for the Oracle database. The default will automatically appear, only change this if a different port is being used

Authentication - Username/Password or Kerberos.

JDBC Driver - ActiveAnalytics will automatically select the correct JDBC driver to talk to your Oracle database.

Username - Enter the username for the database.

Password - Enter the password for the database.

Fields to leave as-is - Include Schema in SQL, Use Custom Fetch Size, Schema, and Isolation level.

After populating the fields, click <u>here</u> to continue.

Test Connection

Click the Test Connection button to ensure connectivity is successful to the MFT Server database. In the image below, the MFT Server database is Microsoft SQL Server.

After a successful test, the next step is to perform the import.

Connection Succeeded
Database: Microsoft SQL Server
Product Version: 13.00.1601
Driver: Microsoft JDBC Driver 7.2 for SQL Server
Driver Version: 7.2.1.0
Source Name: MS SQL Server
Perform the Import

Click on the Import tab circled in red below. You will see a spinning circle indicating the import is in progress.

A	<i>ctive</i> Analytics								
≡	Clear Import								
	Import Last Import Date 7/9/2021	Changes Since Last Import	Items in	ary n List 7	Total Items in List	35	Dashboard Storyboard Report Data Source View	Warnings Items in List	
Imp	ort List								
Name				Last Modified			ntent	Alerts	
٩	MFT Analytics Dashboard			4/23/2021 9:48 AM		34			
Link	Linked content								
8	Data Source		MFT - SQL S	MFT - SQL Server					
Ē	View		MFT Combi	MFT Combined View - SQL Server					

After a successful import, an Import Summary window will pop-up. Click OK.



Click Close



A thumbnail of the imported dashboard and reports will be displayed on the page.

Information about the MFT Analytics Dashboard can be found in the ActiveAnalytics User Guide.

Multiple Instances of MFT Server

If you have two or more MFT Server instances running that you would like ActiveAnalytics to report on, you must import the same YFX file once for each instance. Use the instructions provided earlier in this section to import the file. Nothing is different regarding the import process, except the details about the data source will vary (e.g. the database name, server location, etc.). Each MFT Server instance will have its own dashboard. By default, the dashboards will have the same name. This will make it difficult to distinguish one dashboard from another. It is recommended that you change the name of the dashboard to reflect the instance it is applicable to. We recommend you do this before importing the YFX for subsequent instances.

To change the dashboard name, you must be a system administrator. Login to the ActiveAnalytics web interface. Click on the menu icon to the far left, circled in red in the image below.



Select Browse, then select Dashboards



You will only see an existing dashboard if you are performing the rename before importing the YFX for another MFT Server instance. Mouse over the dashboard's name panel. Click on the 3 vertical dots that appear, then select "Edit Details" from the menu, as depicted in the image below. Alternatively, you can right-click anywhere within the dashboard image to invoke the same menu.

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	Open
	Open in new tab
	Edit
	Edit in new tab
MFT Analytics Dash	Share
	Edit Details
	Make a copy
	Delete

An edit details window will appear, as shown below.

Ed	lit Details	×
	MFT Analytics Dashboard 1	
	ActiveAnalytics 1.0	
	MFT Server	
	Dashboards ~	
	Clear Thumbnail	
	Submit	

At the very top of the window, you will see a textbox with the existing dashboard name. Edit the textbox to change the name. Click the Submit button to save the change.

Next, reload the page. Click on the menu icon, click on Browse, then Dashboards. The dashboard will display the new name, as shown in the image below.

\blacksquare Search Dashboards \bigcirc Q	Sort By ↓ ^A ∽ Layout ⊞ (j)					
My Content						
 Personal Broadcasts Recent Hidden Approval Required 						
By Folder 🗸	MFT Analytics Dashboard 1					

Creating an ActiveAnalytics User

An ActiveAnalytics System Administrator has the authority to create user(s) who will need access to ActiveAnalytics.

To create a user, login to ActiveAnalytics with the System Administrator credentials.

Next, click on the ActiveAnalytics toolbar menu icon, then select Administration, then Admin Console.

My Dashboards				
Browse				
Administration				
Admin Console				
Configuration				
Content Settings				
Import				
Images and Maps				
Email Template				
Session Management				
Schedule Management				
Dashboard Management				
License Management				
Plugin Management				
System Information				
Logout				

To add a User, click on Users as depicted in the image below.

Data Sources				
Users				
Roles				
Content Folders				

Next, click on the Add button.

Enter the following fields:

- First and Last name
- Email address The user will enter this in the username field when logging into ActiveAnalytics
- Password
- Confirm password

Any remaining fields not mentioned can be left as-is. This includes the Role field, which by default is "Reader". In general, the reader role allows users to read content, but they cannot create, modify or delete it.

Click on the Create User button. The user will now appear in the list of Users.

Users		
People		
A	J Doe Reader	•
A	System Administrator System Administrator	•

The first time a user attempts to connect to the ActiveAnalytics application, they will need the email address and password that was set up for them. Upon a successful login, they will be prompted to configure their profile, as per the (partial) image below. They only need to be concerned with entering the original password, then entering a new password and confirming it. The other fields can remain as-is. This information is also provided in the ActiveAnalytics User Guide.

User Profile

Welcome J Doe						
We need some information to set up your profile						
J Doe						
jDoe@advsyscon.com						
Change your password Current Password						
New Password						
Repeat Password						
Your profile						
Job Title						
Write something about yourself						

Version Information

The version of the ActiveAnalytics *application* you are running is displayed on the Login page, as depicted in the image below.



The version of the ActiveAnalytics *Dashboard* you are running, that was imported using the YFX file, can be found by clicking on the ActiveAnalytics menu icon as shown below,



then selecting Browse, then Dashboards.

ing businessings	÷
Browse	
Browse All	
Dashboards	

Click on Layout, then List. The version of the dashboard is located in the Description column.

<i>Active</i> Analytics									
\equiv	Search Dashboards $\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \$	Sort By 🕔	う Layo	out 📃	(j)	0 0 0	Columns		
		Name			Description				
Му	/ Content	MFT Analytics Dashboard			ActiveAnalytics 1.0				
	All								
Personal Broadcasts									

It is possible to have an ActiveAnalytics application version that is different from the Dashboard version.

Database timezone

ActiveAnalytics sources its reporting data from the relational database where MFT Server activity logs are stored. Activity logs for MFT Server are time stamped using UNIX epoch time, but for purposes of reporting are converted to the timezone of the database when used in date/time related queries and for display of date/time data.

ActiveAnalytics, MFT Server and your MFT Server relational database may be installed in separate environments, each with their own timezone settings. Therefore, for purposes of reporting, the timezone of the database will be used as the single source of truth.

If you are experiencing any discrepancies in reporting data, please check the timezone settings of your database which may differ from the timezone settings for the system on which your database is installed. Please consult your database vendor documentation for details on how to obtain and set your timezone.

Note, any changes made to the timezone settings of your database require a restart of ActiveAnalytics and MFT Server in order to take effect, and only affects data moving forward, not historical data.

Uninstall - Windows System

To remove ActiveAnalytics from your server, follow the steps listed below.

- 1) Remove the Service or Stop the Application
 - If you are running the application as a Windows service:
 - Remove the Windows service. The state of the service does not matter (it can be running or stopped). To remove the Windows service, start a Command Prompt as Administrator. Change the directory to <installation directory>\appserver\bin (e.g. cd\Program files\ActiveAnalytics\appserver\bin press Enter). Type: service.bat remove ActiveAnalytics. Press Enter. The service will be removed, as depicted in the image below. Exit the Command prompt (type exit, then press Enter).

- If you are not running the application as a Windows service:
 - Stop the application by running shutdown.bat, located in the <installation directory>\appserver\bin folder.

2) Delete the installation directory. To do this, navigate to the installation folder using Windows File Explorer. Right click on it and select Delete.

3) Delete the ActiveAnalytics database. The name of the database was specified by the user who performed the installation. How to delete the database will depend on which of the 3 ActiveAnalytics database types supported you opted to use. Please see your database provider's documentation to obtain instructions on how to delete the database.

Uninstall - Non-Windows System

To remove ActiveAnalytics from your server, follow the steps listed below.

1) Stop the application as follows: Navigate to: <ActiveAnalytics installation directory>/appserver/bin where the shutdown script is located. Run shutdown.sh.

2) Delete the installation directory. To do this, navigate to ActiveAnalytics parent directory. Delete the ActiveAnalytics directory and all its contents (e.g. rm -rf <ActiveAnalytics directory name>). Observe the example below, where opt is the parent directory and ActiveAnalytics is the installation directory.



3) Delete the ActiveAnalytics database. The name of the database was specified by the user who performed the installation. How to delete the database will depend on which of the 3 database types supported by ActiveAnalytics you opted to use. Please see your database provider's documentation to obtain instructions on how to delete the database.