Logi Ad Hoc Reporting

**Troubleshooting Scheduling Failure** 

# LOGI ANALYTICS

Version 10

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# **General Configuration**

#### **Overview**

The execution and delivery of scheduled reports is one of the more complicated features of Ad Hoc due to the interaction and reliance on a variety of components. The process of scheduled report execution emulates a user running the report at a predefined time. The resultant report may be bundled into an email transmission and delivered to a list of users subscribed to receive the report and/or the report may be stored in an archive.

The process demands the services of a task scheduler. Ad Hoc may be configured to either use the Windows Task Scheduler or the Logi Ad Hoc Scheduler Service. The Logi Ad Hoc Scheduler Service is included as an installation option in the distribution package of each version of Ad Hoc.

For the email delivery of reports, an SMTP server must be identified to provide this service.

Both the scheduler service and the email server are configured for each instance of Ad Hoc via the Management Console. Under the **Instance Configuration** action group are the **Scheduling** and **Email** actions used to identify the appropriate services. In addition, the scheduler service must be enabled for each reporting database connection via the Management Console for the option to schedule reports to be presented in the Ad Hoc interface of the instance.



#### **Scheduler Service**

Under the **Instance Configuration / Scheduling** action, the System Administrator identifies and configures the scheduler service to be used for the Ad Hoc instance. Each Ad Hoc instance may be connected to multiple reporting databases. <u>The ability to schedule reports must be enabled for each reporting database</u>. Just configuring the scheduler service is not sufficient.

Both scheduler service perform the same functions, however, there are significant differences in troubleshooting suspected scheduler issues. Following is a brief description of each and their basic differences.

- Windows Task Scheduler (WTS) this is the typical, default scheduler service. It comes with its own interface that allows the System Administrator to review scheduled tasks. An administrator password must be provided that allows schedules to be created, modified, and removed. All of the scheduling attributes may be reviewed through the provided interface. When using the WTS, Ad Hoc creates an "lgxtask" XML file in the *ahScheduler* folder of the instance with the schedule attributes that serves as a type of backup if the schedules are lost in the WTS. When a scheduled report is executed, an XML log file is created in the *ahScheduler/Log* folder of the instance.
- Logi Ad Hoc Scheduler this scheduler service was created to allow instances on different servers to be serviced by a central facility. This is beneficial for load balanced configurations of the Ad Hoc instances. All of the scheduling attributes are stored in a VistaDB (Derby, in the case of Java version) database found in the root folder of the Logi Ad Hoc Scheduler Service, by default *the C:\Program Files\LogiXML Ad Hoc 10\LogiXML Ad Hoc Scheduler Service* folder as *Schedules.vdb3*. LogiXML does not distribute tools to allow the System Administrator to review the contents of the database. When a scheduled report is executed, an XML log file is created in the *Log* folder of the scheduler service.
  - Note: As of this writing, the Logi Ad Hoc Scheduler is not fully internationalized regarding schedule dates. It is recommended that the WTS is used as the scheduler service in non-US culture implementations.

#### **SMTP Server**

Under **Instance Configuration / Emailing** action, the System Administrator identifies and configures the SMTP server that will deliver reports to the subscribed recipients. In addition, the email format must be configured for each reporting database connected to the instance. <u>The most overlooked attribute in this process is the "From:" address. This is a required attribute for each reporting database.</u> It does not have to be a valid email address; however, it must conform to the format of an email address.

#### Ad Hoc

In the Ad hoc interface, scheduling a report for delivery is normally a two step process. The first step is the creation of the schedule by clicking on the **Schedule** action from the report list, entering the schedule attributes and saving the information. The second step is identifying the subscribers for the report by clicking on the **Schedule** action from the report list, clicking on the **Schedule** action from the schedule list, and checking the expected recipients and clicking on the **Subscribe** button. The list of potential subscribers will be a list of users that are members of the current Organization having access

to the reporting database used by the report. A checkbox allowing the user to be a designated subscriber will be presented for all users that have an email address defined in their profile.

Normally, with the proper permissions, a user can subscribe other users to a scheduled report; however, in the event the report relies on externally defined session parameters the ability to remote subscribe users will not be available. This is because the values of the session parameters must be known at the time of subscription for each subscriber. The only method that guarantees the proper resolution of the external session parameter values is to have each user subscribe to the scheduled report individually.

• Note: Beginning with Version 10.0.76 of Ad Hoc, session parameters can be defined down to the user level. These internal session parameters are resolvable for each user and are not an impediment to remote subscribing of users to a scheduled report.

#### **Roles/Permissions**

Ad Hoc's internal security model is role-based. A role is ultimately a collection of application rights that determine the Ad Hoc features exposed to the user. A role may also restrict access to databases, objects, and columns.

A user must have at least one role assigned to them but may have multiple roles. A user is afforded the sum of the rights and data access permitted by their assigned roles.

There are six rights built into Ad Hoc that directly impact the scheduling features available to users:

- *Manage Scheduled Reports* allows deletion of report schedules and shows the Configuration / Report Configuration / Scheduled Reports option
- Schedule Reports from the All Personal Reports Area allows scheduling of reports from the All Personal Reports list
- Schedule Reports from the My Personal Reports Area allows scheduling of reports from the user's personal reports list
- Schedule Reports from the Shared Reports Area allows scheduling of reports from the Shared Reports list
- Subscribe to Scheduled Reports allows the user to subscribe to an existing schedule
- Schedule reports from Global Reports area a recent addition for future Ad Hoc versions, allows user to schedule reports residing in the Global Reports area

<u>Users are not permitted to run, schedule or subscribe to reports that contain data or display elements</u> <u>that are restricted from the user.</u>

#### **Problem Diagnosis**

This paper provides guidance related to specific issues that might be encountered in the area of scheduling reports and their delivery. The basic questions that are addressed are:

- Why wasn't my scheduled report delivered?
- Why can't I schedule reports?
- <u>Why can't I subscribe to scheduled reports?</u>
- <u>Why can't I subscribe others to a scheduled report?</u>
- Why can't I see all of my users in the subscriber selection dialog?

For each question a logic and resolution table is presented. Try to find your question, the reported condition and review the questions that should be asked as part of the diagnosis. The answers to the diagnostic questions can be found or verified using the link provided in the verification column of the resolution table.

There may be other considerations that don't fall into the diagnostic logic. These are briefly covered in the "Other Diagnostic Tools" section. Of course there may be additional issue sources that aren't covered in this guide. For these issues you should contact Logi Analytics Support. After exhausting the diagnostics provided here, you will have likely eliminated all of the obvious root causes for your scheduling or delivery problems.

# Why wasn't my scheduled report delivered?

Reported Condition	Triage Logic	Verification
For a single report	Does the report run?	Verify that the report runs via
		the Ad Hoc interface
	Is the schedule still active?	Verify that the schedule has not
		<u>expired</u>
	Is the expected recipient	Verify that the user is in the list
	subscribed to the scheduled	of subscribers and the "Is
	report?	Subscribed" column says "Yes"
	Is the email address correct?	Verify that the email address for
		the subscriber is correct
	Did the report run?	Verify that the schedule
		executed successfully
	Were there any email issues?	Verify that the email address
		works for the mail server
	Was the report modified after	Reschedule the report
	being scheduled?	
For all reports	Is the scheduler service running?	Verify that the service is active
	Have the credentials changed?	Verify the credentials for the
		<u>scheduler</u>
	Is the SMTP server running?	Verify that the server is active
	Is the "From:" address	Verify the email configuration
	configured for the database?	for the database connection
For a single user	Is the user subscribed to the	Verify the subscription
	report?	
	Is the email address correct?	Verify that the email address for
		the subscriber is correct
	Is the email deliverable?	Verify that the email address
		works for the mail server
	Was the email routed to the	Verify the email destination
	"Junk" or "Spam" folders?	
	Have the users roles/permissions	Verify the roles/permissions for
	changed?	<u>the user</u>

# Why can't I schedule reports?

Reported Condition	Triage Logic	Verification	
For a single report	Does the report run?	Verify that the report runs via	
		the Ad Hoc interface	
	Do you have permission to	Verify that your role has the	
	schedule reports?	proper permissions	
	Is the report a dashboard?	Verify the report type	
For all reports	Is scheduling enabled?	Verify scheduling configuration	
	Is the scheduler service running?	Verify that the service is active	
	Have the credentials changed?	Verify the credentials for the	
		<u>scheduler</u>	
For a single user	Do you have permission to	Verify that your role has the	
	schedule reports?	proper permissions	

# Why can't I subscribe to scheduled reports?

Reported Condition	Triage Logic	Verification
For a single report	Do you have permission to subscribe to reports?	Verify that the user has the proper right to subscribe
	Do you have permission to schedule reports?	Verify that your role has the proper permissions
	Do you have an organization selected?	Verify that an organization has been selected
For all reports	Do you have permission to subscribe to reports?	<u>Verify that the user has the</u> proper right to subscribe
	Do you have permission to schedule reports?	Verify that your role has the proper permissions
	Do you have an organization selected?	Verify that an organization has been selected
For a single user	Do you have permission to subscribe to reports?	Verify that the user has the proper right to subscribe
	Do you have permission to schedule reports?	Verify that your role has the proper permissions
	Do you have an organization selected?	Verify that an organization has been selected

# Why can't I subscribe others to a scheduled report?

Reported Condition	Triage Logic	Verification
For a single report	Does the report have references to external session parameters?	Verify the report content
	Do you have permission to subscribe to reports?	<u>Verify that the user has the</u> proper right to subscribe
	Do you have an organization selected?	Verify that an organization has been selected
For all reports	Do you have permission to	Verify that the user has the
	subscribe to reports?	proper right to subscribe
	Do you have an organization	Verify that an organization has
	selected?	been selected
For a single user	Do you have permission to	Verify that the user has the
	subscribe to reports?	proper right to subscribe
	Do you have an organization	Verify that an organization has
	selected?	been selected

# Why can't I see all of my users in the subscriber selection dialog?

Reported Condition	Triage Logic	Verification
For a single report	Does the report have references to external session parameters?	Verify the report content
	Are there more potential subscribers than the list will display?	Manage the list of subscribers
	Do you have an organization selected?	Verify that an organization has been selected
For all reports	Does the report have references to external session parameters?	Verify the report content
	Are there more potential subscribers than the list will display?	Manage the list of subscribers
	Do you have an organization selected?	Verify that an organization has been selected
For a single user	Does the report have references to external session parameters?	Verify the report content
	Are there more potential subscribers than the list will display?	Manage the list of subscribers
	Do you have an organization selected?	Verify that an organization has been selected

#### Verify that the report runs via the Ad Hoc interface

If the report does not properly run via the Ad Hoc interface or is broken, it cannot possibly run as a scheduled task. Also, if the report has expired that will become obvious at the same time.

Find the report in the list of reports and click on the report name. Verify that the expected results are produced.

#### Verify that the schedule has not expired

Schedules may have an expiration date which may have passed. The schedule will not continue to run past the expiration date.

Find the report in the list of reports and click on the **Schedule** action. A list of schedules for the report should be presented. Click on the **Modify Schedule** action and verify that the *End Date* attribute has not been passed.

#### Verify the subscriber list

Scheduled reports should be delivered to the list of subscribers. A user is subscribed to a report when the *Is Subscribed* column contains "Yes" for the specific user.

Find the report in the list of reports and click on the **Schedule** action. A list of schedules for the report should be presented. Click on the **Change Subscription** action and find the user in the list. Make sure that the *Is Subscribed* column has a "Yes" value for the user.

#### Verify the email address

Every user subscribed to a scheduled report has an associated email address; however, the Ad Hoc interface does not verify that the email address is valid.

Find the report in the list of reports and click on the **Schedule** action. A list of schedules for the report should be presented. Click on the **Change Subscription** action and find the user in the list. Make sure that the *Email* address for the user is accurate.

#### Verify schedule execution

When a scheduled report runs an XML log file is created. Contained in the log file is a Result attribute that indicates either Success or Failure. If the WTS is used, the log file will be found in the *ahScheduler\Log* folder of the instance. If the Logi Ad Hoc Scheduler Service is used, the log file will be found in the Log folder where the service was installed (typically, *C:\Program Files\LogiXML Ad Hoc 10\LogiXML Ad Hoc Scheduler Service*).

If a log file cannot be found, that indicates that the scheduled task did not run. Any number of reasons could cause the problem including the service not being active at the scheduled time or the server not running at the time.

If the log file contains a "Failure" Result, the log file should indicate the cause for the failure as well.

If the log file contains a "Success" Result, the scheduled task ran properly.

#### Verify the Email address

Scheduled reports are delivered via an SMTP server to the subscribers email address. If the mail server is down, configured improperly, or is having issues with the users email address the report would not be delivered.

To test the SMTP server, run the Management Console and click on the **Instance Configuration / Emailing** action. Click on the **Edit Email Server Settings** button to launch the Email Server Settings dialog. Click on the **Test SMTP Settings** button and enter the email address of the user.

This test will verify that the SMTP server is active, the SMTP attributes provide access to it, and whether the email address is valid for the server. If the test email cannot be delivered, a message indicating that there is a problem will be displayed.

#### Reschedule the report

When the scheduled report has been significantly modified, particularly in the area of "ask parameters", the schedule may have to be resaved to record all of the changes and re-establish the schedule. As a general rule, when a scheduled report has been modified it is a good practice to exercise the schedule and verify that it continues to behave normally.

To test the schedule, find the report in the list of reports and click on the **Schedule** action. A list of schedules for the report should be presented. Click on the **Run Now** action and verify that the report ran successfully and was delivered to the intended subscribers.

#### Verify that the Scheduler Service is running

Either the Logi Ad Hoc Scheduler Service or the Windows Task Scheduler must be running, depending on which scheduler service is configured to service the scheduled tasks.

The state of both services can be verified by opening the **Windows Control Panel** and selecting the **Administrative Tools** option. From the list of tools presented, select **Services**. From the list of services, verify that the required task scheduler is "Started" as in the following images:

🎇 Logical Disk Manager Administrative Service	Contigures hard disk drives and volumes. The service only runs		Manual
🎭 LogiXML Ad Hoc Scheduler Service	Launch reports and process based on schedules. This services $\ldots$	Started	Automatic
🖏 LogiXML Scheduler Service		Started	Automatic
🎇 System Restore Service	Performs system restore functions. To stop service, turn off Sy	Started	Automatic
System Restore Service	Performs system restore functions. To stop service, turn off Sy Enables a user to configure and schedule automated tasks on t	Started Started	Automatic Automatic

Logi Analytics was formerly known as LogiXML

#### Verify the Scheduler Service credentials

The credentials supplied during the configuration of the scheduler service must permit the creation, modification, and deletion of scheduled tasks.

Credentials and other attributes may be verified from the Management Console by clicking on **Instance Configuration / Scheduling** and clicking on the **Test Scheduler Settings** button.

#### Verify the email notification configuration for the database connection

Email delivery of scheduled reports must be configured for each database connection in the instance. Most of the default attributes related to the email content are sufficient to complete the delivery process; however, the "From:" address attribute does not have a default value and is a required attribute.

Verify the email notification configuration by clicking on the **Instance Configuration / Emailing** action in the Management Console. In the lower panel will be a list of databases on the left and the email attributes on the right under the **Email Messages** tab. Highlight each database in the list or locate the database that seems to have problems and verify that the "From:" attribute has been specified and that the address conforms to a typical email address. The address is not required to be valid, but must conform to the format for an email address.

If a value is entered or changed in the "From:" address, click on the **Apply Changes** button to save the attribute value. Click on the **OK** button to dismiss the dialog.

#### Check the Junk / Spam folders

Depending on the "From:" and ether the SMTP configuration or users email client, messages may be routed to the Spam or Junk email folders. There may also be rules specified in the users email client that route messages to alternate folders.

If it appears that email delivery of reports are not being delivered, check the users "trash" folders.

#### Verify Roles/Permissions for the user

A user must have access to all display elements and data used in a report in order to run or receive the report. In some cases, a report may have been modified after scheduling/subscribing such that a user may no longer have access to the report.

This may be a complicated process. Check the contents of the report and, for the user, verify that the user should have access to the current data and display elements. Display elements include data tables, crosstabs, charts, etc. Data includes databases, objects, and columns. The user may have more than one role. Since permissions are the sum of all the user's roles, all of the users' roles will have to be verified.

#### Verify the users' configuration

Access to certain features of Ad Hoc is controlled by a role-based security model. There are five specific rights that are directly related to scheduling; *Manage Scheduled Reports, Schedule Reports from the All Personal Reports Area, Schedule Reports from the My Personal Reports Area, Schedule Reports from the Shared Reports and Subscribe to Scheduled Reports.* 

#### Verify the report content for external session parameters

Reports may rely on session parameters that have their values set and passed into Ad Hoc on a user-byuser basis. Consequently, Ad Hoc must resolve the session parameters by each individual user. No user, including the System Administrator, would know the values for an external session parameter.

When a report is scheduled, all of the parameters used by the report must be known at the time of subscription. This means that each individual user must subscribe to a scheduled report so that their session information can be resolved and recorded in the metadata database to allow the report to execute properly for the user.

Batch or remote subscribing of users to a scheduled report that relies on external session parameters is not possible.

#### Verify that scheduling is enabled

Scheduling may be enabled by each reporting database connection for an instance. In order for the **Schedule** action to be displayed from the reports list, scheduling must be enabled for the database used by the report.

To enable/disable scheduling from the Management Console, click on the **Instance Configuration / Scheduling** action. In the bottom panel of the dialog is a list of all of the reporting connections with an "Enable" checkbox associated with each connection. All reporting connections may be enabled/disabled by clicking on the "Enable" column header. Click on the **OK** button to save the attributes.

#### Verify the report type

Ad Hoc supports traditional reports as well as dashboard style reports. Both show up in the report list, but dashboards cannot be scheduled.

If the report icon looks like  $\mathbb{H}$  in the report list, this indicates the report is a dashboard and the **Schedule** action will not be presented.

#### Manage the subscriber list

The subscriber list will contain all of the users in the same organization as the current user or, in the case of the System Administrator, all of the users in the selected organization. If the list is larger than the current configuration permits for lists, a paging control will be displayed to traverse the full list.

All lists in the Ad hoc interface are controlled by the "Rows per Page" attribute found in the Configuration / Application Configuration / Application Settings page.

#### Select an Organization

If the Ad Hoc instance is configured to allow multiple organizations, there is a possibility that an "Organizations" drop-down list is presented in the menu bar. Subscriber lists are filtered by the current organization.

If the "All" option is selected in the **Organizations** list, no subscribers will be shown. Select an organization and navigate back to the schedule list and select the **Change Subscription** action. A list of users belonging to the selected organization will be shown.

#### **Other Diagnostic Tools**

There are quite a few other reasons why a scheduled report might not be delivered. Examples include copying an instance to a different server, changes in the SMTP or task scheduler services, system upgrades, and changes in the security model. These, and other possible scenarios, are not covered in this document.

Usually the System Administrator can track the cause by walking through the process that a scheduled report traverses and confirming that each process is behaving normally. The key questions that need to be answered are:

- 1) Does the report run in Ad Hoc properly?
- 2) Was the report launched by the scheduler?
- 3) Was the report blocked from delivery by the mail server?

These core questions are answered above.

Sometimes more extended diagnosis may be necessary. On those occasions one or more of the following diagnostics may provide a clue as to the underlying issue.

#### **Event Viewer**

Checking the **Event Viewer** under the **Applications** area may have time-stamped information that could shed some light on the issue. The **Event Viewer** on the web server should be reviewed for problems time-stamped around the scheduled time of the report execution.

#### **Diagnostic Tool**

The Management Console provides a **Diagnostic** tool that scans an instance and reports inconsistencies. To run the **Diagnostic** scan, launch the Management Console and select the Ad Hoc instance that failed to deliver the scheduled report. Click on the **Tools** action group and the **Diagnostic** action and complete the wizard process. Review the resulting report for issues that might impact scheduling.

#### **Error Logging**

The engine that renders the reports provides some error logging capability. This can be enabled by editing the *\_Definitions/\_Settings.lgx* file, locating the *<General>* element and adding the *LogErrors="True"* attribute. With this attribute enabled, the engine will create a file in the *rdErrorLog* folder of the Ad Hoc instance for detected systemic problems.

# **Contact Us**

For more information about other Logi Analytics products or assistance beyond this user manual, please contact Logi Analytics in the following ways:

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