Logi Ad Hoc Reporting
Troubleshooting Scheduling Issues

Version 12

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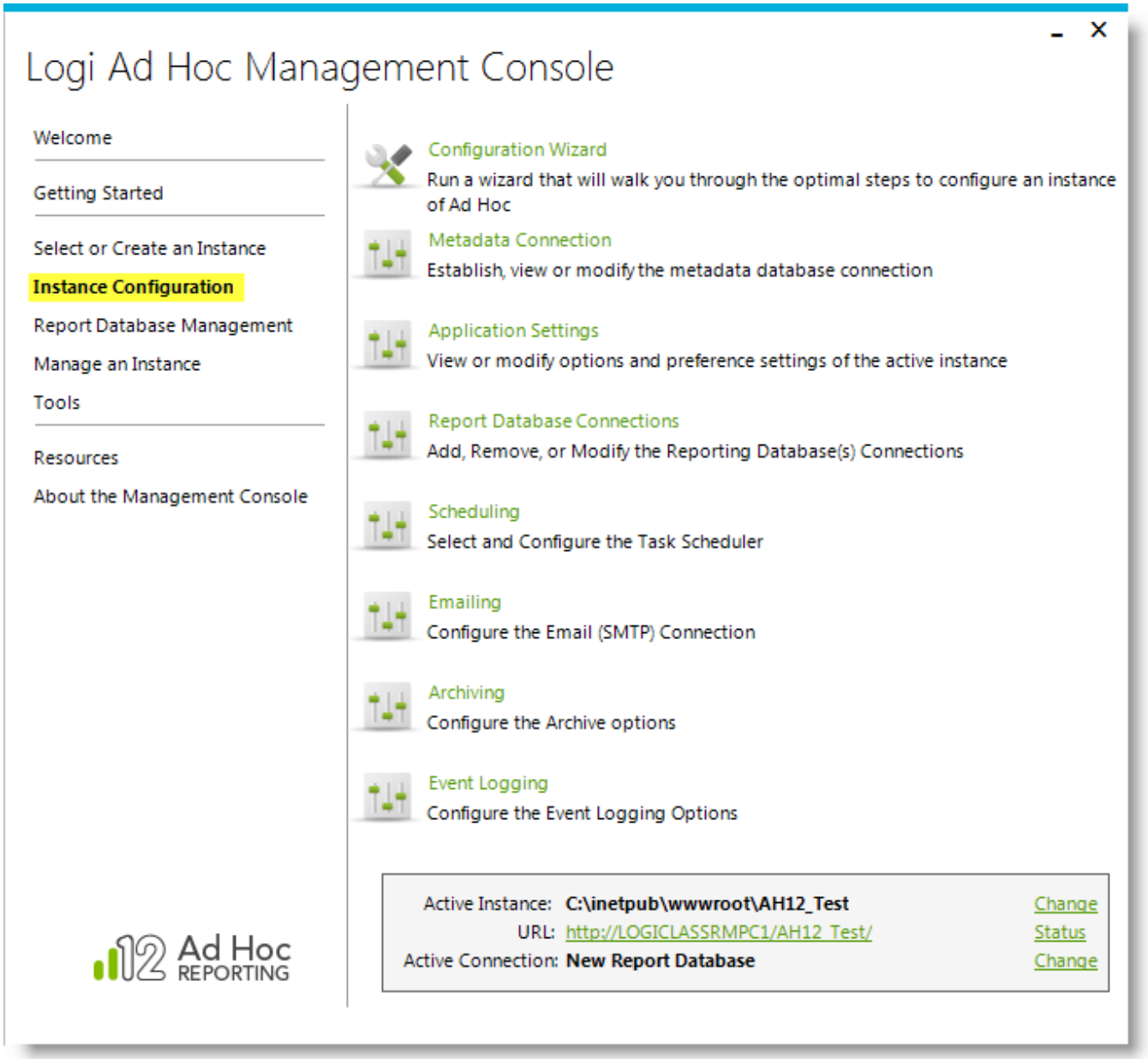
General Configuration

The execution and delivery of scheduled reports is one of the more complicated features of Ad Hoc due to interaction with 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 can be bundled into an email transmission and delivered to a list of users subscribed to receive the report and/or the report can be stored in an archive.

The process demands the services of a task scheduler. Ad Hoc can be configured to either use the Windows Task Scheduler or the Logi Ad Hoc Scheduler Service. The Scheduler Service is included as an installation option when installing Ad Hoc.

In order to deliver reports in emails, an SMTP server must be available to provide this service.

Both the scheduler service and the email server are configured for each instance of Ad Hoc in the Management Console. Under the **Instance Configuration** action group, there are **Scheduling** and **Email** actions used to configure 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*, the System Administrator identifies and configures the scheduler service to be used for the Ad Hoc instance. Each Ad Hoc instance can be connected to multiple reporting databases. *The ability to schedule reports must be enabled for each reporting database*.

Both the Windows Task Schedule and the Logi Scheduler Server perform the same functions; however, there are significant differences between them when it comes to troubleshooting suspected scheduler issues:

Windows Task Scheduler (WTS) – This is the scheduler service delivered with all modern Windows versions. It comes with its own interface that allows the System Administrator to review scheduled tasks. An administrator password must be provided in order to create, modify, or delete scheduled tasks. When using WTS, Ad Hoc creates an "lgxtask" XML file in the instance's `ahScheduler` folder that serves as a kind of backup if the schedules are lost in WTS. When a scheduled report is executed, a log file is created in the `ahScheduler/Log` folder.

Logi Ad Hoc Scheduler – This scheduler service allows instances on different servers to be centrally managed, which is very useful in load-balanced Ad Hoc configurations. All of the scheduling attributes are stored in a VistaDB (.NET) or Derby (Java) database in the scheduler service's root folder. When a scheduled report is executed, an XML log file is created in the `Log` folder.

Note: As of this writing, the Logi Ad Hoc Scheduler is not fully internationalized regarding schedule dates. We recommend that you use WTS in non-US culture implementations.

SMTP Server

Under *Instance Configuration* → *Emailing*, the System Administrator can identify and configure the SMTP server tobe used to deliver reports to subscribed recipients. In addition, the email format must be configured for each reporting database connected to the instance. *The most overlooked attribute in this process is the "From:" address - a required attribute for each reporting database.*

Scheduling in Ad Hoc

In the Ad Hoc interface, scheduling a report for delivery is normally a two-step process:

The first step is creating the schedule by clicking the **Schedule** option from the report list, entering the schedule attributes, and saving the information.

The second step is identifying the report's subscribers by clicking the **Schedule** action from the report list, clicking **Change Subscription** in the Schedule list, selecting the expected recipients, clicking the **Subscribe**. The list of potential subscribers is the list of users who are members of the current Organization, and have access to the reporting database used by the report. Users can be selected as a subscriber only if they 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 that the report relies on externally-defined session parameters, *the ability to remotely subscribe users will not be available unless session parameters have been defined down to the user level*. This is because the values of the session parameters involved must be known at the time of subscription for each subscriber. In the absence of user-level session parameters, 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.

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 can also restrict access to databases, objects, and columns.

Users must have at least one role assigned to them and can be assigned multiple roles. A user is granted the sum of the rights and data access conveyed 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 makes the *Configuration* → *Report Configuration* → *Scheduled Reports* option visible.
- **Schedule Reports from the All Personal Reports Area** – Allows scheduling of reports in the All Personal Reports list.
- **Schedule Reports from the My Personal Reports Area** – Allows scheduling of reports in the user's Personal Reports list.
- **Schedule Reports from the Shared Reports Area** – Allows scheduling of reports in the Shared Reports list.
- **Schedule reports from Global Reports area** – Allows user to schedule reports residing in the Global Reports area.
- **Subscribe to Scheduled Reports** – Allows the user to subscribe to an existing schedule.

Users are not permitted to run, schedule, or subscribe to reports that contain data or display elements that are restricted from use/view by the user.

Problem Diagnosis

This document provides guidance related to specific issues that can be encountered when scheduling reports and configuring their delivery. The basic questions that are addressed are:

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

A logic and resolution table is presented for each question. The answers to the diagnostic questions can be found or verified using the link provided in the verification column of the resolution table.

There can be other considerations that don't fall into the diagnostic logic. These are briefly covered in the "Other Diagnostic Tools" section. Of course, there can be additional issue sources that aren't covered in this document; for those 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 report runs via the Ad Hoc interface
	Is the schedule still active?	Verify that the schedule has not expired
	Is the expected recipient subscribed to the scheduled report?	Verify that the user is in the list of subscribers and the "Is 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 being scheduled?	Reschedule the report
For all reports	Is the scheduler service running?	Verify that the service is active
	Have the credentials changed?	Verify the credentials for the scheduler
	Is the SMTP server running?	Verify that the server is active
	Is the "From:" address configured for the database?	Verify the email configuration for the database connection
For a single user	Is the user subscribed to the report?	Verify the subscription
	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 "Junk" or "Spam" folders?	Verify the email destination
	Have the users roles/permissions changed?	Verify the roles/permissions for the user

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 schedule reports?	Verify that your role has the 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 scheduler
For a single user	Do you have permission to schedule reports?	Verify that your role has the 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?	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 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?	Verify that the user has the 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 subscribe to reports?	Verify that the user has the proper right to subscribe
	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 an organization selected?	Verify that an organization has been selected

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

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 run properly in 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 the report name. Verify that the expected results are produced.

Verify that the schedule has not expired

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

Find the report in the list of reports and click the **Schedule** action. A list of schedules for the report should be presented. Click 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 the **Schedule** action. A list of schedules for the report should be presented. Click 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 the **Schedule** action. A list of schedules for the report should be presented. Click 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 WTS is used, the log file will be found in the instance's `ahScheduler\Log` folder. 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\Logi Analytics Ad Hoc 12\LogiAnalytics Ad Hoc Scheduler Service`*).

If no log file can be found, that's an indication 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 user’s email address, the report would not be delivered.

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

This test will verify that the SMTP server is active, that 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

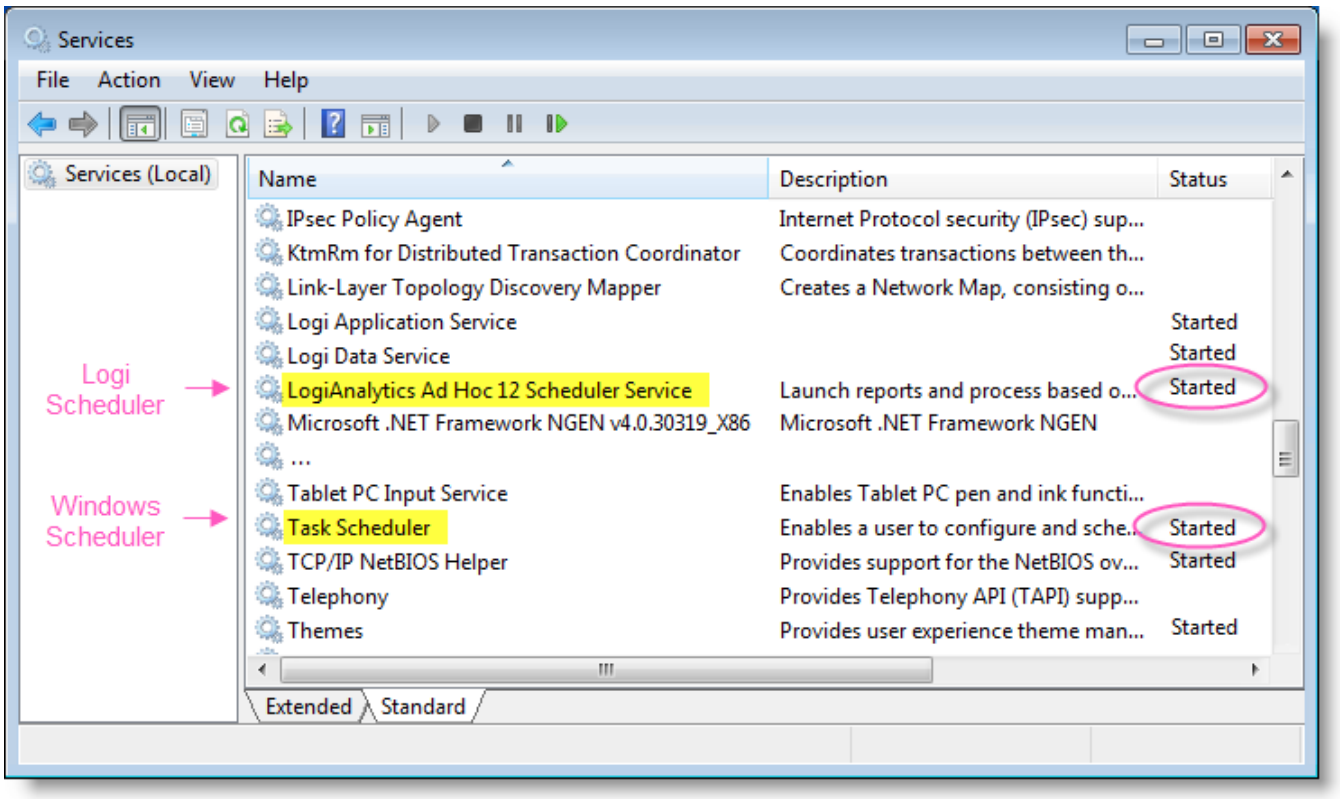
When the scheduled report has been significantly modified, particularly when using dynamic “Ask parameters”, the schedule may have to be re-saved to record all of the changes and re-establish the schedule. As a general rule, when a scheduled report has been modified, it’s a good practice to run the schedule and verify that it continues to behave normally.

To test the schedule, find the report in the list of reports and click the **Schedule** action. A list of schedules for the report should be presented. Click 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

In order to run scheduled reports, 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, shown in the following example:



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 can be verified from the Management Console by clicking on *Instance Configuration* → *Scheduling* and clicking **Test Scheduler Settings**.

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 does not 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 **Apply Changes** to save the attribute value. Click **OK** to close the dialog box.

Check Junk / Spam folders

Depending on the “From:” and ether the SMTP configuration or users email client, messages can be routed to the Spam or Junk email folders. There can 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 can have been modified after scheduling/subscribing such that a user can no longer have access to the report.

This can 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 can 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 can rely on session parameters that have their values set and passed into Ad Hoc on a user-by-user 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 can 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 the *Instance Configuration* → *Scheduling* action. In the bottom panel of the dialog box is a list of all of the reporting connections with an "Enable" checkbox associated with each connection. All reporting connections can be enabled/disabled by clicking the "Enable" column header. Click **OK** 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  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, making changes in the SMTP or task scheduler services, applying system upgrades, and changing 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?

Sometimes more extended diagnosis is necessary. On those occasions one or more of the following diagnostics approaches can provide a clue as to the underlying issues:

Event Viewer

Checking the **Event Viewer** under the **Applications** area can 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 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 to it. 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

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