

# Kofax Reporting 2.0 Daily Operation & Maintenance

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## *Application Note*

<b>Date</b>	September 26, 2013
<b>Applies To</b>	Kofax Reporting 2.0
<b>Summary</b>	This application note provides information about daily operation and maintenance of the Kofax Reporting 2.0 product.
<b>Revision</b>	1.0

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## Kofax Reporting Daily Operation & Maintenance Overview

Kofax Reporting helps system administrators, business process managers, and other stakeholders gain visibility into and take control of Kofax-managed business processes. This product serves as the single conduit across many Kofax products, providing a centralized storage of historical operational metrics and audit data.

This application note provides information about daily operation of Kofax Reporting 2.0, including the following.

- [Monitoring WSA](#)
- [Managing Failed Messages Manually](#)
- Deleting old data from ([staging](#), [warehouse](#)) databases
- [Managing MS SQL Server Databases](#)
- [Managing Oracle Databases](#)
- Managing [Log Files](#)

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## Monitoring WSA

WSA provides a monitoring interface with the following main functions:

- Monitoring WSA status (for troubleshooting)  
WSA stands for Web Services Architecture and it is one of options for communication between application sites and the central reporting site. For additional details on Kofax Reporting's WSA, please refer to the **Installing WSA** section, beginning on page 16 of the [Kofax Reporting 2.0 Administrator's Guide](#).
- Configuring WSA  
For more details, refer to the **Configuring WSA** section, beginning on page 33 of the [Kofax Reporting 2.0 Administrator's Guide](#).
- Viewing messages in WSA storage  
The **WSA Storage** section can be found on page 39 of the [Kofax Reporting 2.0 Administrator's Guide](#).
- [Managing Failed Messages Manually](#)
  1. Start the WSA Monitor utility from the Kofax Reporting group in the Windows Start menu.
  2. If WSA password protection is enabled, log on using the user name "admin" and a password.  
For further details, please refer to the Security options tab information located in the

**Configuring WSA Advanced Settings** section, beginning on page 34 of the [Kofax Reporting 2.0 Administrator's Guide](#).

3. On the menu, click **Status** to display the status of WSA and its internal components and connections. This information might be important for troubleshooting.

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### WSA Storage

Each WSA has an internal storage where it temporarily stores reporting data. The storage can be accessed using WSA Monitor.

#### **WSA Sender storage folders**

- The Inbound Status > Active folder shows messages received from Kofax applications before they are delivered to the WSA Receiver. Messages from the MSMQ dead letter queue are also stored here.
- The Inbound Status > Processed folder shows messages delivered to WSA Receiver. Undeliverable messages are stored here if an administrator deletes them from the Inbound Status > Active folder.
- The outbound storage folders are not used.

#### **WSA Receiver storage folders**

- The Inbound Status > Active folder shows messages received from WSA Sender before ETL Agent attempts to retrieve them. Also, messages that the ETL Agent rejects and schedules for later retry are stored here.
- Messages are moved to the Outbound Status > Active folder when the ETL Agent attempts to retrieve them.
- Successfully confirmed messages are stored in the Outbound Status > Processed folder.
- Rejected messages return to Inbound Status > Active.

**TIP:** Strict browser security settings can restrict the access to some storage fields. For best experience, allow JavaScript and add the IP address to the trusted sites list.

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### Managing Failed Messages Manually

Follow the steps described in this section to manually manage messages that could not be delivered from WSA Receiver to ETL Agent.

**NOTE:** Usually, retries are done automatically and manual action is not necessary.

It is not possible to configure the retry behavior from the WSA Sender to the WSA Receiver. From the WSA Receiver to the ETL Agent, you can control the behavior with the *OutboxReactivate* parameter, in the Store tab of the WSA configuration. The default value is 15 minutes before a retry is attempted. Setting the parameter to 0 disables retries, which is not recommended.

If you disable automatic reactivation or the delivery fails for a prolonged amount of time, WSA storage may get full. If the WSA storage is full, an administrator can delete or reactivate messages in the storage.

For additional details regarding this WSA configuration, please refer to **Configuring WSA Advanced Settings** section beginning on page 34 of the [Kofax Reporting 2.0 Administrator's Guide](#).

### **Deleting Messages**

**CAUTION:** Deleting messages will result in a loss of reporting data.

1. Start the WSA Receiver Monitor or the WSA Sender Monitor from the Kofax Reporting group in the Windows Start menu.
2. Click **Outbound > Active** to display a list of messages. For the WSA Sender, also look in **Inbound > Active**.
3. Select the message or messages you wish to delete.
4. Click **Delete**.

**NOTE:** If you leave the storage window open in your browser for several minutes, the view might time out. Please click **Refresh** before deleting messages.

Also, sometimes, deleting a message may fail because the message is locked for delivery (e.g., on the WSA Sender, the message is being transferred to the WSA Receiver). If the delivery does not work, the message will be unlocked after a while and you can attempt to delete it again. You can stop the polling service to prevent locking.

### **Reactivating Messages**

Follow the steps below if you need to manually reactivate messages in message queues (as there is no automatic reactivation.)

1. Start the WSA Receiver Monitor from the Kofax Reporting group in the Windows Start menu.
2. Click **Outbound > Active** to display a list of messages.
3. Select the message or messages you wish to reactivate.
4. Click **Reactivate**.

Manual reactivation in the WSA Sender is not practical as HTTP transport retries are performed very fast.

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### **Deleting Old Data from Warehouse Database**

Periodically, customers may decide to purge old reporting data from the database because it is no longer needed. This deletion is performed by running a database script (a stored procedure named *sp\_delete\_hist\_oper\_data*).

1. Stop the ETL Agent service.
2. Log on to a database management tool, e.g., Microsoft SQL Server Management Studio or Oracle SQL Developer.
3. Run the stored procedure *sp\_delete\_hist\_oper\_data*. This example deletes all data older than 1 November 2011, 00:00:00.

**For MS SQL Server:**

```
sp_delete_hist_oper_data 10000, 2011, 11
```

**For Oracle:**

```
CALL sp_delete_hist_oper_data(10000, 2011, 11)
```

4. Restart the ETL Agent afterwards.

Deleting data from the database can be a time-consuming operation (especially in Oracle databases). Updating table and index statistics before deleting might improve the delete performance:

```
EXEC dbms_stats.gather_schema_stats('schema_name', cascade=>TRUE);
```

The *etl\_job\_details* table is not managed by this stored procedure. This table contains log entries for diagnostics; administrators can truncate it manually if needed.

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**Deleting Old Data from Staging Database**

The reporting data in the staging database is managed automatically. By default, processed records are deleted immediately. This can be changed by editing the ETL Agent advanced configuration by referring to the **Configuring Advanced Settings of ETL Agent** section beginning on page 27 of the [Kofax Reporting 2.0 Administrator's Guide](#).

**NOTE:** You cannot delete the Workstation table.

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**Managing MS SQL Server Databases**

Microsoft SQL Server databases automatically create log files that contain historical changes in the database. Depending on your database configuration, these log files can potentially fill the hard drive.

If you select "Simple" as the "Recovery model," make sure that you truncate the log files.

E.g., you can use a similar SQL statement to perform this action manually:

```
- - recovery model must be "simple"  
- - Shrink the log file to 100 MB.  
USE <databasename>  
DBCC SHRINKFILE (<databasename>_Log, 100);  
GO
```

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**Managing Oracle Databases**

For optimal performance of the reporting components, optimizer statistics should be available in the Oracle database. Learn more about managing optimizer statistics for an Oracle 11g database by browsing to the URL below.

[http://docs.oracle.com/cd/B28359\\_01/server.111/b28274/stats.htm](http://docs.oracle.com/cd/B28359_01/server.111/b28274/stats.htm)

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**Log Files**

Kofax Reporting provides log files that can help with troubleshooting. Log files are stored in the application / program data folder of all users. The exact path (<path>) depends on the operating system.

- C:\Documents and Settings\All Users\Application Data\Kofax\Reporting (Windows XP and

Windows Server 2003)

- C:\ProgramData\Kofax\Reporting (Windows Vista, Windows Server 2008 and later)

### **Managing Logs in the WSA**

1. Start the WSA Receiver Configuration or the WSA Sender Configuration from the Kofax Reporting group in the Windows Start menu.
2. Click **Advanced** to display additional configuration options.
3. Edit the settings in the Trace tab.
  - The default values (TraceLevel 10 and MessageTraceSize 1) provide basic trace information (that is often sufficient) without negatively impacting performance.
  - Troubleshooting values (TraceLevel 40 and MessageTraceSize 100000) provide lot of information; these settings are more suitable when duplicating error situations in a controlled environment.
4. Click **Save**, then click **Exit and restart service**.
5. Review the log files in `<path>\WSA-Receiver\log` or `<path>\WSA-Sender\log`.

### **Managing Logs in the ETL Agent**

The Windows user under which the ETL Agent service is running must have the "performance log user" right.

If an ETL Agent running under the admin or system user creates a log file and later the service is modified to run under a regular user, log files cannot be written. Non-admin/non-system users must be granted additional permissions for write access to the logs. Alternatively, delete the existing log files.

The trace file is written using the Windows system locale setting. To display regional characters correctly, make sure that the application/editor displaying the log files is using the Windows default encoding and character set.

1. Go to the `<path>\KofaxReportingETLAgent\LogConfig\` folder.
2. Open the **log4net.config** file in a text editor.
3. Edit the line starting with `<level value=`. Use *ERROR* for error output only, *INFO* for normal operation, and *DEBUG* for troubleshooting. The default value is *INFO*. Refer to the example below.

```
<level value="ERROR" />
```
4. Restart the ETL Agent service to make the changes effective.
5. Review the log files in `<path>\KofaxReportingETLAgent\log`.