

Kofax TotalAgility Reporting Views

Version: 7.10.0

Date: 2021-12-12

© 2021 Kofax. All rights reserved.

Kofax is a trademark of Kofax, Inc., registered in the U.S. and/or other countries. All other trademarks are the property of their respective owners. No part of this publication may be reproduced, stored, or transmitted in any form without the prior written permission of Kofax.

Table of Contents

Preface.....	5
Related documentation.....	5
Training.....	6
Getting help with Kofax products.....	6
Chapter 1: Introduction.....	8
Chapter 2: Category audit - runtime.....	9
v_batch_audit (Kofax Capture batch summary).....	9
v_doc_audit.....	9
v_page_audit.....	11
v_page_audit_compare.....	12
v_batch_completion.....	12
v_op_audit.....	13
v_tsf_user_perf.....	14
v_tsf_user_perf_by_mod.....	14
Chapter 3: Category operational performance - general.....	16
v_batch_session.....	16
v_doc_session (for various report types).....	17
Chapter 4: Category operational performance - system performance.....	18
v_pages_scanned (Kofax Capture pages scanned).....	18
v_tsf_class_vs_review (US-CRA01).....	18
v_field_acc (US-CRA04).....	19
v_field_confidence (US-CRA05).....	20
v_tsf_statistics.....	20
v_recog_acc_by_batch (Kofax Transformation Modules recognition accuracy by batch).....	21
v_recog_acc_grouped (Kofax Transformation Modules recognition accuracy grouped).....	22
v_recog_timing_by_batch (Kofax Transformation Modules recognition timing by batch).....	22
v_doc_volume_by_batch (Kofax Transformation Modules document volume by batch).....	23
v_doc_volume_grouped (Kofax Transformation Modules document volume grouped).....	23
v_recog_acc_by_field (Kofax Transformation Modules recognition accuracy by field).....	24
v_recog_timing_grouped (Kofax Transformation Modules document recognition timing).....	24
v_recog_acc_by_batch_grouped (Kofax Transformation Modules recognition accuracy grouped).....	25
v_field_recog_acc_grouped (Kofax Transformation Modules field recognition accuracy grouped).....	26

v_tsf_class_acc.....	26
v_tsf_sep_acc_by_batch_class.....	27
v_tsf_extr_acc_grouped.....	28
v_sla_monitoring.....	28
v_sla_monitoring_bf.....	29
Chapter 5: Category operational performance - operator.....	31
v_op_prod_by_mod_details (US-WrkMgt03, US-WrkMgt05).....	31
v_op_prod_by_batch_summary (US-WrkMgt04).....	31
Chapter 6: Sample report queries.....	33
Batch audit.....	34
Kofax Transformation Modules user performance.....	34
Kofax Transformation Modules user performance per module.....	35
Module productivity.....	35
System throughput.....	36
Operator productivity summary.....	36
Kofax Transformation Modules module performance.....	37
Kofax Transformation Modules server performance.....	37
Pages scanned.....	38
Kofax Transformation Modules daily statistics.....	38
Kofax Transformation Modules recognition timing by month.....	39
Kofax Transformation Modules recognition timing by day.....	39
Kofax Transformation Modules recognition accuracy by month.....	39
Kofax Transformation Modules recognition accuracy by day.....	40
Kofax Transformation Modules field recognition accuracy by month.....	40
Kofax Transformation Modules field recognition accuracy by day.....	41
Kofax Transformation Modules document classification accuracy by month.....	41
Kofax Transformation Modules document separation accuracy.....	42
Kofax Transformation Modules extraction accuracy and confidence by month.....	42
Kofax Transformation Modules extraction accuracy and confidence by day.....	43
Operator productivity per module summary.....	44
Kofax Transformation Modules misclassified document types.....	44

Preface

This guide describes the sample views provided with Kofax Reporting.

Related documentation

The full documentation set for Kofax TotalAgility is available at the following location.

<https://docshield.kofax.com/Portal/Products/KTA/7.10.0-vmhad0mru4/KTA.htm>

In addition to this guide, the documentation set includes the following items:

- *Kofax TotalAgility Prerequisites Guide*: Provides system requirements for installing TotalAgility, instructions for running the prerequisite utility, and a software checklist for various installation types.
- *Kofax TotalAgility Installation Guide*: Describes how to install and configure TotalAgility.
- *Kofax TotalAgility Integration Server Installation Guide*: Describes how to install Kofax Integration Server and integrate it with other products.
- *Kofax TotalAgility On-Premise Multi-Tenant Installation Guide*: Describes how to install and configure On- Premise Multi-Tenant system.
- *Kofax TotalAgility Configuration Utility Guide*: Explains how to use the Configuration Utility to update settings across various configuration files for different types of installation and deployment.
- *Kofax TotalAgility Administrator's Guide*: Provides information to the administrator on configuring and maintaining a TotalAgility installation.
- *Kofax TotalAgility Architecture Guide*: Provides an overview of the TotalAgility architecture, covering various deployments for on-premise, on-premise multi-tenancy and Azure environments.
- *Kofax TotalAgility Best Practices Guide*: Describes the best practices you must follow when using TotalAgility to improve performance, cost, maintenance, availability and security.
- *Kofax TotalAgility Features Guide*: Provides an overview of the TotalAgility features.
- *Kofax TotalAgility Migration Guide*: Provides information on TotalAgility upgrades from different versions and post upgrade configuration.
- *Kofax TotalAgility Help*: Provides details about using TotalAgility to design business jobs and cases, assign resources, create forms, integrate with external applications, and more. Access the help from the TotalAgility application by clicking the Help button.
- *Kofax TotalAgility Workspace Help*: Describes how to use the Workspace to manage activities, jobs, and resources. Access the help from the TotalAgility Workspace by clicking the Help button.

- *Kofax TotalAgility On-Premise Multi-Tenant System Help*: Describes how to create and manage tenants using the TotalAgility On-Premise Multi-Tenant system.
- *Kofax TotalAgility Web Capture Control Help* : Provides details on using a Web Capture control in creating multi-page documents, creating a new document in a new folder, deleting pages that have been incorrectly scanned, and more; also, describes the buttons available in a Web Capture control toolbar.
- *Kofax Analytics for TotalAgility Product Features Guide*: Provides an overview of the dashboards that help you track data through the workflow, analyze the effectiveness of the processes and resources, and address business problems.
- *Kofax TotalAgility Tables*: Describes the Kofax TotalAgility tables and fields used by Kofax Analytics for TotalAgility.
- *Migration From Kofax Products Guide*: Provides information about migrating TotalAgility files and Kofax Transformation Modules projects to TotalAgility.

Training


Kofax offers both classroom and online training to help you make the most of your product. To learn more about training courses and schedules, visit the [Kofax Education Portal](#) on the Kofax website.

Getting help with Kofax products

The [Kofax Knowledge Base](#) repository contains articles that are updated on a regular basis to keep you informed about Kofax products. We encourage you to use the Knowledge Base to obtain answers to your product questions.

To access the Kofax Knowledge Base:

1. Go to the [Kofax website](#) home page and select **Support**.
2. When the Support page appears, select **Customer Support > Knowledge Base**.

 The Kofax Knowledge Base is optimized for use with Google Chrome, Mozilla Firefox or Microsoft Edge.

The Kofax Knowledge Base provides:

- Powerful search capabilities to help you quickly locate the information you need.
Type your search terms or phrase into the **Search** box, and then click the search icon.
- Product information, configuration details and documentation, including release news.
Scroll through the Kofax Knowledge Base home page to locate a product family. Then click a product family name to view a list of related articles. Please note that some product families require a valid Kofax Portal login to view related articles.

From the Knowledge Base home page, you can:

- Access the Kofax Community (for all customers).
Click the **Community** link at the top of the page.
- Access the Kofax Customer Portal (for eligible customers).
Click the **Support** link at the top of the page. When the Customer & Partner Portals Overview appears, click **Log in to the Customer Portal**.
- Access the Kofax Partner Portal (for eligible partners).
Click the **Support** link at the top of the page. When the Customer & Partner Portals Overview appears, click **Log in to the Partner Portal**.
- Access Kofax support commitments, lifecycle policies, electronic fulfillment details, and self-service tools.
Go to the **General Support** section, click **Support Details**, and then select the appropriate tab.

Chapter 1

Introduction

Kofax Reporting provides the sample views that can be used as base for custom reports. For these views, the description holds the name of the existing report type.

Columns that are part of the “primary key” of a view are underlined.

For detailed information about each table, refer to [Kofax TotalAgilityReportingTables_EN.pdf](#).

Report authors should be granted the `kfx_reader` or `kfx_advanced_reader` role for the database. Using either role, they can easily copy a query from the view, modify, and test it as a report query.

Chapter 2

Category audit - runtime

This chapter describes Audit-Runtime views.

v_batch_audit (Kofax Capture batch summary)

The information in this view can be used to replace the Batch Summary report from Kofax Capture standard reporting. It provides an overview of batch processing performance.

The view holds one record for each completed batch.

The report author is responsible for additional grouping and summarizing.

Column	Description
<u>batch_id</u>	Unique batch ID
batch_name	Batch name
create_date_time	Batch creation date and time (UTC) in seconds.
create_date_key	Foreign key to date_dim record matching create_date_time.
create_time_key	Foreign key to time_dim record matching create_date_time.
batch_class	Batch class name.
processing_time	Total processing time in seconds.
end_to_end_time	Total end-to-end batch processing duration in seconds.
docs	Number of documents.
pages	Number of pages.

v_doc_audit

The information in this view can be used to replace the Document Summary report from Kofax Capture standard reporting. It provides an overview of document processing performance.

The view holds one record for each completed document.

The report author is responsible for additional grouping and summarizing.

Column	Description
batch_name	Batch name

Column	Description
<u>doc_id</u>	Unique document ID.
event_time	Event date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching event_time.
time_key	Foreign key to time_dim record matching event_time.
sequence_num	Sequential event number within session.
action_name	Event description.
action_id	Event ID.
is_interactive	0: automatic event, 1: interactive event.
user_logon_name	User name
station_name	Station name
mod_name	Module name
machine_name	Machine name
export_mod	Involved export connector (for export events).
reject_note	Rejection note (for document reject events).

You can optionally include the following event types in this view.

Event ID	Event Description
20001	Document created (KFS).
20002	Document moved.
20003	Document deleted.
20004	Document exported.
20005	Document created through split.
20006	Document deleted through merge.
20007	Document rejected.
20008	Document unrejected.
20009	Suggested class changed.
20010	Suggested class accepted.
20011	Confident class changed.
20012	Form type changed.
20013	Document copied.
20014	Document lost pages by split.
20015	Document gained pages by merge.
20016	Document created (Kofax Capture).
20018	Document move out of batch.

Event ID	Event Description
20019	Document move into batch.
20020	Document name changed.
20021	Override document problem.
20022	Restore document problem.
20023	Document system classified.
20024	Page moved between documents.
20025	Capture completed.

v_page_audit

The information in this view provides an overview of page processing performance. The view holds one record for each page in a completed document.

The report author is responsible for additional grouping and summarizing.

Column	Description
batch_name	Batch name
page_id	Unique page ID
event_time	Event date and time (UTC) in seconds.
sequence_num	Sequential event number within session.
action_id	Event ID
action_name	Event description
is_interactive	0: automatic event, 1: interactive event.
user_logon_name	User name
site_name	Site name
station_name	Station name or scanner name (for KFS page create events).
mod_name	Module name
machine_name	Machine name
reject_note	Rejection note (for page reject events).

You can optionally include the following event types in this view.

Event ID	Event Description
10001	Page scan (Kofax Capture).
10002	Page move
10003	Page delete
10004	Page export

Event ID	Event Description
10007	Page replace
10008	Page copy
10009	Page rotate
10010	Page reject
10011	Page unreject
10012	Page redact (KFS).
10013	Page scan (KFS).
10014	Page annotate (KFS).
10015	Page moved out of batch.
10016	Page moved into batch.
10017	Delete annotation for page.
10019	Redact page

v_page_audit_compare

This view shows the number of scanned, exported, and deleted pages per batch. The view contains one record per completed batch.

Column	Description
full_date	Batch export date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching full_date.
time_key	Foreign key to time_dim record matching full_date.
batch_key	Unique batch key, foreign key to batch_dim.
<u>batch_id</u>	Unique batch ID from Kofax Capture.
batch_name	Batch name.
pages_scanned	Number of scanned pages.
pages_deleted	Number of deleted pages.
pages_exported	Number of exported pages.

v_batch_completion

This view shows the current status of every batch.

Column	Description
create_time	Batch creation date and time (UTC) in seconds.

Column	Description
create_date_key	Foreign key to date_dim record matching create_time.
create_time_key	Foreign key to time_dim record matching create_time.
batch_name	Batch name
<u>batch_id</u>	Unique batch ID from Kofax Capture.
is_deleted	0: not deleted, 1: deleted
numeric_state	Batch state
mod_name	Last module that processed the batch.
last_proc_time	Last processing time (UTC) in seconds.
last_proc_date_key	Foreign key to date_dim record matching last_proc_time.
last_proc_time_key	Foreign key to time_dim record matching last_proc_time.

v_op_audit

This view shows information about the start and end of interactive batch sessions. It contains one record for each interactive batch open or batch close event.

Column	Description
user_logon_name	Operator name
batch_name	Batch name
batch_id	Unique batch ID from Kofax Capture.
action_id	Event ID
action_name	Event description
action_time	Event date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching action_time.
time_key	Foreign key to time_dim record matching action_time.
site_name	Site name
station_name	Station name
machine_name	Machine name
mod_name	Module name

You can optionally include the following event types in this view.

Event ID	Description
30003	Batch open (interactive)
30004	Batch close (interactive)

v_tsf_user_perf

This view exposes Kofax Transformation Modules user performance (number of documents processed, keystrokes, session duration).

It holds one record for each attended session on a document with index fields.

The report author is responsible for additional grouping and summarizing.

Column	Description
user_logon_name	User name
user_key	Foreign key to user_dim record matching user_logon_name.
full_date	Session end date (UTC) in seconds.
date_key	Foreign key to date_dim record matching full_date.
time_key	Foreign key to time_dim record matching full_date.
key_strok	Number of keystrokes.
doc_key	Unique document key (foreign key to doc_dim).
doc_id	Unique document ID from Kofax Capture.
batch_key	Unique batch key (foreign key to batch_dim).
batch_id	Unique batch ID from Kofax Capture.
batch_name	Batch name
field_num	Number of index fields in this document.
sec	Processing time in seconds.

v_tsf_user_perf_by_mod

This view exposes the time each user spent in each attended module. It holds one record per attended batch session. The report author is responsible for additional grouping and summarizing.

Column	Description
user_logon_name	User name
user_key	Foreign key to user_dim record matching user_logon_name.
full_date	Session end date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching full_date.
time_key	Foreign key to time_dim record matching full_date.
mod_name	Module name
mod_key	Foreign key to mod_dim record matching mod_name.

Column	Description
sec	Time spent (seconds)

Chapter 3

Category operational performance - general

This chapter describes the Operational Performance - General views that are the basis for several report types.

Report Type	Existing Report	Views
Module Productivity	Kofax Capture Standard	v_batch_session
System Throughput by Module Summary	Kofax Capture Advanced	v_batch_session, v_doc_session
System Throughput by Day Summary	Kofax Capture Advanced	v_batch_session, v_doc_session
System Throughput by Day by Module Summary	Kofax Capture Advanced	v_batch_session, v_doc_session
Operator Productivity Summary	Kofax Capture Standard Kofax Capture Advanced	v_batch_session, v_doc_session
Operator Productivity by Module Summary	Kofax Capture Advanced	v_batch_session, v_doc_session
Kofax Transformation Modules Performance per Module		v_batch_session
Kofax Transformation Modules Server Performance		v_batch_session, v_doc_session

v_batch_session

The view holds one record for each completed batch session for various report types.

The report author is responsible for additional grouping and summarizing.

Column	Description
mod_name	Module name
mod_key	Foreign key to mod_dim record matching mod_name.
end_date_and_time	Batch session end date and time (UTC) in seconds
end_date_key	Foreign key to date_dim record matching end_date_and_time.
end_time_key	Foreign key to time_dim record matching end_date_and_time.
batch_key	Unique batch key.
batch_id	Unique batch ID from Kofax Capture.

Column	Description
batch_name	Batch name
docs_compl_num	Number of documents completed.
key_strok_num	Number of keystrokes.
sess_duration_sec	Batch processing time in seconds.
pages_num	Number of pages.
docs_num	Number of documents.
ms_in_class_sep	Milliseconds spent for Kofax Transformation Modules classification and separation.
user_logon_name	User name
user_key	Foreign key to user_dim record matching user_logon_name.
<u>batch_sess_snapshot_key</u>	Unique batch session key, can be used for joining the view with v_doc_session (for example, to calculate the number of distinct documents).

v_doc_session (for various report types)

The view holds one record for each completed document session for various report types.

The report author is responsible for additional grouping and summarizing.

Column	Description
<u>doc_sess_snapshot_key</u>	Unique key of the document session.
batch_sess_snapshot_key	Unique key of the batch session.
full_date	Batch session end date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching full_date.
time_key	Foreign key to time_dim record matching full_date.
doc_key	Unique document key.
mod_key	Foreign key to mod_dim record matching mod_name.
mod_name	Module name
ms_in_ocr	Milliseconds spent for OCR (Kofax Transformation Modules).
ms_in_extr	Milliseconds spent for extraction (Kofax Transformation Modules).
ms_in_class	Milliseconds spent for classification (Kofax Transformation Modules).
doc_sess_duration_ms	Milliseconds spent for this document session (Kofax Transformation Modules).

Chapter 4

Category operational performance - system performance

This chapter describes the views related to the Operational and System Performance group.

v_pages_scanned (Kofax Capture pages scanned)

You can use this information in this view to replace the Pages Scanned report from Kofax Capture standard reporting. It holds one record per batch session.

The report author is responsible for additional grouping and summarizing.

Column	Description
full_date	Scan date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching full_date.
time_key	Foreign key to time_dim record matching full_date.
site_name	Site name
station_name	Scan station name.
pages_scanned_num	Number of pages scanned.

v_tsf_class_vs_review (US-CRA01)

The information in this view can be used to replace the "Classification versus Review" report from Kofax Capture Advanced Reports. Only completed batches are considered.

This view holds the detail data (one record per page).

Column	Description
batch_key	Internal batch key (foreign key to batch_dim).
batch_name	Batch name
op	Review operator name.
review_user_key	Foreign key to user_dim record matching op.
doc_key	Internal document key (foreign key to doc_dim).
initial_tsf_class	Kofax Transformation Modules class from classification session.

Column	Description
tsf_class	Kofax Transformation Modules class from document review session.
review_date	Document review date (UTC) in seconds.
reviewed_date_key	Foreign key to date_dim record matching review_date.
reviewed_time_key	Foreign key to time_dim record matching review_date.
classify_date	Classification date (UTC) in seconds.
classified_date_key	Foreign key to date_dim record matching classify_date.
classified_time_key	Foreign key to time_dim record matching classify_date.
<u>page_id</u>	Unique page ID
is_confly_classified	0: not confidently classified. 1: confidently classified.
class_confidence_perc	Classification confidence in percent.

v_field_acc (US-CRA04)

The information in this view can be used to replace the report , Kofax Transformation Modules Field Accuracy from Kofax Capture Advanced Reports.

For every completed batch, the view provides one record per named field. It compares the result of automatic classification with the output of Kofax Transformation Manager validation.

The number of single character changes is calculated though a Leveshtein distance algorithm implemented in function fn_chars_changed. As this calculation must be done for every field, the performance of this query may be slow.

Column	Description
<u>field_name</u>	Field name
full_date	Batch export date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching full_date.
time_key	Foreign key to time_dim record matching full_date.
batch_key	Internal batch key (foreign key to batch_dim).
<u>batch_id</u>	Unique batch ID.
batch_name	Batch name
doc_num	Number of documents.
field_num	Number of fields.
chars_recognized_num	Number of automatically recognized characters.
conf_chars_num	Number of confidently recognized characters.
chars_conf_perc	Percentage of confidently recognized characters.

Column	Description
chars_validated_num	Number of validated characters.
chars_changed_num	Number of changed characters (calculated though fn_chars_changed).
chars_changed_perc	Percentage of changed characters (based on validated characters).

You can optionally include the following event type in this view.

Event ID	Event Description
60001	Fields changed

v_field_confidence (US-CRA05)


The information in this view can be used to replace the report, Kofax Transformation Modules Field Confidence from Kofax Capture Advanced Reports.

The granularity of this view is a single index field (for tabular fields, several records may exist with the same field_name).

Column	Description
field_name	Field name
recognition_date	Recognition date and time (UTC) in seconds.
batch_class	Batch class
doc_class	Document class
form_type	Form type
chars_conf_perc	Percentage of confident characters.

v_tsf_statistics

This view can be used to replace the Kofax Transformation Modules Daily Statistics report. It provides information about document and page traffic and field recognition accuracy. It holds one record per document.

 This view only works for completed documents.

The report author is responsible for additional grouping and summarizing.

Column	Description
last_proc_time	Last processing date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching last_proc_time.
time_key	Foreign key to time_dim record matching last_proc_time.
group_value	Kofax Transformation Modules group value.


Column	Description
doc_key	Unique document key, foreign key to doc_dim.
<u>doc_id</u>	Unique document ID from Kofax Capture.
page_num	Number of pages.
field_valid_corr_num	Number of valid and correct fields.
field_valid_incorr_num	Number of valid and incorrect fields.
field_rejected_corr_num	Number of rejected and correct fields.
field_rejected_incorr_num	Number of rejected and incorrect fields.
field_num	Total number of fields.

v_recog_acc_by_batch (Kofax Transformation Modules recognition accuracy by batch)

This view can be used to replace the Kofax Transformation Modules Recognition Accuracy by Batch report.

The view is grouped by batch and field name. It provides the average recognition accuracy of a field within a batch.

The view is based on field detail data. Field details are only kept in the database for a limited time.

 This view only works for completed documents.

Column	Description
batch_name	Batch name
<u>batch_id</u>	Unique batch ID (from Kofax Capture).
batch_key	Unique batch key (foreign key to batch_dim).
<u>field_name</u>	Field name
field_valid_corr_perc	Percentage of valid and correct fields.
field_valid_incorr_perc	Percentage of valid and incorrect fields.
field_rejected_corr_perc	Percentage of rejected and correct fields.
field_rejected_incorr_perc	Percentage of valid and incorrect fields.
field_total_num	Total number of fields.

v_recog_acc_grouped (Kofax Transformation Modules recognition accuracy grouped)

This view can be used to replace the Kofax Transformation Modules Recognition Accuracy Grouped report from the Actual Reports group.

The view is grouped by Kofax Transformation Modules group value and field name. It provides the field recognition accuracy per group and field name.

i This view only works for completed documents.

Column	Description
batch_name	Batch name
<u>batch_id</u>	Unique batch ID (from Kofax Capture).
batch_key	Unique batch key (foreign key to batch_dim).
<u>field_name</u>	Field name
field_valid_corr_perc	Percentage of valid and correct fields.
field_valid_incorr_perc	Percentage of valid and incorrect fields.
field_rejected_corr_perc	Percentage of rejected and correct fields.
field_rejected_incorr_perc	Percentage of valid and incorrect fields.
field_total_num	Total number of fields.

Column	Description
<u>group_value</u>	Kofax Transformation Modules group value.
<u>field_name</u>	Field name
field_valid_corr_num	Number of valid and correct fields.
field_valid_incorr_num	Number of valid and incorrect fields.
field_rejected_corr_num	Number of rejected and correct fields.
field_rejected_incorr_num	Number of rejected and incorrect fields.
field_num	Total number of fields.

v_recog_timing_by_batch (Kofax Transformation Modules recognition timing by batch)

This view can be used to replace the Kofax Transformation Modules Recognition Timing by Batch report from the Actual Reports group.

It holds one record for each completed batch.

Column	Description
batch_key	Internal batch key (foreign key to batch_dim).
<u>batch_id</u>	Unique batch ID (from Kofax Capture).
batch_name	Batch name
last_proc_time	Last processing date and time (UTC, granularity: seconds).
date_key	Foreign key to date_dim record matching last_proc_time.
time_key	Foreign key to time_dim record matching last_proc_time.
doc_num	Number of documents.
page_num	Number of pages.
sec_in_ocr	Total seconds spent in OCR.
sec_in_extr	Total seconds spent in extraction.

v_doc_volume_by_batch (Kofax Transformation Modules document volume by batch)

The Kofax Transformation Modules Document Volume by Batch report from the Actual Reports group can be designed from "v_recog_timing_by_batch" or from "v_doc_volume_by_batch".

The view "v_doc_volume_by_batch" holds one record for each completed document.

Column	Description
batch_key	Internal batch key (foreign key to batch_dim).
<u>batch_id</u>	Unique batch ID (from Kofax Capture).
batch_name	Batch name
last_proc_time	Last processing date and time (UTC, granularity: seconds).
date_key	Foreign key to date_dim record matching last_proc_time.
time_key	Foreign key to time_dim record matching last_proc_time.
doc_num	Number of documents.
page_num	Number of pages.

v_doc_volume_grouped (Kofax Transformation Modules document volume grouped)

This view can be used to design the Kofax Transformation Modules Document Volume Grouped report from the Actual Reports group.

For each batch, the report shows the document volume grouped by group value.

i This view works for completed documents.

Column	Description
<u>group_value</u>	Kofax Transformation Modules group value.
batch_name	Batch name
<u>batch_id</u>	Unique batch ID (from Kofax Capture).
batch_key	Internal batch key (foreign key to batch_dim).
last_proc_time	Last processing date and time (UTC, granularity: seconds).
date_key	Foreign key to date_dim record matching last_proc_time.
time_key	Foreign key to time_dim record matching last_proc_time.
doc_num	Number of documents.
page_num	Number of pages.

v_recog_acc_by_field (Kofax Transformation Modules recognition accuracy by field)

This view can be used to design the historical report Kofax Transformation Modules Recognition Accuracy by Field.

It is built from aggregated data and grouped by batch class and field name.

Column	Description
<u>batch_class</u>	Batch class name.
<u>field_name</u>	Field name
field_valid_corr_perc	Percentage of valid and correct fields.
field_valid_incorr_perc	Percentage of valid and incorrect fields.
field_invalid_corr_perc	Percentage of invalid and correct fields.
field_invalid_incorr_perc	Percentage of invalid and incorrect fields.
field_total_num	Total field number.

v_recog_timing_grouped (Kofax Transformation Modules document recognition timing)

This view can be used to design the historical report types, Kofax Transformation Modules Document Recognition Timing Grouped and Kofax Transformation Modules Document Recognition Timing per Day.


It holds one record per completed document. The report author is responsible for additional grouping and summarizing.

Column	Description
batch_class	Batch class name.
group_value	Kofax Transformation Modules group value.
last_proc_time	Last processing date and time (UTC, granularity: seconds).
date_key	Foreign key to date_dim record matching export_date_key.
time_key	Foreign key to time_dim record matching last_proc_time.
doc_key	Unique document key (foreign key to doc_dim).
page_num	Number of pages.
sec_in_ocr	Total OCR time in seconds.
sec_in_extr	Total extraction time in seconds.

v_recog_acc_by_batch_grouped (Kofax Transformation Modules recognition accuracy grouped)

This view can be used to design the historical report types, Kofax Transformation Modules Recognition Accuracy Grouped and Kofax Transformation Modules Recognition Accuracy per Day.

It holds one record for each combination of batch ID and group value. The report author is responsible for additional grouping and summarizing.

 This view works for completed documents.

Column	Description
batch_class	Batch class name.
batch_name	Batch name
<u>batch_id</u>	Unique batch ID.
batch_key	Unique batch key (foreign key to batch_dim).
<u>group_value</u>	Kofax Transformation Modules group value.
last_proc_time	Last processing date and time (UTC, granularity: seconds).
<u>date_key</u>	Foreign key to date_dim record matching export_date_time.
<u>time_key</u>	Foreign key to time_dim record matching export_date_time.
valid_corr	Number of valid and correct fields.
valid_incorr	Number of valid and incorrect fields.
invalid_corr	Number of invalid and correct fields.
invalid_incorr	Number of invalid and incorrect fields.


Column	Description
field_num	Number of fields.
doc_num	Number of documents.
page_num	Number of pages.

v_field_recog_acc_grouped (Kofax Transformation Modules field recognition accuracy grouped)

This view can be used to design the historical report types, Kofax Transformation Modules Field Recognition Accuracy Grouped and Kofax Transformation Modules Field Recognition Accuracy per Day.

It is grouped by batch ID, group value, and field name.

The report author is responsible for additional grouping and summarizing.

 This view works for completed documents.

Column	Description
batch_id	Unique batch ID from Kofax Capture.
batch_name	Batch name
batch_key	Unique batch key (foreign key to batch_dim).
batch_class	Batch class name.
group_value	Kofax Transformation Modules group value.
field_name	Field name
last_proc_time	Last processing date and time (UTC, granularity: seconds).
date_key	Foreign key to date_dim record matching export_date_time.
time_key	Foreign key to time_dim record matching export_date_time.
valid_corr	Number of valid and correct fields.
valid_incorr	Number of valid and incorrect fields.
invalid_corr	Number of invalid and correct fields.
invalid_incorr	Number of invalid and incorrect fields.
field_num	Number of fields.

v_tsf_class_acc

This view exposes Kofax Transformation Modules document classification accuracy. It covers only documents that were marked as completed. It holds one record per completed document.

The report author is responsible for additional grouping and summarizing.

Column	Description
batch_class	Batch class name.
group_value	Kofax Transformation Modules group value.
class_date_time	Classification date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching export_date_time.
time_key	Foreign key to time_dim record matching export_date_time.
doc_key	Unique document key (foreign key to doc_dim).
corr_and_conf	1 if document correct and confidently classified.
corr_and_unconf	1 if document correct and unconfidently classified.
incorr_and_conf	1 if document incorrect and confidently classified.
incorr_and_unconf	1 if document incorrect and unconfidently classified.

v_tsf_sep_acc_by_batch_class

This view exposes Kofax Transformation Modules batch separation accuracy.

It holds one record per successfully completed batch.

The report author is responsible for additional grouping and summarizing.

Column	Description
batch_class	Batch class
create_date_time	Batch creation date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching export_date_time.
time_key	Foreign key to time_dim record matching export_date_time.
batch_key	Unique batch key (foreign key to batch_dim).
batch_id	Unique batch ID from Kofax Capture.
batch_name	Batch name
corr_splits	Number of correct split points.
wrong_splits	Number of wrong split points.
missed_splits	Number of missed split points.
is_corrly_split	0 if batch has wrong split points or missed split points, else 1.

v_tsf_extr_acc_grouped

This view exposes Kofax Transformation Modules field extraction accuracy grouped by batch, group value and field name.

The report author is responsible for additional grouping and summarizing.

i This view works for completed documents.

Column	Description
batch_class	Batch class
<u>batch_id</u>	Unique batchID.
<u>group_value</u>	Kofax Transformation Modules group value.
<u>field_name</u>	Field name
batch_name	Batch name
batch_key	Unique batch key (foreign key to batch_dim).
last_proc_time	Last processing date and time (UTC, granularity: seconds).
export_date_key	Foreign key to date_dim record matching export_date_time.
export_time_key	Foreign key to time_dim record matching export_date_time.
fields	Number of fields.
characters	Number of characters.
valid_corr_fields	Number of valid and correct fields.
valid_incorr_fields	Number of valid and incorrect fields.
invalid_corr_fields	Number of invalid and correct fields.
invalid_incorr_fields	Number of invalid and incorrect fields.
conf_corr_fields	Number of confident and correct fields.
conf_incorr_fields	Number of confident and incorrect fields.
unconf_corr_fields	Number of unconfident and correct fields.
unconf_incorr_fields	Number of unconfident and incorrect fields.

v_sla_monitoring

This view contains one record per batch. It shows the total processing time (from inception till completion / or from inception till last batch event, if batch was not completed yet), batch completion status, number of documents, number of pages, batch class, station and operator from batch creation.

Column	Description
batch_class	Batch class
<u>batch_id</u>	Unique batch ID
batch_name	Batch name
time_created	Creation time of oldest document (UTC) in seconds.
create_date_key	Foreign key to date_dim record matching time_created.
create_time_key	Foreign key to time_dim record matching time_created.
is_exported	0: not exported, 1: exported
batch_state	Numeric batch status.
scan_user	Scan user
create_user_key	Foreign key to user_dim record matching scan_user.
scan_site	Scan site
scan_station	Scan station
create_station_key	Foreign key to station_dim record matching scan_station.
end_to_end_sec_num	Total processing time of this batch (so far).
docs_num	Number of documents.
pages_num	Number of pages.

v_sla_monitoring_bf

This view is not intended for production use, because it relies on a hard-coded batch field name. It returns all batches that contain a batch field called "sample". This view just shows how to build such a query.

For each batch, it shows the value of this batch field, the total processing time (from inception till completion / or from inception till last batch event, if batch was not completed yet), batch completion status, number of documents, number of pages, batch class, station and operator from batch creation.

Column	Description
batch_class	Batch class
<u>batch_id</u>	Unique batch ID
batch_name	Batch name
time_created	Creation time of oldest document (UTC) in seconds.
create_date_key	Foreign key to date_dim record matching time_created.
create_time_key	Foreign key to time_dim record matching time_created.
<u>field_value</u>	Batch field value.
is_exported	0: not exported, 1: exported

Column	Description
batch_state	Numeric batch status.
scan_user	Scan user
create_user_key	Foreign key to user_dim record matching scan_user.
scan_site	Scan site
scan_station	Scan station
create_station_key	Foreign key to station_dim record matching scan_station.
end_to_end_sec_num	Total processing time of this batch (so far).
docs_num	Number of documents.
pages_num	Number of pages.

Chapter 5

Category operational performance - operator

This chapter describes the Operational Performance - views that are the basis for several report types.

v_op_prod_by_mod_details (US-WrkMgt03, US-WrkMgt05)

This view can be used to replace the report types, Operator Productivity Details and Operator Productivity by Batch Detail in Kofax Capture Advanced Reports.

Each record holds performance details about a single batch session.

Column	Description
op	Operator name
batch_key	Unique batch ID (foreign key to batch_dim).
batch_id	Unique batch ID
batch_name	Batch name
mod_name	Module name
start_time	Batch session start date and time (UTC) in seconds.
start_date_key	Foreign key to date_dim record matching start_time.
start_time_key	Foreign key to time_dim record matching start_time.
end_time	Batch session end date and time (UTC) in seconds.
end_date_key	Foreign key to date_dim record matching end_time.
end_time_key	Foreign key to time_dim record matching end_time.
distinct_docs	Number of documents at session end.
processing_time	Batch session duration in seconds.
avg_time_per_dist_doc	Average time per document in seconds.

v_op_prod_by_batch_summary (US-WrkMgt04)

This view can be used to replace the Operator Productivity By Batch Summary report in Kofax Capture Advanced Reports.

It shows how a single operator contributed to the performance of a single batch. The view is grouped by batch and operator.

Column	Description
<u>user_logon_name</u>	Operator name
batch_key	Internal batch key (foreign key to batch_dim).
<u>batch_id</u>	Unique batch ID (from Kofax Capture).
batch_name	Batch name
sesss	Number of batch sessions.
mo ds	Number of used modules.
sum_docs	Number of completed documents.
distinct_docs	Distinct number of documents.
processing_time	Batch processing time in seconds.
avg_sess_time	Average batch session duration in seconds.
avg_mod_time	Average time spent per module in seconds.
distinct_doc_time	Average time spent per document in seconds.
batch_create_time	Batch creation date and time (UTC) in seconds.
date_key	Foreign key to date_dim record matching batch_create_time.
time_key	Foreign key to time_dim record matching batch_create_time.

Chapter 6

Sample report queries

This chapter describes sample queries for some report types that are grouped by date. The database holds all time stamps in UTC time. It is up to the report author to calculate local date and time values as needed and to do the grouping.

The following examples show how the calculations of date and time values and grouping can be achieved using the predefined set of views. All examples are in TSQL syntax (for MS SQL Server 2008 R2).

All sample queries use the following algorithm to determine the local date value *date_local* from the UTC based date and time value *date_time_utc*:

```
CAST( SWITCHOFFSET(TODATETIMEOFFSET (date_time_utc, '+00:00'),  
DATENAME(TZoffset, SYSDATETIMEOFFSET()) ) as date) as date_local
```

For conversion to another time zone, use an explicit date and time offset value as the second parameter of function SWITCHOFFSET.

Example (switching to UTC + 8):

```
CAST( SWITCHOFFSET(TODATETIMEOFFSET (date_time_utc, '+00:00'), '+08:00' ) as date) as  
date_local
```

Helper views

Some views are for internal use and their backward compatibility is not guaranteed. The following table provides a list of such views.

View	Description
v_batch_duration_hlp	Batch duration helper view. Shows batch summary for batches that contains some scanned pages.
v_dist_docs	Helper view. Shows distinct documents in all document sessions.
v_field_chars_changed	Operational performance helper view. Shows changed chars per field.
v_last_batch_event	Shows latest batch action.
v_object_audit_hlp	Helper view intended for internal usage for other audit views.
v_open_batch_sess	Show batch sessions that are currently opened. This view is currently not supported, because data is reported only when session is completed.
v_batch_completed_hlp	Shows batches that contain documents that were marked as capture completed.

Filtering by local date

All views holding date and time values also hold foreign keys to the dimension tables date_dim and time_dim. As these keys are indexed, they should be used when filtering by day or time is needed.

The Business Intelligence (BI) application, such as Kofax Analytics, can convert date and time values to UTC time and then build date and time keys from the UTC time.

The date_key in date_dim is an integer value that can be calculated as $\text{day} + \text{month} * 100 + \text{year} * 10000$. For example, the date 2012-10-31 corresponds to date_key 20121031.

The time_key in time_dim is an integer value that can be calculated as $\text{second} + \text{minute} * 100 + \text{hour} * 10000$. Thus, the minimum time_key is 0 (00:00:00) and the maximum time_key is 235959 (23:59:59).

Batch audit

This query can be used to replace the "Batch Summary" report from Kofax Capture standard reporting. It provides an overview of batch processing performance, grouped by batch class and day.

```
SELECT ld.batch_class,ld.create_day,COUNT (ld.batch_id) as batches,
SUM (ld.processing_time) as processing_time,SUM (ld.end_to_end_time) as
end_to_end_time,
SUM (ld.docs) as docs,SUM(ld.pages) as pages,
SUM (ld.docs) * 1.0 / COUNT (ld.batch_id) as avg_docs_per_batch,
SUM(ld.pages) * 1.0 / COUNT (ld.batch_id) as avg_pages_per_batch,
SUM (ld.processing_time) * 1.0 / nullif (SUM(ld.docs),0) as
avg_processing_time_per_doc,
SUM (ld.processing_time) * 1.0 / count (ld.batch_id) as avg_processing_time_per_batch,
SUM (ld.end_to_end_time) * 1.0 / COUNT (ld.batch_id) as avg_end_to_end_time
FROM (select batch_id, batch name,CAST( SWITCHOFFSET(TODATETIMEOFFSET
(create_date_time,'+00:00'),
DATENAME(TZoffset, SYSDATETIMEOFFSET()) ) as date) as create_day,
batch_class,processing_time,end_to_end_time,docs,pages
FROM v_batch_audit ) ld group by ld.batch_class, ld.create_day
```

Kofax Transformation Modules user performance

This query provides information about the performance of Kofax Transformation Modules operators (number and frequency of keystrokes, processed documents), grouped by operator name and day.

```
;with locData (user_logon_name, localDate, doc_key, batch_key, key_strok, field_num,
sec)as
(SELECT user_logon_name,CAST( SWITCHOFFSET(TODATETIMEOFFSET (full_date,'+00:00'),
DATENAME(TZoffset, SYSDATETIMEOFFSET()) ) as date) as
localDate,doc_key,batch_key,key_strok,field_num,
sec from v_tsf_user_perf)
SELECT d.user_logon_name, d.localDate as full_date, y.key_strok,
y.doc_sesss,y.distinct_docs,
y.distinct_batches ,y.field_sesss, d.dist_fields, y.sec,
y.key_strok * 1.0/ y.field_sesss as key_strok_per_field_sess,
y.key_strok * 1.0/ d.dist_fields as key_strok_per_dist_field,
y.key_strok * 1.0/ y.doc_sesss as key_strok_per_doc_sess,
y.key_strok * 1.0/ y.distinct_docs as key_strok_per_dist_doc,
```

```

y.key_strok * 1.0/ y.distinct_batches as key_strok_per_batch,
y.key_strok * 60.0/ nullif (y.sec,0) as key_strok_min_user,
y.key_strok * 60.0/ nullif (y.sec * y.field_sesss, 0) as key_strok_min_field_sess,
y.key_strok * 60.0/ nullif (y.sec * d.dist_fields, 0) as key_strok_min_dist_field,
y.key_strok * 60.0/ nullif (y.sec * y.doc_sesss, 0) as key_strok_min_doc_sess,
y.key_strok * 60.0/ nullif (y.sec * y.distinct_docs, 0) as key_strok_min_dist_doc,
y.key_strok * 60.0/ nullif (y.sec * y.distinct_batches, 0) as key_strok_min_dist_batch
FROM(SELECT x.user_logon_name, x.localDate, SUM(x.dist_fields) as dist_fields from
(SELECT user_logon_name,localDate,doc_key,MAX(field_num) as dist_fields
FROM locData group by user_logon_name, localDate, doc_key) x group by
x.user_logon_name, x.localDate)
d inner join
(SELECT user_logon_name, localDate,SUM (key_strok) as key_strok,COUNT (doc_key) as
doc_sesss,
COUNT (distinct doc_key) as distinct_docs,COUNT (distinct batch_key) as
distinct_batches,
SUM (field_num) as field_sesss,SUM (sec) as sec
FROM locData group by user_logon_name, localDate) y
on (d.user_logon_name = y.user_logon_name and d.localDate = y.localDate )

```

Kofax Transformation Modules user performance per module

This query shows the number and duration of interactive batch sessions, grouped by user, date and module.

```

;with locData (user_logon_name,localDate, mod_name, sec) as
(SELECT user_logon_name, CAST
(SWITCHOFFSET(TODATETIMEOFFSET (full_date,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET ()))
as date) as localDate,mod_name,sec
FROM v_tsf_user_perf_by_mod )
SELECT user_logon_name, localDate as full_date, mod_name, SUM (sec) as total_sec,
AVG (sec * 1.0) as average_sec,COUNT (sec) as sesss
FROM locData group by user_logon_name, localDate, mod_name

```

Module productivity

Like the original "v_mod_prod" view, this query can be used when porting the Kofax Capture Standard Report " Module Productivity" to Kofax Reporting Platform. The resulting data set is grouped by module and date.

```

;with locData (mod_name, localDate, batch_key, docs_compl_num,
key_strok_num, sess_duration_sec) as
(SELECT mod_name, CAST
(SWITCHOFFSET(TODATETIMEOFFSET (end_date_and_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET ()))
as date) as localDate, batch_key,docs_compl_num, key_strok_num, sess_duration_sec
FROM v_batch_session)
SELECT mod_name,localDate as full_date,COUNT (batch_key) as sess_num,
COUNT (distinct batch_key) as batch_num,SUM (docs_compl_num) as docs_compl_num,
SUM (key_strok_num) as key_strok_num,
SUM (docs_compl_num) * 1.0 / COUNT (distinct batch_key) as
avg_compl_docs_per_batch_num,
SUM (key_strok_num) * 1.0 / nullif (sum (docs_compl_num),0) as
avg_key_strok_per_compl_doc,
SUM (sess_duration_sec) as total_processing_time_sec,
SUM (sess_duration_sec) * 1.0 / COUNT (distinct batch_key) as avg_sec_per_batch,

```

```
SUM (sess_duration_sec) * 1.0 / nullif (sum (docs_compl_num),0) as
avg_sec_per_compl_doc
FROM locData group by mod_name, localDate
```

System throughput

Like the original view "v_sys_through_by_day_by_mod", this query can be used when porting the following Kofax Capture Advanced Reports to the Kofax Reporting Platform:

- System Throughput by Module Summary
- System Throughput by Day Summary
- System Throughput by Day by Module Summary

The query measures system throughput (sessions, batches, documents, pages, duration) grouped by module and day.

```
;with locData (mod_name, localDate, batch_key, docs_compl_num,
key_strok_num, sess_duration_sec,
pages_num, batch_sess_snapshot_key) as
(SELECT mod_name, CAST (SWITCHOFFSET(TODATETIMEOFFSET (end_date_and_time, '+00:00'),
DATENAME(TZoffset, SYSDATETIMEOFFSET ())) as date) as
localDate, batch_key, docs_compl_num, key_strok_num,
sess_duration_sec, pages_num, batch_sess_snapshot_key FROM v_batch_session)
SELECT mod_name, full_date, sess_num, batch_num, distinct_doc_num, page_num,
total_processing_time_sec,
total_processing_time_sec * 1.0 / sess_num as avg_time_per_sess_sec,
total_processing_time_sec * 1.0 / batch_num as avg_time_per_batch_sec,
total_processing_time_sec * 1.0 / nullif(distinct_doc_num,0) as
avg_time_per_dist_doc_sess,
total_processing_time_sec * 1.0 / nullif (page_num, 0) as avg_time_per_page_sess
FROM (SELECT bdata.*, (SELECT COUNT (distinct_doc_key) FROM v_doc_session where
batch_sess_snapshot_key in (select batch_sess_snapshot_key from locData where
mod_name = bdata.mod_name and localDate = bdata.full_date)) as distinct_doc_num
FROM (SELECT mod_name, localDate as full_date, COUNT (batch_key) as sess_num, COUNT
(distinct batch_key) as batch_num,
SUM (pages_num) as page_num, SUM (sess_duration_sec) as total_processing_time_sec
FROM locData group by mod_name, localDate ) bdata ) x
```

Operator productivity summary

Like the original view "v_op_prod_summary", this query can be used as an equivalent of the Kofax Capture Operator Productivity Summary report and of KC Advanced Report US-WrkMgt01.

This query shows the productivity of a single operator by day.

```
;with locData (user_logon_name, mod_name, localDate, batch_key, docs_compl_num,
key_strok_num, sess_duration_sec, pages_num, batch_sess_snapshot_key) as
(SELECT user_logon_name, mod_name, CAST
(SWITCHOFFSET(TODATETIMEOFFSET (end_date_and_time, '+00:00'), DATENAME(TZoffset,
SYSDATETIMEOFFSET ()))
as date) as
localDate, batch_key, docs_compl_num, key_strok_num, sess_duration_sec, pages_num,
batch_sess_snapshot_key from v_batch_session)
SELECT user_logon_name, full_date, sess_num as sesss, batch_num as batches, mods, sum_docs,
distinct_doc_num as distinct_docs,
total_processing_time_sec as processing_time,
```

```

total_processing_time_sec * 1.0 / nullif (sess_num,0) as avg_sess_time,
total_processing_time_sec * 1.0 / nullif (mods,0) as avg_mod_time,
total_processing_time_sec * 1.0 / nullif(distinct_doc_num,0) as distinct_doc_time,
sum_keystrok,sum_docs * 1.0 / nullif (batch_num,0) as avg_compl_docs_per_batch,
sum_keystrok * 1.0 / nullif (sum_docs, 0) as avg_keystrok_per_doc,
total_processing_time_sec * 1.0 / batch_num as distinct_batch_time,
sum_docs * 3600.0 / nullif (total_processing_time_sec,0) as docs_per_hour,
sum_keystrok * 3600.0 / nullif (total_processing_time_sec,0) as keystrok_per_hour
FROM (SELECT bdata.*,
(SELECT COUNT (distinct doc_key) from v_doc_session where
batch_sess_snapshot_key in (select batch_sess_snapshot_key from locData where
user_logon_name = bdata.user_logon_name and localDate = bdata.full_date)) as
distinct_doc_num
FROM (SELECT user_logon_name,localDate as full_date,
COUNT (batch_key) as sess_num,
COUNT (distinct batch_key) as batch_num,
COUNT (distinct mod_name) as mods,
SUM (docs_compl_num) as sum_docs,
SUM (key_strok_num) as sum_keystrok,
SUM (sess_duration_sec) as total_processing_time_sec
FROM locData group by user_logon_name, localDate) bdata) x

```

Kofax Transformation Modules module performance

Like the original view "v_tsf_perf_per_mod", this query shows batch and document processing statistics, grouped by module and day.

```

;with locData (user_logon_name, mod_name, localDate, batch_key, docs_num,
docs_compl_num,
key_strok_num, sess_duration_sec, pages_num, batch_sess_snapshot_key) as
(SELECT user_logon_name, mod_name, CAST
(SWITCHOFFSET(TODATETIMEOFFSET (end_date_and_time, '+00:00'), DATENAME(TZoffset,
SYSDATETIMEOFFSET ()))
as date) as localDate, batch_key, docs_num, docs_compl_num,
key_strok_num, sess_duration_sec, pages_num,
batch_sess_snapshot_key from v_batch_session)
SELECT mod_name, localDate as full_date, SUM(sess_duration_sec) as total_sec,
COUNT (batch_key) as batch_sesss, SUM (docs_num) as doc_sesss,
AVG (sess_duration_sec * 1.0) as sec_per_batch,
SUM (sess_duration_sec) * 1.0 / nullif (sum (docs_num), 0) as sec_per_doc
FROM locData group by mod_name, localDate

```

Kofax Transformation Modules server performance

Like the original view "v_tsf_server_perf", this query shows the performance of the Kofax Transformation Modules Server processes on a per day basis.

```

;with locData (mod_name, localDate, ms_in_class_sep, batch_sess_snapshot_key) as
(SELECT mod_name, CAST
(SWITCHOFFSET(TODATETIMEOFFSET (end_date_and_time, '+00:00'), DATENAME(TZoffset,
SYSDATETIMEOFFSET ()))
as date) as localDate, ms_in_class_sep, batch_sess_snapshot_key from v_batch_session),
locDocData (mod_name, batch_sess_snapshot_key, doc_sess_snapshot_key, doc_key, ms_in_ocr,
ms_in_extr, ms_in_class,
doc_sess_duration_ms, localDate ) as
(SELECT mod_name, batch_sess_snapshot_key, doc_sess_snapshot_key,
doc_key, ms_in_ocr, ms_in_extr, ms_in_class,

```

```

doc_sess_duration_ms,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (full_date,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate from v_doc_session)
SELECT localDate as full_date,SUM (locDocData.ms_in_ocr) as total_ms_in_ocr,
SUM (locDocData.ms_in_extr) as total_ms_in_extr,SUM (locDocData.ms_in_class) as
total_ms_in_class,
SUM (locDocData.doc_sess_duration_ms) as total_ms,
(SELECT SUM (ms_in_class_sep * 1.0) FROM locData d where
d.localDate = locDocData.localDate) as total_ms_in_class_sep,COUNT
(locDocData.doc_sess_snapshot_key ) as doc_sesss,
AVG (locDocData.ms_in_ocr * 1.0) as avg_ms_in_ocr,AVG (locDocData.ms_in_extr * 1.0) as
avg_ms_in_extr,
AVG (locDocData.ms_in_class * 1.0) as avg_ms_in_class,AVG
(locDocData.doc_sess_duration_ms * 1.0) as avg_ms
FROM locDocData where mod_name like 'KTM Server%' group by localDate

```

Pages scanned

This query can be used to replace the Kofax Capture Standard Pages Scanned report. It shows a scan statistic grouped by day, scan station and site.

```

;with locData (localDate, station_name, site_name, pages_scanned_num) as
(SELECT CAST
(SWITCHOFFSET(TODATETIMEOFFSET (full_date,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate, station_name, site_name, pages_scanned_num from v_pages_scanned)
SELECT localDate,YEAR(localDate) as calendar_year,MONTH (localDate) as month_of_year,
site_name,station_name,SUM (pages_scanned_num) as pages_scanned_num
FROM locData group by localDate,station_name,site_name

```

Kofax Transformation Modules daily statistics

Like the original view "v_daily_statistics", this query can be used for porting the Kofax Transformation Modules Daily Statistics Report.

The query shows throughput and field recognition accuracy per day and group value.

```

;with locData (localDate,group_value,doc_key,doc_id,page_num,field_valid_corr_num,
field_valid_incorr_num,field_rejected_corr_num,field_rejected_incorr_num,field_num) as
(SELECT CAST
(SWITCHOFFSET(TODATETIMEOFFSET (last_proc_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate,[group_value],[doc_key],[doc_id],[page_num],
[field_valid_corr_num],
[field_valid_incorr_num],[field_rejected_corr_num],[field_rejected_incorr_num],
[field_num]
FROM v_tsf_statistics)
SELECT localDate, group_value,COUNT (doc_key) as doc_num,SUM (page_num) as page_num,
SUM (field_valid_corr_num) as field valid corr num,
SUM (field_valid_incorr_num) as field valid incorr num,
SUM (field_rejected_corr_num) as field rejected corr num,
SUM (field_rejected_incorr_num) as field rejected incorr num,
SUM (field_num) as field_num
FROM locData group by localDate,group_value

```

Kofax Transformation Modules recognition timing by month

This query shows Kofax Transformation Modules recognition timing grouped by batch class, group value and month. It can be used to replace the historical Kofax Transformation Modules Document Recognition Timing Grouped report.

```
;with locData
(batch_class,group_value,localDate,doc_key,page_num,sec_in_ocr,sec_in_extr) as
(SELECT batch_class,group_value,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate,doc_key,page_num,sec_in_ocr,sec_in_extr
FROM v_recog_timing_grouped)
SELECT batch_class, group_value,
CAST (YEAR(localDate) as nvarchar(4)) + RIGHT('0'+
CONVERT (VARCHAR,MONTH(localDate)),2) as last_proc_time,
COUNT (doc_key) as doc_num,SUM (page_num) as page_num,SUM (sec_in_ocr) as sec_in_ocr,
SUM (sec_in_extr) as sec_in_extr
FROM locData group by locData.batch_class,locData.group_value,
CAST (YEAR(localDate) as nvarchar(4)) + RIGHT('0'+
CONVERT (VARCHAR,MONTH(localDate)),2)
```

Kofax Transformation Modules recognition timing by day

This query shows Kofax Transformation Modules recognition timing grouped by batch class, group value and day. Use the query to replace the historical Kofax Transformation Modules Document Recognition Timing per Day report.

```
;with locData
(batch_class,group_value,localDate,doc_key,page_num,sec_in_ocr,sec_in_extr) as
(SELECT batch_class,group_value,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate,doc_key,page_num,sec_in_ocr,sec_in_extr
FROM v_recog_timing_grouped)
SELECT batch_class, localDate,COUNT (doc_key) as doc_num,SUM (page_num) as page_num,
SUM (sec_in_ocr) as sec_in_ocr,SUM (sec_in_extr) as sec_in_extr
FROM locData group by locData.batch_class,locData.localDate
```

Kofax Transformation Modules recognition accuracy by month

This query shows Kofax Transformation Modules recognition accuracy grouped by timing grouped by batch class, group value and month. Use the query to replace the historical Kofax Transformation Modules Recognition Accuracy Grouped report.

```
;with locData (batch_id,batch_name,batch_class,group_value,localDate,batch_key,
group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,field_num,doc_num,page_num) as
(SELECT batch_id,batch_name,batch_class,group_value,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate,batch_key,group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,field_num,doc_num,page_num
```

```

FROM v_recog_acc_by_batch_grouped)
SELECT batch_class,group_value,CONVERT(nvarchar(4), YEAR(localDate)) + RIGHT ('0'+
CONVERT (nvarchar(2),
MONTH(localDate)), 2) as ym,SUM (valid_corr) * 100.0 / SUM (field_num) as
valid_corr_perc,
SUM (valid_incorr) * 100.0 / SUM (field_num) as valid_incorr_perc,
SUM(invalid_corr) * 100.0 / SUM (field_num) as invalid_corr_perc,
SUM (invalid_incorr) * 100.0 / SUM (field_num) as invalid_incorr_perc,
SUM (field_num) as field_num,SUM (doc_num) as doc_num,SUM (page_num) as page_num
FROM locData group by batch_class,group_value, CONVERT(nvarchar(4),
YEAR(localDate)) + RIGHT ('0'+ CONVERT (nvarchar(2), MONTH(localDate)),2

```

Kofax Transformation Modules recognition accuracy by day

This query shows Kofax Transformation Modules recognition accuracy grouped by timing grouped by batch class and day. Use this query to replace the historical Kofax Transformation Modules Recognition Accuracy per Day report.

```

;with locData ( batch_id,batch_name,batch_class,group_value,localDate,batch_key,
group_value_key,valid_corr,valid_incorr,
invalid_corr,invalid_incorr,field_num,doc_num,page_num)as
(SELECT batch_id,batch_name,batch_class,group_value,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate,batch_key,group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,
field_num,doc_num,page_num
FROM v_recog_acc_by_batch_grouped)
SELECT batch_class, localDate as full_date,SUM (valid_corr) * 100.0 / SUM (field_num)
as valid_corr_perc,
SUM (valid_incorr) * 100.0 / SUM (field_num) as valid_incorr_perc,
SUM(invalid_corr) * 100.0 / SUM (field_num) as invalid_corr_perc,
SUM (invalid_incorr) * 100.0 / SUM (field_num) as invalid_incorr_perc,
SUM (field_num) as field_num,SUM (doc_num) as doc_num,SUM (page_num) as page_num
FROM locData group by batch_class,localDate

```

Kofax Transformation Modules field recognition accuracy by month

Like the original query "v_field_recog_acc_grouped", this query can be used for porting the Kofax Transformation Modules Field Recognition Accuracy Grouped report. It provides a field recognition statistic grouped by batch class, group value, field and month.

```

;with locData
(batch_id,batch_name,batch_class,group_value,field_name,localDate,field_key,
batch_key,group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,field_num) as
(SELECT batch_id,batch_name,batch_class,group_value,field_name,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as
localDate,field_key,batch_key,group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,field_num
FROM v_field_recog_acc_grouped)
SELECT batch_class, group_value,field_name,CONVERT (nvarchar(4),

```



```

YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2), MONTH(localDate)),2) as ym,
SUM (valid_corr) * 100.0 / SUM (field_num) as field_valid_corr_perc,
SUM (valid_incorr) * 100.0 / SUM (field_num) as field_valid_incorr_perc,
SUM (invalid_corr) * 100.0 / SUM (field_num) as field_invalid_corr_perc,
SUM (invalid_incorr) * 100.0 / SUM (field_num) as field_invalid_incorr_perc,
SUM (field_num) as field_num
FROM locData group by batch_class, group_value, field_name,
CONVERT (nvarchar(4),YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2),
MONTH(localDate)),2)

```

Kofax Transformation Modules field recognition accuracy by day

Like the original query "v_field_recog_acc_per_day", this query can be used for porting the Kofax Transformation Modules Field Recognition Accuracy per Day report. The query provides a field recognition statistic grouped by batch class, field and day.

```

;with locData
(batch_id,batch_name,batch_class,group_value,field_name,localDate,field_key,
batch_key,group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,field_num) as
(SELECT batch_id,batch_name,batch_class,group_value,field_name,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as
localDate,field_key,batch_key,group_value_key,valid_corr,valid_incorr,invalid_corr,
invalid_incorr,field_num
FROM v_field_recog_acc_grouped)
SELECT batch_class, field_name,localDate as full_date,
SUM (valid_corr) * 100.0 / SUM (field_num) as field_valid_corr_perc,
SUM (valid_incorr) * 100.0 / SUM (field_num) as field_valid_incorr_perc,
SUM (invalid_corr) * 100.0 / SUM (field_num) as field_invalid_corr_perc,
SUM (invalid_incorr) * 100.0 / SUM (field_num) as field_invalid_incorr_perc,
SUM (field_num) as field_num
FROM locData group by batch_class, field_name, localDate

```

Kofax Transformation Modules document classification accuracy by month

Like the original query "v_tsf_class_acc_grouped", this query shows Kofax Transformation Modules document classification accuracy, grouped by batch class, group value and month.

```

;with locData (batch_class,group_value,localDate,doc_key,corr_and_conf,incorr_and_conf,
corr_and_unconf,incorr_and_unconf) as
(SELECT batch_class,group_value,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (class_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as
localDate,doc_key,corr_and_conf,incorr_and_conf,corr_and_unconf,incorr_and_unconf
FROM v_tsf_class_acc)
SELECT batch_class,group_value,
CONVERT (nvarchar(4),YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2),
MONTH(localDate)),2) as month_classified,COUNT (doc_key) as docs,
SUM (corr_and_conf)as corr_conf_docs,SUM (corr_and_unconf) as corr_unconf_docs,

```

```
SUM (incorr_and_conf) as incorr_conf_docs,SUM (incorr_and_unconf) as
incorr_unconf_docs,
SUM (corr_and_conf) * 100.0 / count (doc_key) as perc_corr_conf_docs,
SUM (corr_and_unconf) * 100.0 / count (doc_key) as perc_corr_unconf_docs,
SUM (incorr_and_conf) * 100.0 / count (doc_key) as perc_incorr_conf_docs,
SUM (incorr_and_unconf) * 100.0 / count (doc_key) as perc_incorr_unconf_docs
FROM locData group by batch_class,group_value,CONVERT (nvarchar(4),
YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2), MONTH(localDate)),2)
```

Kofax Transformation Modules document separation accuracy

This query shows Kofax Transformation Modules document separation accuracy, grouped by batch class and date.

```
;with locData(batch_class,localDate,batch_key,batch_id,batch_name,corr_splits,
wrong_splits,missed_splits,is_corrly_split) as
(SELECT batch_class,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (create_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as
localDate,batch_key,batch_id,batch_name,corr_splits,wrong_splits,missed_splits,
is_corrly_split
FROM v_tsf_sep_acc_by_batch_class)
SELECT batch_class,CONVERT(nvarchar(4),
YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2), MONTH(localDate)),2) as
month_created,
COUNT (batch_key) as batches,SUM (corr_splits) as corr_splits,SUM (wrong_splits) as
wrong_splits,
SUM (missed_splits) as missed_splits,SUM (corr_splits) * 1.0 / count (batch_key) as
corr_splits_per_batch,
SUM (wrong_splits) * 1.0 / count (batch_key) as wrong_splits_per_batch,
SUM (missed_splits) * 1.0 / count (batch_key) as missed_splits_per_batch,
SUM (is_corrly_split) * 100.0 / COUNT (batch_key) as perc_corrly_split_batches
FROM locData group by batch_class,
CONVERT (nvarchar(4),YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2),
MONTH(localDate)),2)
```

Kofax Transformation Modules extraction accuracy and confidence by month

This query shows Kofax Transformation Modules extraction statistics, grouped by batch class, group value, field and month.

```
;with locData
(batch_id,batch_name,batch_class,group_value,field_name,localDate,field_key,
batch_key,group_value_key,fields,characters,valid_corr_fields,valid_incorr_fields,
invalid_corr_fields,invalid_incorr_fields,conf_corr_chars,conf_incorr_chars,
unconf_corr_chars,
unconf_incorr_chars) as
(SELECT batch_id,batch_name,batch_class,group_value,field_name,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as localDate,field_key,batch_key,group_value_key,fields,characters,
valid_corr_fields,valid_incorr_fields,invalid_corr_fields,invalid_incorr_fields,
conf_corr_chars,conf_incorr_chars,
unconf_corr_chars,unconf_incorr_chars
```

```

FROM v_tsf_extr_acc_grouped)
SELECT batch_class,group_value,field_name,
CONVERT (nvarchar(4),YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2),
MONTH(localDate)),2) as month_exported,SUM (fields) as fields,SUM (characters) as
characters,
SUM (valid_corr_fields) as valid_corr_fields,SUM (valid_incorr_fields)
as valid_incorr_fields,
SUM (invalid_corr_fields) as invalid_corr_fields,SUM (invalid_incorr_fields)
as invalid_incorr_fields,
SUM (valid_corr_fields) * 100.0 /sum (fields) as perc_valid_corr,
SUM (valid_incorr_fields) * 100.0 /sum (fields) as perc_valid_incorr,
SUM (invalid_corr_fields) * 100.0 /sum (fields) as perc_invalid_corr,
SUM (invalid_incorr_fields) * 100.0 /sum (fields) as perc_invalid_incorr,
SUM (conf_corr_chars) as conf_corr_chars,SUM (conf_incorr_chars) as conf_incorr_chars,
SUM (unconf_corr_chars) as unconf_corr_chars,SUM (unconf_incorr_chars)
as unconf_incorr_chars,
SUM (conf_corr_chars) * 100.0 / sum (characters) as perc_conf_corr_chars,
SUM (conf_incorr_chars) * 100.0 / sum (characters) as perc_conf_incorr_chars,
SUM (unconf_corr_chars) * 100.0 / sum (characters) as perc_unconf_corr_chars,
SUM (unconf_incorr_chars) * 100.0 / sum (characters) as perc_unconf_incorr_chars
FROM locData group by batch_class,group_value,field_name,
CONVERT (nvarchar(4),YEAR(localDate)) + RIGHT ('0' + CONVERT(nvarchar(2),
MONTH(localDate)),2

```

Kofax Transformation Modules extraction accuracy and confidence by day

Like the original view "v_tsf_extr_acc_by_day", this query shows Kofax Transformation Modules extraction statistics, grouped by batch class, field and day.

```

;with locData
(batch_id,batch_name,batch_class,group_value,field_name,localDate,field_key,
batch_key,group_value_key,fields,characters,valid_corr_fields,valid_incorr_fields,
invalid_corr_fields,
invalid_incorr_fields,conf_corr_chars,conf_incorr_chars,unconf_corr_chars,
unconf_incorr_chars) as
(SELECT batch_id,batch_name,batch_class,group_value,field_name,CAST
(SWITCHOFFSET(TODATETIMEOFFSET (export_date_time,'+00:00'),DATENAME(TZoffset,
SYSDATETIMEOFFSET()))
as date) as
localDate,field_key,batch_key,group_value_key,fields,characters,valid_corr_fields,
valid_incorr_fields,invalid_corr_fields,invalid_incorr_fields,conf_corr_chars,
conf_incorr_chars, unconf_corr_chars,unconf_incorr_chars
FROM v_tsf_extr_acc_grouped)
SELECT batch_class,localDate as export_date,field_name,SUM (fields) as fields,
SUM (characters) as characters,SUM (valid_corr_fields) as valid_corr_fields,
SUM (valid_incorr_fields) as valid_incorr_fields,SUM (invalid_corr_fields) as
invalid_corr_fields,
SUM (invalid_incorr_fields) as invalid_incorr_fields,SUM (valid_corr_fields) * 100.0 /
sum (fields)
as perc_valid_corr,
SUM (valid_incorr_fields) * 100.0 /sum (fields) as perc_valid_incorr,
SUM (invalid_corr_fields) * 100.0 /sum (fields) as perc_invalid_corr,
SUM (invalid_incorr_fields) * 100.0 /sum (fields) as perc_invalid_incorr,
SUM (conf_corr_chars) as conf_corr_chars,SUM (conf_incorr_chars) as conf_incorr_chars,
SUM (unconf_corr_chars) as unconf_corr_chars,SUM (unconf_incorr_chars) as
unconf_incorr_chars,
SUM (conf_corr_chars) * 100.0 / sum (characters) as perc_conf_corr_chars,
SUM (conf_incorr_chars) * 100.0 / sum (characters) as perc_conf_incorr_chars,

```

```
SUM (unconf_corr_chars) * 100.0 / sum (characters) as perc_unconf_corr_chars,
SUM (unconf_incorr_chars) * 100.0 / sum (characters) as perc_unconf_incorr_chars
FROM locData group by batch_class,localDate,field_name
```

Operator productivity per module summary

Like the original view "v_op_prod_by_mod_summary", this query shows operator productivity grouped by operator and module. Use this query to replace the Operator Productivity Summary Report in Kofax Capture Advanced Reports.

```
SELECT user_logon_name,mod_name,batch_num as batches,sess_num as sesss,mods,sum_docs,
distinct_doc_num as distinct_docs,total_processing_time_sec as processing_time,
total_processing_time_sec * 1.0 / nullif (sess_num,0) as avg_sess_time,
total_processing_time_sec * 1.0 / nullif (batch_num,0) as avg_batch_time,
total_processing_time_sec * 1.0 / nullif(distinct_doc_num,0) as distinct_doc_time
FROM (SELECT bdata.*, (SELECT COUNT (distinct doc_key) FROM v_doc_session where
batch_sess_snapshot_key in (SELECT batch_sess_snapshot_key FROM v_batch_session where
user_logon_name = bdata.user_logon_name and mod_name = bdata.mod_name)) as
distinct_doc_num FROM
(SELECT user_logon_name,mod_name,COUNT (batch_key) as sess_num,COUNT (distinct
batch_key) as batch_num,
COUNT (distinct mod_name) as mods,SUM (docs_compl_num) as sum_docs,SUM (key_strok_num)
as sum_keystrok,
SUM (sess_duration_sec) as total_processing_time_sec
FROM v_batch_session group by user_logon_name, mod_name) bdata) x
```

Kofax Transformation Modules misclassified document types

This sample query uses the view "v_tsf_class_vs_review" to create a statistics about misclassified Kofax Transformation Modules documents. The resultset can be used to build the equivalents for the Kofax Capture Advanced Reports, Misclassified Document Types and Reclassified Document Types (US-CRA02, US-CRA03).

```
;with lData
(batch_key,batch_name,review_user_key,op,doc_key,initial_tsf_class,tsf_class,
loc_review_date,
loc_classify_date,page_id,is_confly_classified,class_confidence_perc) as
(SELECT
batch_key,batch_name,review_user_key,op,doc_key,initial_tsf_class,tsf_class,case
reviewed_date_key
when -1 then NULL else CAST(SWITCHOFFSET(TODATETIMEOFFSET
(review_date,'+00:00'),DATENAME(TZoffset, SYSDATETIMEOFFSET())) as date) end,
case classified_date_key when -1 then NULL else CAST (SWITCHOFFSET(TODATETIMEOFFSET
(classify_date,'+00:00'),DATENAME(TZoffset, SYSDATETIMEOFFSET())) as date) end,
page_id,is_confly_classified,class_confidence_perc FROM v_tsf_class_vs_review where
initial_tsf_class != tsf_class)
SELECT batch_key, batch_name,op,initial_tsf_class,tsf_class,loc_review_date as
review_date,loc_classify_date as classify_date,COUNT (page_id) as page_num,COUNT
(distinct doc_key) as doc_num FROM lData group by batch_key, batch_name, op,
initial_tsf_class,tsf_class,loc_review_date,loc_classify_date
```