



fileSMART for Property Management-Owner and Tenant Water Usage Invoicing OCR Configuration

Overview

fileSMART workflow has been updated to take advantage of Scanner technology that provides OCR (OCR stands for Optical Character Recognition and involves software that can read words and numbers from an electronic document and then gives that information to fileSMART to automate workflow processing). A Real Estate office will need to have OCR software or can purchase OCR software from their Printer / Scanner hardware supplier to use with fileSMART .

It is important to note that the OCR software is not provided by Rockend it needs to be provided by the office wanting to use the solution in conjunction with fileSMART for Tenant water usage processing.

In order to automate Owner & Tenant water invoicing workflow with OCR you will need to be familiar with fileSMART document workflow as the fileSMART workflow will still read the barcode on a water document but then add the Tenant water usage information provided by the OCR software. This will allow the new fileSMART Owner & Tenant water invoicing workflow to automatically pre-fill all the details in the Document tab, History tab, Invoice tab and now the Tenant invoice tab so that both an Owner and Tenant invoice can be processed in REST and can be automatically completed with only the need for workflow user approval.

Barcoded workflow can only be unlocked in your fileSMART software after you attend training for invoice workflow. It is also recommended that you read the 'fileSMART for Property Management - Workflow Assist Setup and Use' guide which will explain the concept and setup of fileSMART workflow.

This solution should save staff days in manual invoicing entry for Tenant Water rate usage invoicing.

Rockend has been working with a number of Printer companies to ensure the text file can be provided by a third party OCR software program and this software can be used in conjunction with most scanners to produce the text file needed.

The solution utilises fileSMART Workflow Assist and emails the Water rates notice as a tiff file along with a text file with Tenant Water usage as a separate text file attachment.

The text file provides fileSMART with the data to pre-fill all the Tenant water usage information as shown in the Tenant tab below.

Document Data	
Prop Code	BEACH96
Creditor Code	ROCKWATER
Tenant	Clive Owen
Lease Start Date	12/06/2015
Vacating Date	13/12/2016
Charge Tenant Water	<input checked="" type="checkbox"/>
Water Efficient Status	Yes
Water Charge 1	Water Usage - 24/09/14 to 10/11/14
Usage kL/ Units	50
Water Charge 2	

Work History	
Previous Meter Reading	1025
Current Meter Reading	1075
Previous Reading Date	24/09/2014
Current Reading Date	10/11/2014

Invoice	
Amount 1	300.00
Amount 2	0.00
Total Amount	300.00

Activating Workflow

If you have not used workflow in the previous versions of fileSMART you can only use the Ad-hoc workflow. Using the more advanced Invoice Workflows requires a consulting session from a Rockend staff member.

Please contact the Training Team on 1300 657 700 or email training@rockend.com.au for further details.

REST Owner & Tenant Water Invoicing OCR overview

Rockend's fileSMART Owner & Tenant Water invoicing OCR feature will make automatic processing for Tenant Water invoicing possible for most Water invoices. This OCR solution complements the existing QR Code and barcoded workflow to provide both the Owner disbursement and the Tenant Water Invoicing in one step. fileSMART Owner & Tenant Water invoicing OCR provides a way to electronically auto complete Tenant Water invoicing documents that would normally be entered manually into REST Professional.

In order to automatically pre-fill Owner & Tenant Water invoicing workflow in fileSMART:

- The Water rate must be sent to workflow using Workflow Assist and in particular the Workflow type of 'REST Owner & Tenant Water rate invoicing'. The OCR software must be setup to send the water rate pdf or tiff file and the CSV file it created to the email address defined for Water rates with the Workflow type of 'REST Owner & Tenant Water rate invoicing', or
- The water rate must have a barcode that already works for REST Barcoded Invoicing workflow.
- The Water Authority creditor details for barcode or QR Code processing must be entered into REST Professional. A Property reference number provided by your Water Authority will be used as a Customer Reference Number (CRN) for regular payment details which are entered into REST Professional against the correct property.
- fileSMART Workflow Assist must be setup with an email address to process REST Owner & Tenant Water Invoicing. Each email should have a tiff file and a text where each field is separated by a comma, this type of file is commonly called a CSV (Comma Separated Value) file.
- Each matching tiff file and CSV file must have the same name. For example:
 - waterinvoice12345.tiff
 - waterinvoice12345.csv

NOTE: This ensures that when the fileSMART reads the barcode on the water invoice, it is matched with the Tenant water usage information included in the CSV file that is created by the OCR software. You can have several tiff and CSV files in the same email message but each matching tiff file and CSV file must have the same name.

- When fileSMART puts the water invoice into workflow it will auto complete all the workflow information for all four tabs. For the Tenant tab fileSMART will check the Tenant 'Charge Tenant Water' flag if the flag is ticked then the Tenant tab data will be pre-filled by the OCR usage information provided. If the 'Charge Tenant Water' flag is not ticked then the Tenant Tab data will not be pre-filled. If the 'Charge Tenant Water' flag is incorrect for that Tenant please make changes in REST Professional to correct the Tenant record or you can enter the usage information for the Tenant tab and that information will be passed to REST Professional. To save time it is important to setup the 'Charge Tenant Water' flag for each tenant record in REST Professional.
- Once the water invoice is approved two sets of invoice information one for the Owner and second for the Tenant Water invoice is sent to REST Professional for processing and payment. Note that if the Tenant Tab has a Total amount of \$0.00 the Tenant invoice will not be created for REST Professional.
- fileSMART will auto Archive two copies of the Water invoice one for the Owner (as it has always done) and a second copy for the Tenant. This allows the water invoice to be used in PrintMail to collate the Tenant Water usage invoice created by REST Professional, along with a copy of the water rates notice to provide proof of the usage charges.

NOTE: The fields in the Tenant tab can all be edited in REST Professional and the changes can be updated to the fileSMART workflow item by using the Re-workflow feature. The tenant's **Previous Meter Reading**, tenant's **Previous Reading Date**, **Charge Tenant Water**, Property's **Water Efficient Status**, Tenant's **GST Exempt** status, descriptions for Water Charge 1 and Water Charge 2 can be edited and updated to the Tenant tab screen before the workflow is approved. The edited descriptions will be sent to REST Professional for processing in fileSMART Tenant Invoices.

Required format of the CSV file (Comma Separated Values)

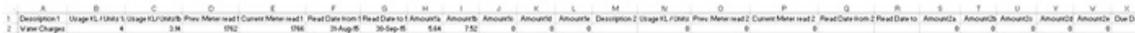
The CSV file must have the following format in order for fileSMART to process the file. If the file does not have the correct format then the Tenant tab data cannot be pre-filled. The CSV file will need to have the following heading which on the first line of the CSV file and a second line with all the Tenant data needed to automatically pre-fill the Tenant tab data in fileSMART workflow.

Please see the example data for a CSV file below:

Description 1,Usage KL / Units 1a,Usage KL/ Units 1b,Prev. Meter read 1,Current Meter read 1,Read Date from 1,Read Date to 1,Amount1a, Amount1b, Amount1c, Amount1d, Amount1e, Description 2,Usage KL / Units 2,Prev. Meter read 2,Current Meter read 2,Read Date from 2,Read Date to 2, Amount2a, Amount2b, Amount2c, Amount2d, Amount2e, Due Date

Water Usage,65,0,1300,1365,21/03/2016,24/09/2016,172.77,44.08,4.75,0,0,,0,0,0,,0,0,0,0,24/09/2016

Due to the number of fields in the CSV field the two line example wraps around in this word document the first line begins with **Description 1** and ends with **Due Date**. The second line begins with **Water Usage** and ends with **24/09/2016**. Viewed within Excel it would look the example below



A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	
1	Description 1	Usage KL/Units 1a	Usage KL/Units 1b	Prev. Meter read 1	Current Meter read 1	Read Date from 1	Read Date to 1	Amount1a	Amount1b	Amount1c	Amount1d	Amount1e	Description 2	Usage KL/Units 2	Prev. Meter read 2	Current Meter read 2	Read Date from 2	Read Date to 2	Amount2a	Amount2b	Amount2c	Amount2d	Amount2e	Due Date
2	Water Usage	65	0	1300	1365	21/03/2016	24/09/2016	172.77	44.08	4.75	0	0												24/09/2016

REST Owner & Tenant Water Invoicing workflow - OCR

Details

The REST Owner & Tenant Water Invoicing workflow operates in a similar way to the Barcoded invoice processing workflow but it can receive extra information from OCR software to pre-fill the Tenant water usage information. This information is required for the fileSMART Tenant tab in the REST Owner & Tenant Water Invoicing workflow.

The two required files must be emailed to fileSMART Workflow Assist in order to pre-fill the REST Owner and Tenant water invoicing tab information.

NOTE: Water invoices sent to fileSMART Workflow Assist by email will be added directly into a user's Workflow Queue. Please refer to [fileSMART for Property Management Workflow Assist Setup and Use Guide](#) for further details on using this feature.

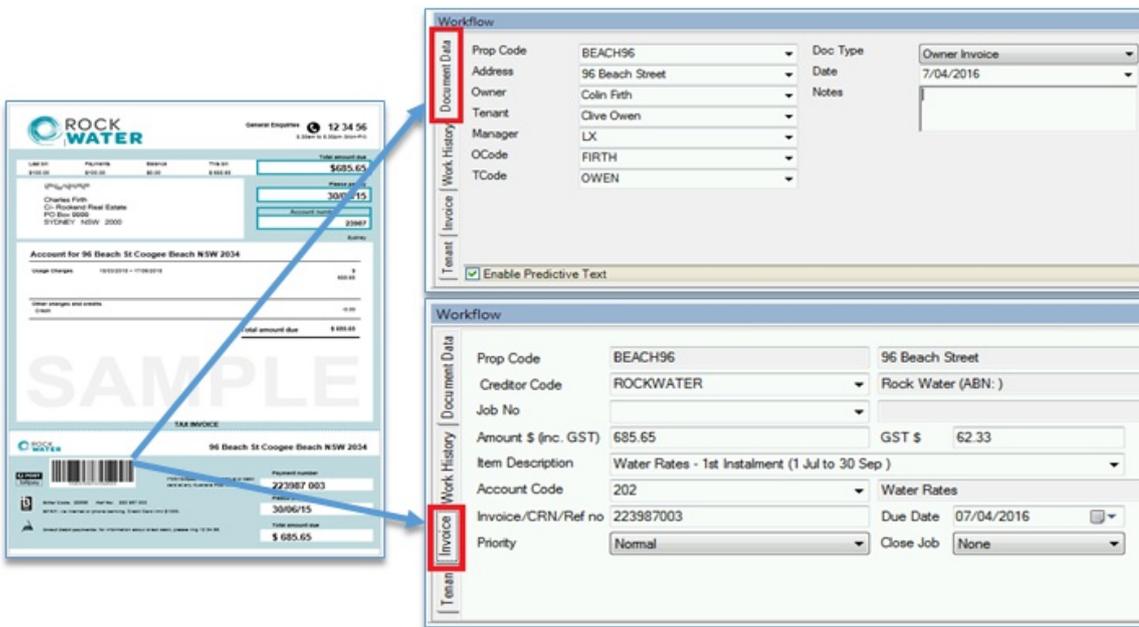
The steps below demonstrate the process of fileSMART Workflow Assist and REST Owner & Tenant Water Invoicing workflow with OCR.

1. For each item, a new workflow of type REST Owner & Tenant Water Invoicing is created.
2. The workflow item is assigned to the user you select.
3. For a Water bill with a valid barcode and CSV file the Creditors Biller Id is read to lookup the Creditor record and the Customer reference number is used to look up the REST property code details. This in turn is used to populate the archiving data and then the invoicing data for the document. The CSV file is then read to pre-fill the Tenant Water usage tab.
4. fileSMART will check the Tenant 'Charge Tenant Water' flag if the flag is ticked then the Tenant tab data will be pre-filled by the OCR information provided. If the 'Charge Tenant Water' flag is not ticked then the Tenant Tab data will not be pre-filled. If the 'Charge Tenant Water' flag is incorrect for that Tenant please make changes in REST Professional to the Tenant record.
5. The document remains in the queue of the nominated user until it is approved, the same as other workflow types such as a non-barcoded invoice.

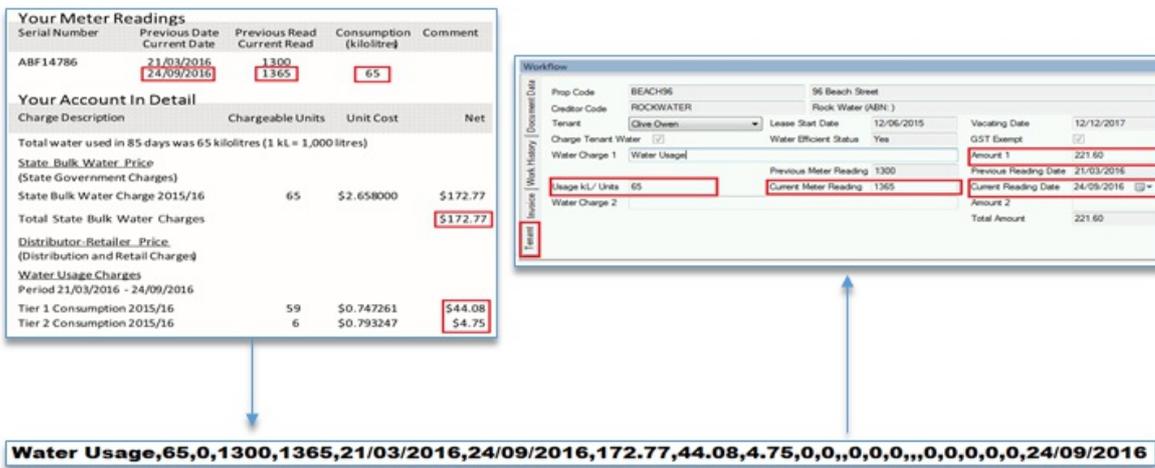
The water authority default expense account code and transactions description setup should also be setup against the creditor in REST Professional. Where these steps are completed there should be no data entry required by a user when approving invoices.

If a workflow fails to read a barcode whether because the Creditor Biller Id does not exist in REST Professional, or the barcode cannot be read due to scanned document clarity the invoicing and Tenant data may be manually entered into fileSMART.

The diagram below demonstrate a water rate and a CSV file which has auto populated all four workflow tabs in the fileSMART REST Owner & Tenant Water invoicing workflow.



The barcode in the previous diagram pre-fills all the Document Data Tab details and the Invoice tab details as it does for all REST Barcoded Invoice workflow documents



The Meter reading data is extracted by OCR software as shown in the previous diagram from a water rate document see the left hand side imagine, the OCR software will export all the details it needs to fill in a simple CSV file which is then read by fileSMART as shown on the right hand side of the diagram. This information is then used to pre-fill all the Tenant water data in the fileSMART Tenant water usage tab.

In the example the Water usage total amount is made up of 3 different dollar amounts that are passed individually to fileSMART. The amounts will be added together to display the total Tenant Water usage amount in the Tenant Tab.

In the example above the dollar amounts of \$172.77, \$44.08 and \$4.75 are added together and the total amount of \$221.60 is shown as the usage amount.

REST Owner & Tenant Water Invoicing workflow – OCR CSV file template

Rules

- The tiff file or PDF and the CSV file provided by the OCR software that matches, must have the same file name.
- The tiff file must have an extension of .tiff. The pdf file must have an extension of .pdf.
- The tiff file provided by the OCR software needs to be 300DPI black and white
- The CSV file must have an extension of .csv.
- Fields in the CSV file need to be separated by a comma this includes the heading line.

Description 1, Usage KL / Units 1a, Usage KL/ Units 1b, Prev. Meter read 1, Current Meter read 1, Read Date from 1, Read Date to 1, Amount 1a, Amount 1b, Amount 1c, Amount 1d, Amount 1e, Description 2, Usage KL / Units 2, Prev. Meter read 2, Current Meter read 2, Read Date from 2, Read Date to 2, Amount 2a, Amount 2b, Amount 2c, Amount 2d, Amount 2e, Due Date

The table below lists all the OCR CSV file fields available for the automatic REST **Owner & Tenant Water Invoicing** Workflow, with a description of each field. The format shown in the sample below is mandatory. Fields values can of course be left blank if an alphanumeric field or must be zero if a numeric field. The headings on line one of the CSV file must be shown for all fields.

Field Name	Description
Description 1	The description that can be populated by the OCR software into the fileSMART REST Owner & Tenant Water Invoicing tab field called 'Water Charge 1'. The field is optional and can be left blank no character needs to be entered if not required. The 'Water Charge 1' field can also be filled by the default description provided by the REST Professional field located in the menu Other > Utilities > Company Details > Water Invoicing tab > Water Charge, Invoice Description field . Note the field is alphanumeric.
Usage KL / Units 1a	The 'Usage KL / Units 1a' field can be populated by the OCR software into the fileSMART REST Owner & Tenant Water Invoicing tab field called 'Usage kL / Units'. The field is optional and can be a 0 value but it is recommended that the units can be automatically pre-filled into the fileSMART Tenant tab. Note the field is numeric and must have a numeric value.
Usage KL/ Units 1b	The 'Usage KL / Units 1b' field can be populated by the OCR software. If there are values for both 'Usage KL / Units 1a' and 'Usage KL / Units 1b' fields fileSMART Workflow Assist will total both fields and pre-fill that total to the REST Owner & Tenant Water Invoicing tab field called 'Usage kL / Units'. The field is optional and can be a 0 value if only one value is required then populate 'Usage KL / Units 1a'. Note the field is numeric and must have a numeric value.
Prev. Meter read 1	'Prev. Meter read 1' has been added to the OCR CSV file for future use currently the 'Previous Meter reading' is currently populated by the previous meter reading field stored in REST Professional.
Current Meter read 1	The 'Current Meter read 1' field can be populated by the OCR software into the fileSMART REST Owner & Tenant Water Invoicing tab field called 'Current Meter reading'. The field is optional and can be a zero value but it is recommended that the units be filled in so that the value can be automatically pre-filled into the fileSMART Tenant tab. Note the field is numeric and must have a numeric value.
Read Date from 1	The 'Prev. Date from 1' has been added to the OCR CSV file for future use currently the 'Previous Date from 1' is currently populated by the previous date field stored in REST Professional.
Read Date to 1	The 'Read Date to 1' field can be populated by the OCR software into the fileSMART REST Owner & Tenant Water Invoicing tab field called 'Current Reading Date'. The field is optional and can be left blank but it is recommended that the units be filled in so that the value can be automatically pre-filled into the fileSMART Tenant tab. Note the field is a date field and either must be blank or must contain a date value.
Amount 1a	The first of 5 amount fields that can be can be populated by OCR software into the Tenant tab field called 'Water Charge 1'. Note that if the GST Exempt flag is not selected, a Read-Only description of (incl. GST) will display beside the amount field. Please enter a GST inclusive amount if the Tenant is to be charged a GST inclusive amount; otherwise enter a GST exclusive amount. The field is optional and can be a 0 value but it is recommended that the units can be automatically pre-filled into the fileSMART Tenant tab. Note the field is numeric and must have a numeric value.
	One of 5 amount fields that can be can be populated by OCR software and can then be accumulated as a

Amount1b	total into the Tenant tab field called 'Water Charge 1'. If a water rates notice contains more than one amount field which needs to be used for the Water usage amount charge then each of the Amount1a to Amount1e can be used. FileSMART will total all 5 fields. Note that if the GST Exempt flag is not selected, a description of (incl. GST) will display beside the amount field. Please enter a GST inclusive amount if the Tenant is to be charged a GST inclusive amount; otherwise enter a GST exclusive amount. The field is optional and can be a 0 value. Note the field is numeric and must have a numeric value.
Amount1c	One of 5 amount fields that can be can be populated by OCR software and can then be accumulated as a total into the Tenant tab field called 'Water Charge 1'. If a water rates notice contains more than one amount field which needs to be used for the Water usage amount charge then each of the Amount1a to Amount1e can be used. FileSMART will total all 5 fields. Note that if the GST Exempt flag is not selected, a description of (incl. GST) will display beside the amount field. Please enter a GST inclusive amount if the Tenant is to be charged a GST inclusive amount; otherwise enter a GST exclusive amount. The field is optional and can be a 0 value. Note the field is numeric and must have a numeric value.
Amount1d	One of 5 amount fields that can be can be populated by OCR software and can then be accumulated as a total into the Tenant tab field called 'Water Charge 1'. If a water rates notice contains more than one amount field which needs to be used for the Water usage amount charge then each of the Amount1a to Amount1e can be used. FileSMART will total all 5 fields. Note that if the GST Exempt flag is not selected, a description of (incl. GST) will display beside the amount field. Please enter a GST inclusive amount if the Tenant is to be charged a GST inclusive amount; otherwise enter a GST exclusive amount. The field is optional and can be a 0 value. Note the field is numeric and must have a numeric value.
Amount1e	One of 5 amount fields that can be can be populated by OCR software and can then be accumulated as a total into the Tenant tab field called 'Water Charge 1'. If a water rates notice contains more than one amount field which needs to be used for the Water usage amount charge then each of the Amount1a to Amount1e can be used. FileSMART will total all 5 fields. Note that if the GST Exempt flag is not selected, a description of (incl. GST) will display beside the amount field. Please enter a GST inclusive amount if the Tenant is to be charged a GST inclusive amount; otherwise enter a GST exclusive amount. The field is optional and can be a 0 value. Note the field is numeric and must have a numeric value.
Description 2	The description that can be populated by the OCR software into the fileSMART REST Owner & Tenant Water Invoicing tab field called 'Water Charge 2'. The field is optional and can be left blank no character needs to be entered if not required. The 'Water Charge 1' field can also be filled by the default description provided by the REST Professional field located in the menu Other > Utilities > Company Details > Water Invoicing tab > Second Water Charge, Invoice Description field . Note the field is alphanumeric.
Usage KL / Units 2	The 'Usage KL / Units 2' has been added to the OCR CSV file for future use the field is numeric please enter a comma separated zero value.
Prev. Meter read 2	The 'Prev. Meter read 2' has been added to the OCR CSV file for future use the field is numeric please enter a comma separated zero value.
Current Meter read 2	The 'Current Meter read 2' has been added to the OCR CSV file for future use the field is numeric please enter a comma separated zero value.
Read Date from 2	The 'Read Date from 2' has been added to the OCR CSV file for future use. Note the field is a date field and either must be blank left blank or must contain a date value.
Read Date to 2	The 'Read Date to 2' has been added to the OCR CSV file for future use. Note the field is a date field and either must be blank left blank or must contain a date value.

Amount2a, Amount2b, Amount2c, Amount2d, Amount2e	One of 5 amount fields that can be populated by OCR software and can then be accumulated as a total into the Tenant tab field called 'Water Charge 2'. If a water rates notice contains more than one amount field which needs to be used for a second amount charge then each of the Amount2a to Amount2e fields in the OCR CSV file can be used. FileSMART will total all 5 fields. If only one amount is needed simply add the value to Amount2a. Note that if the GST Exempt flag is not selected, a description of (incl. GST) will display beside the amount field. Please enter a GST inclusive amount if the Tenant is to be charged a GST inclusive amount; otherwise enter a GST exclusive amount. The fields are optional and can be a 0 value. Note the fields are numeric and must have a numeric value.
Due Date	The 'Due Date' has been added to the OCR CSV file for future use. Note the field is a date field and either must be blank left blank or must contain a date value.

REST Owner & Tenant Water Invoicing – OCR Troubleshooting

If your emails are not being read or OCR data is not received from the Workflow Assist email mailbox, check the following;

- Is the OCR CSV file correct, does it contain the right data and in the right format to pre-fill the Tenant tab in the fileSMART, REST Owner & Tenant Water invoicing workflow?
- Did you validate the Workflow routing rule that you created for the REST Owner & Tenant Water invoicing? If you are changing an existing Workflow routing rule or you create a new water invoicing based routing rule you must validate the changes or the new Workflow Routing rule before any emails are read from that particular email mailbox.
- If Workflow Assist is reading Barcodes or QR Codes but no workflow tab data is pre-filled does the creditor exist in REST Professional?
- If Workflow Assist is reading Barcodes or QR Codes but no workflow tab data is pre-filled does the creditor have a BPAY or EFT payment type?
- If Workflow Assist is reading Barcodes or QR Codes but no workflow tab data is pre-filled does the creditor have a Biller code in REST?
- Only the one Creditor and Biller Code can exist in REST for QR Codes to work.
- Is the original QR Code or barcode clear enough? Standard fileSMART Workflow Assist scanning has been optimised to achieve maximum reliability, however if the original image is not clear then the scanned image may need to be processed as a standard (non-barcoded) invoice.

06/05/2016 2:55 pm AEST
