

LANSA Integrator

Spooled File Manager

[Abstract](#)

Work with IBM i output queues and spooled files from a browser



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Welcome to Spooled File Manager

This document describes how to use Spooled File Manager.

Spooled File Manager is a web application that helps you manage IBM i (IBM server) output queues and spooled files from a browser.

Typical tasks are:

- Search for spooled files
- Search for output queues
- Save the search criteria in folders for later reuse
- Print spooled files
- Convert spooled file content to HTML, PDF and/or text
- Download spooled files to your computer or mobile device
- Manage output queues

Once you have downloaded the spooled files, you can include information from the spooled files into office applications such as Microsoft Excel.

Where to find information

Get started with Spooled File Manager	Getting started Installation, registering to use Spooled File Manager, starting Spooled File Manager and log on instructions.
Search for and manage spooled files	Spooled files Create spooled file filters, run spooled file searches, view, print and manage spooled files.
Search for and work with output queues	Output queues Search for output queues, view spooled files in output queues, delete spooled files from output queues, hold and release output queues.
Save and organise spooled file filters and output queue filters	Folder Management Create folders, maintain folders and save filters in folders.
Understand concepts behind Spooled File Manager	Concepts Conceptual information in this section describes how Spooled File Manager works, including designing search filters, viewing the search results and using spooled file data in office applications.
Set configuration parameters	Configuration Configure directives, parameters and properties for controlling Spooled File Manager behaviour and user access.

LANSA Integration Toolkit

Spooled File Manager is one of the services provided by the LANSAs Integration Toolkit.

The service portfolio Figure 1 (page 7) includes data transformation, secure file transfer, email, messaging and web services. It supports multiple data formats, including JSON, XML, text, video, text messages (SMS), email, Microsoft Excel workbooks, PDF documents, IBM server spooled files, and relational databases.

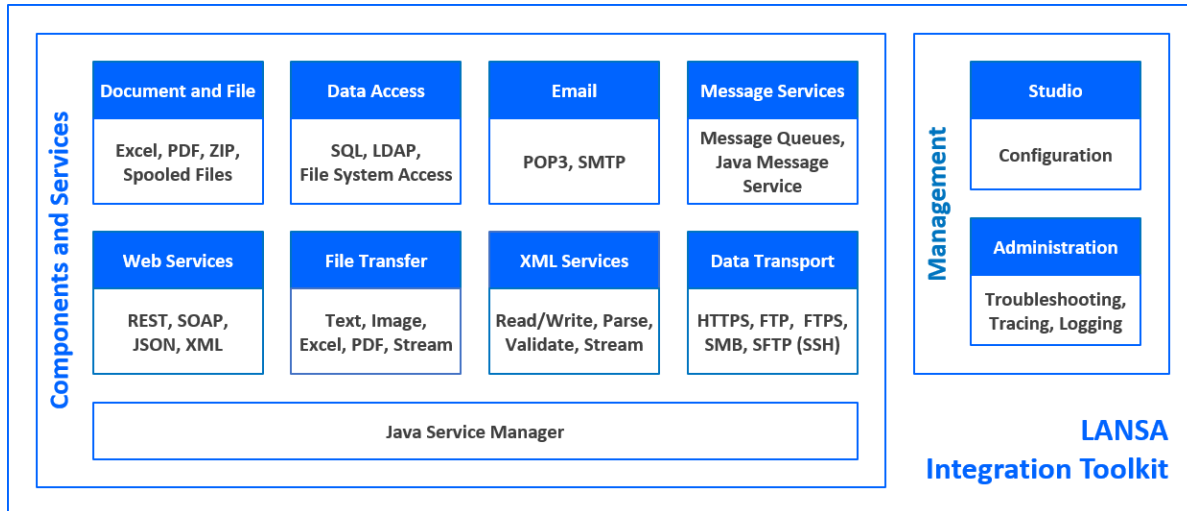


Figure 1: LANSAs Integration Toolkit components and services

LANSA Integration Toolkit provides data receiving and sending services using communications protocols including HTTPS, FTP, SFTP, SMB, SMTP, and POP3. It also provides access to the IBM server file system (IFS) and file systems on Windows servers.

Developers can use these services in RPG applications to transform data from one format to another programmatically and integrate with applications running on remote IBM servers and applications running on Linux or Windows platforms.

What is Spooled File Manager?

Spooled File Manager is a web application you can use to manage spooled files and output queues on an IBM server. It provides full control of spooled files and output queues with all the functionality of the IBM output queue and spooled file commands plus multiple ways to display spooled files. You can also create, run and save queries and searches using spooled file filters and output queue filters.

The Spooled File Manager page (Figure 2, page 8) consists of two panels. The left-hand panel contains filters used to search for spooled files and output queues and folders containing saved filters. Tabs in the right-hand panel contain search results, forms for editing filters and setting options.

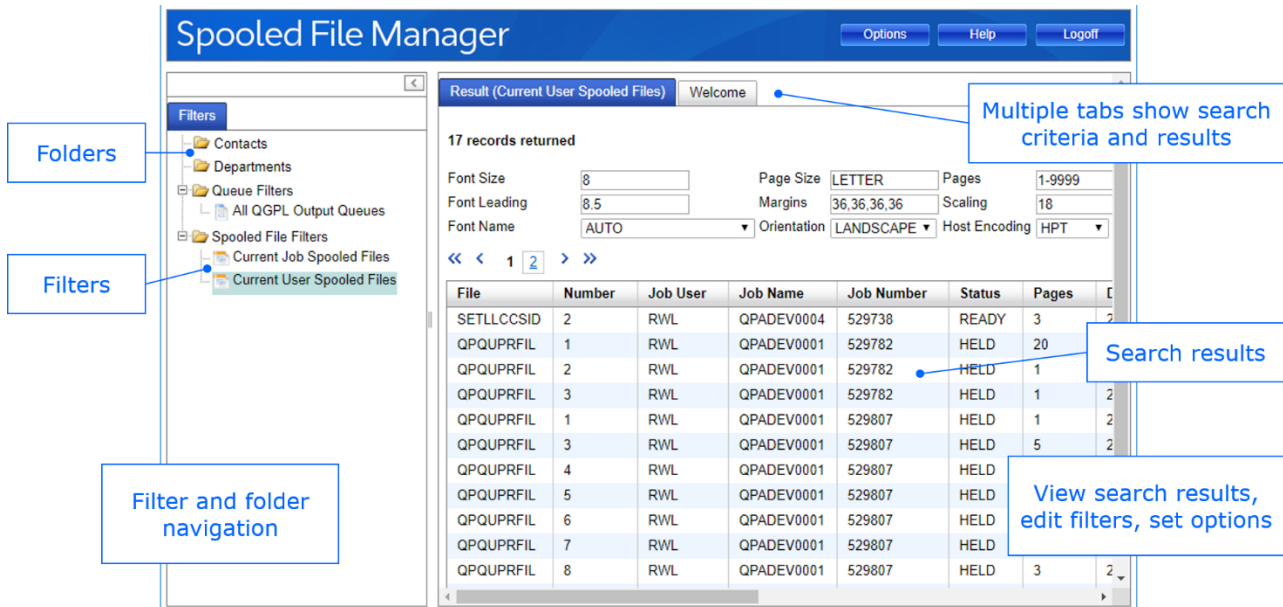


Figure 2: Spooled File Manager page layout and content

The right-hand panel in Figure 2 (page 8) shows two tabs. The tab labelled, "Result (Current User Spooled Files)", presents search results obtained by running the Current User Spooled Files filter. The search results contain a filtered list of spooled files associated with the person currently logged on.

The second tab (out of view) is the Welcome page.

Figure 3 (page 9) shows a floating menu with options for viewing and working with spooled files.

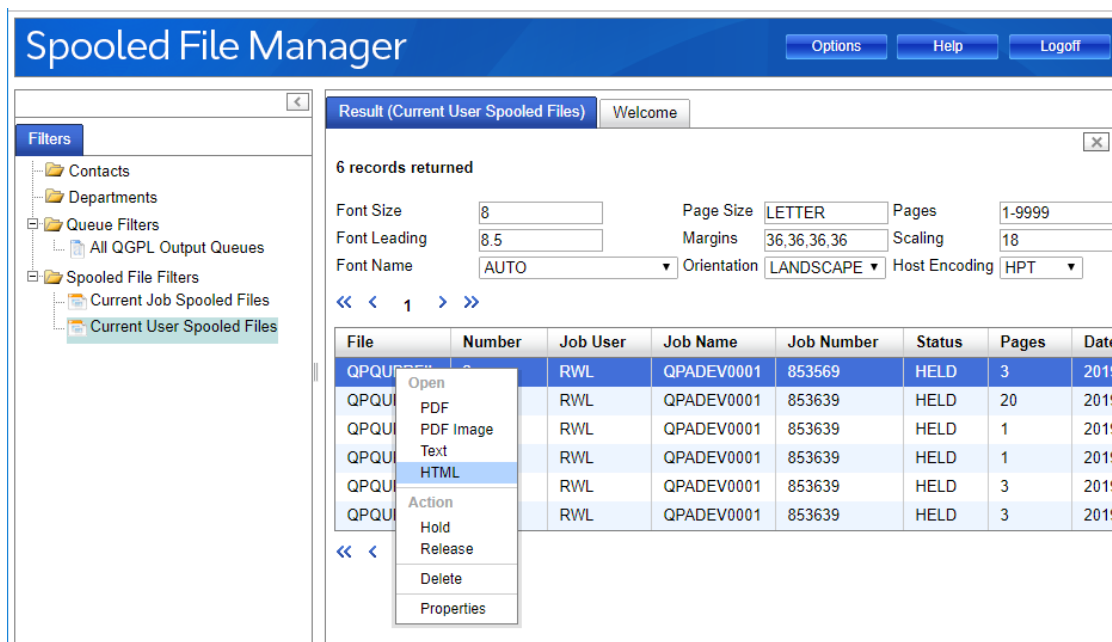


Figure 3: Options for displaying the content of spooled files

The options include opening a spooled file to view as PDF, PDF image, text or HTML, holding, releasing and deleting a spooled file. The properties option displays the properties (or attributes) associated with the selected spooled file.

Clicking the HTML item from the floating menu opens a new window to reveal the content of the selected spooled file displayed as HTML, Figure 4 (page 9).

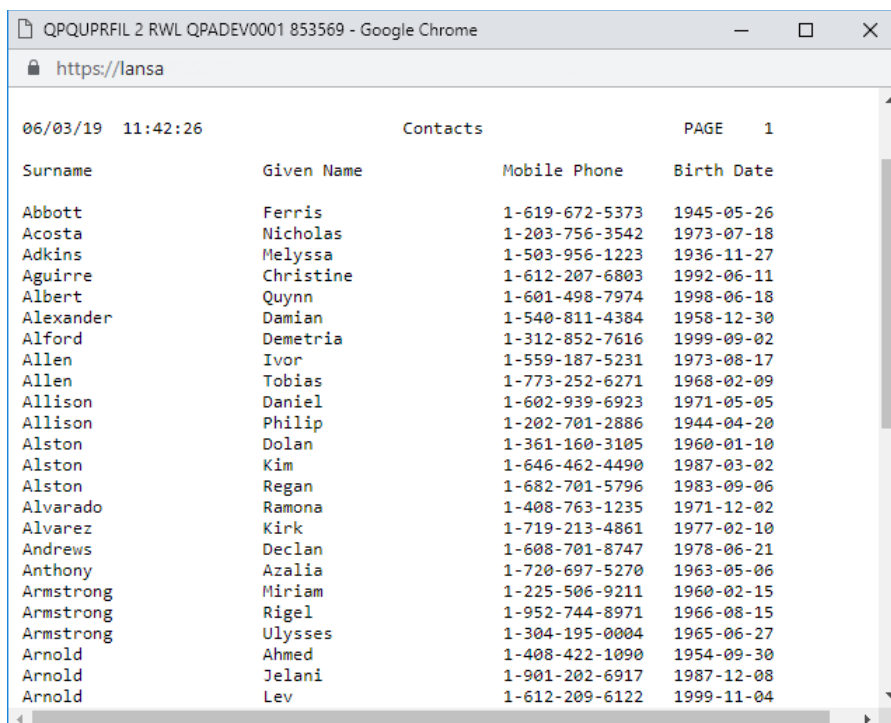


Figure 4: Display spooled file content as HTML

Installation

Personal computers and mobile devices

You do not need to install any software on your computer or mobile device to use Spooled File Manager.

The prerequisites are:

- A supported browser, e.g. Chrome, Edge, Firefox and Safari
- A network connection to the internet and/or corporate network
- The address (URL) for Spooled File Manager at your site

Obtain the address from your administrator.

IBM servers

The "LANSA Integration Toolkit for IBM i Installation and Operation" document explains how to install the software on an IBM server.

How to register to use Spooled File Manager

Spooled File Manager provides access to spooled files and data on IBM servers. Registration ensures that only authorised persons can use Spooled File Manager to work with data in spooled files. You need an active IBM server user profile and password to log on and use Spooled File Manager.

Spooled File Manager provides administrators with options for automatic registration or administrator registration:

Automatic	<p>When Spooled File Manager is configured for automatic (or self) registration it will register a user at the first log on attempt. Spooled File Manager will request a user profile and password and add the user to the registered users list.</p> <p>Users do not need to request registration when administrators allow automatic registration.</p>
Administrator	<p>When Spooled File Manager is configured for administrator registration users must request registration from an administrator.</p> <p>The administrator will grant or deny the request.</p> <p>After granting a request an administrator will add the user to the registered users list.</p>

How to start Spooled File Manager

Open the LANSa Integration Toolkit Welcome page

Start a browser on your computer or mobile device and enter the LANSa Integration Toolkit URL.

URL format	http://[IBM server]:[port number]/index.html
[IBM server]	Substitute the name or IP address of your IBM server.
[port number]	Port number represents the port number defined during installation; 4563 is the default port number.
Example URL	http://lansa999:4563/index.html

The LANSa Integration Toolkit Welcome page Figure 5 (page 11) includes clickable items for Terminal Server, Spooled File Manager, and Data Explorer.

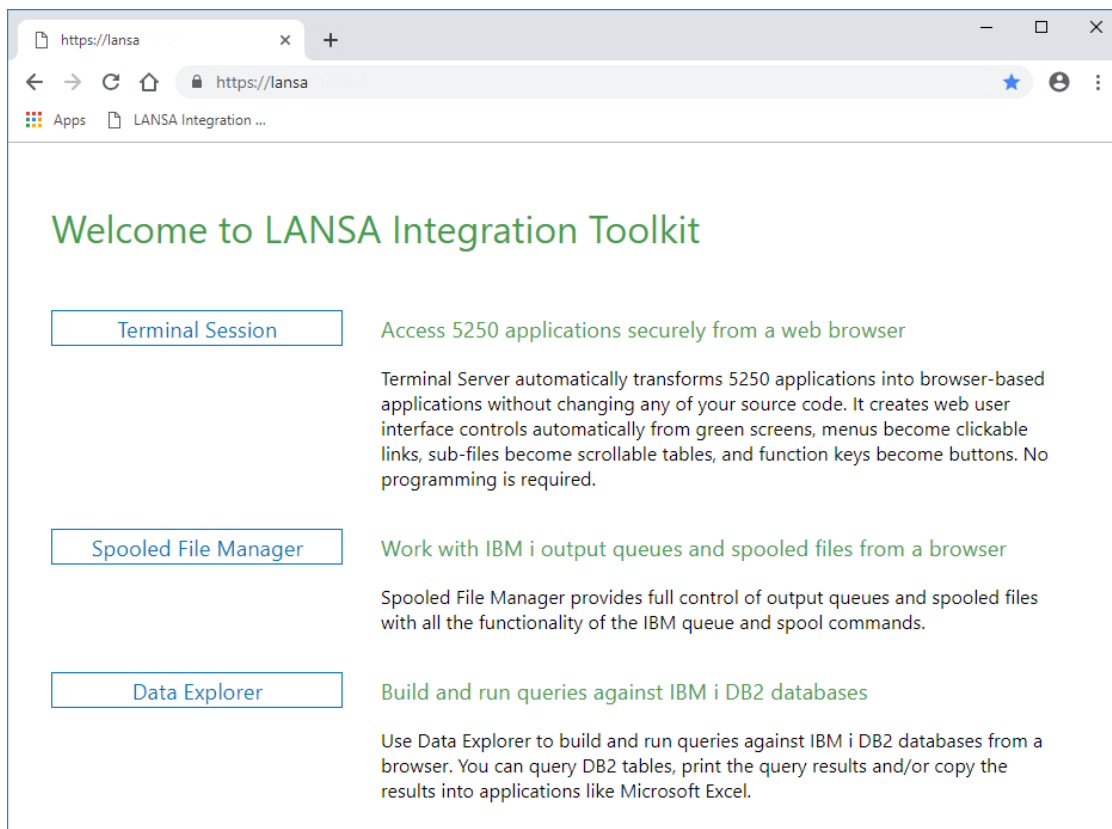


Figure 5: LANSa Integration Toolkit Welcome page

Log on

Click Spooled File Manager in the LANSa Integration Toolkit Welcome page to log on.

When Spooled File Manager starts, the browser will display the Access log on dialogue.

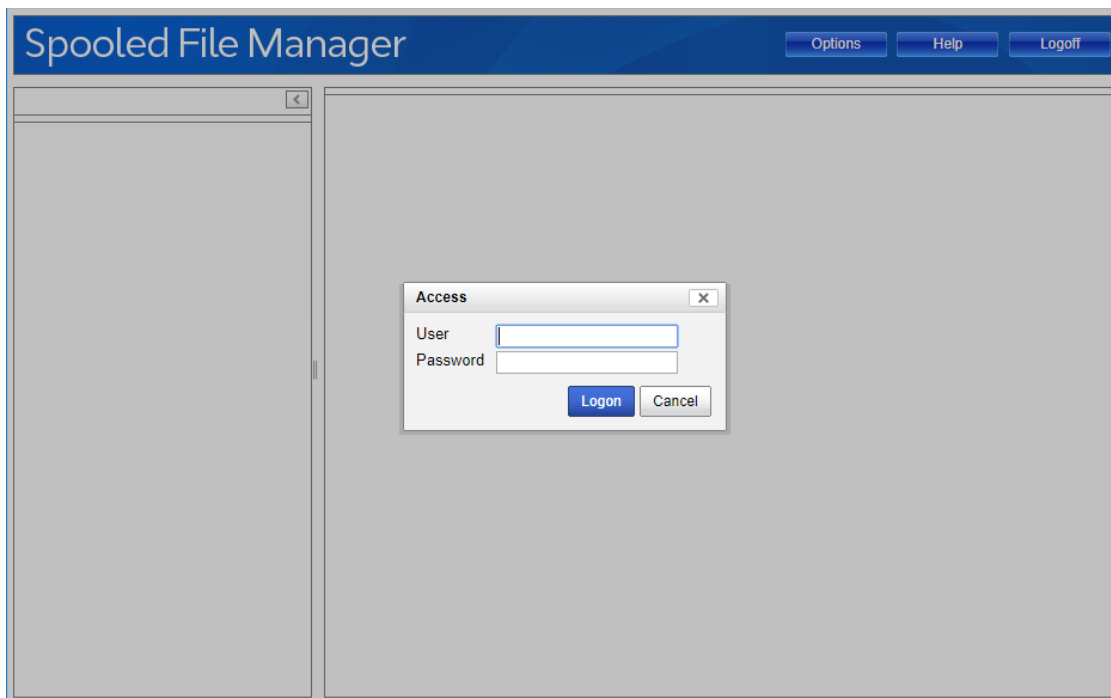


Figure 6 Spooled File Manager access log on dialogue

To log on you must provide your user profile and password:

1. Type your user profile.
2. Type your password.
3. Click the Logon button
4. Wait while Spooled File Manager verifies your credentials.

If your log on is successful, Spooled File Manager will display the home page.

If your log on is unsuccessful, Spooled File Manager will display an error message.

Log on will fail if you make a mistake typing the user identification and/or the password.

Check you have the correct user identification and re-type the password.

Contact your administrator if you forget your user identification and/or password.

Spooled files

How to search for spooled files: quick reference

To search for spooled files:

1. Create a spooled file filter.
2. Define the search criteria in the filter.
3. Open the filter to run the search.
4. Spooled File Manager will display the search results as a list of spooled files.

Spooled file filters

Spooled file filters define search criteria Spooled File Manager will use when searching for spooled files. This section describes tasks required to manage spooled file filters.

Figure 7 (page 13) shows the edit tab for a spooled file filter and highlights the search criteria.

The screenshot shows the 'Spooled File Manager' application window. On the left is a tree view with folders like 'Contacts', 'Departments', 'Queue Filters', 'All QGPL Output Queues', 'Spooled File Filters', 'Current Job Spooled Files', and 'Current User Spooled Files'. The main area is titled 'Current User Spooled Files' and contains a form with two columns of search criteria. The first column includes fields for User, User Data, Queue, Library, Form Type, Job Name, Job Number, Spooled File Name, Spooled File Number, Start Date, and End Date. The second column includes fields for Font Name, Font Size, Font Leading, Page Size, Margins, Orientation, Pages, Image Scaling, Host Encoding, Start Time, and End Time. A blue box labeled 'Search criteria' points to the fields from 'User' to 'End Date'. Another blue box labeled 'Spooled file filter edit form' points to the entire form area. The form also includes a 'Title' field, a 'Description' field, and 'Search', 'Reset', and 'Save' buttons at the bottom.

Figure 7: Search criteria in a spooled file filter

Spooled File Manager uses the properties labelled as search criteria when searching. You may use any combination of these properties for searches.

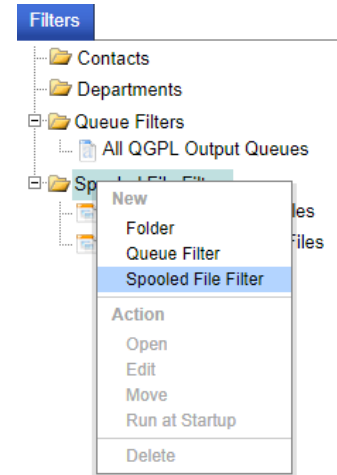
The search criteria conventions used by Spooled File Manager follows conventions for partial names and wildcards implemented by the IBM server operating system.

Create a spooled file filter

Create a spooled file filter, define the search criteria in the filter, save the filter and/or open the filter to run the search immediately.

To create a spooled file filter:

1. In the Filters panel click a folder name.
2. From the floating menu choose Spooled File Filter.
3. Wait until Spooled File Manager shows the filter edit tab.
4. Type your search criteria and filter details.
To start over, click the Reset button to clear the tab.
5. Click the Save button to save the filter in a folder.
6. Spooled File Manager will ask you to confirm the save action.
Answer Yes to save the filter or No to abandon the filter.
7. Click the Search button to start searching immediately.
You can search without saving the filter.



Define the search criteria for the spooled file filter on the spooled file filter tab (Figure 8, page 14).

Spooled File Manager [Options] [Help] [Logout]

Filters

- Contacts
- Departments
- Queue Filters
 - All QGPL Output Queues
- Spooled File Filters
 - Current Job Spooled Files
 - Current User Spooled Files**

Current User Spooled Files | Result (Current User Spooled Files) | Welcome

User	*CURRENT	Font Name	AUTO
User Data	*ALL	Font Size	8
Queue	*ALL	Font Leading	8.5
Library	*ALL	Page Size	LETTER
Form Type	*ALL	Margins	36,36,36
Job Name		Orientation	LANDSCAPE
Job Number		Pages	1-9999
Spooled File Name		Image Scaling	18
Spooled File Number		Host Encoding	HPT
Start Date		Start Time	
End Date		End Time	
Title	Current User Spooled Files		
Description	All spooled files for current user		

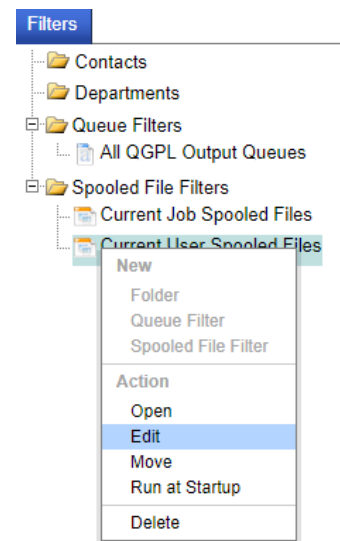
[Search] [Reset] [Save]

Figure 8: Spooled file filter tab - create or edit spooled file filters and search criteria

Edit or change a spooled file filter

To edit a spooled file filter:

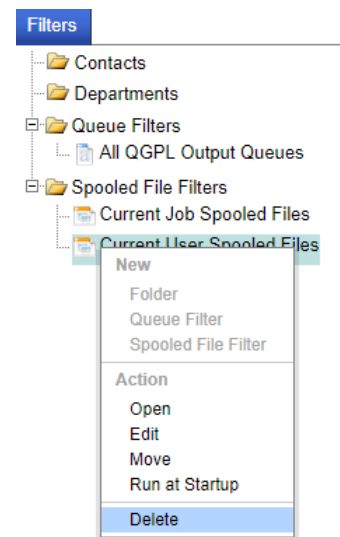
1. In the Filters panel, click a spooled file filter name.
2. From the floating menu choose Action - Edit.
3. Wait until Spooled File Manager shows the filter edit tab.
4. Type new search criteria and/or change filter details.
Click the Reset button to clear the tab and start over.
5. Click the Save button to save the filter.
6. Spooled File Manager will ask you to confirm the save action.
Answer Yes to save or No to abandon the changes.
7. Click the Search button to start searching immediately.
You can search without saving the filter.



Delete a spooled file filter

To delete a spooled file filter:

1. In the Filters panel, click a spooled file filter name.
2. From the floating menu choose Action - Delete.
3. Spooled File Manager will ask you to confirm the filter delete action.
4. Answer Yes to delete the filter or No to abandon the delete.



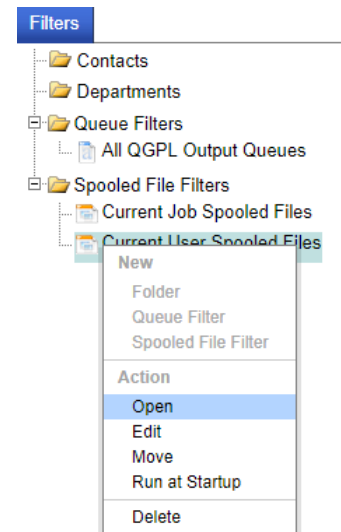
Warning: You cannot undelete a spooled file filter. Exercise care when deleting spooled file filters.

Search for spooled files

Opening a spooled file filter starts a search using search criteria described in the filter.

To run a spooled file search:

1. In the Filters panel, click a spooled file filter name.
2. From the floating menu choose Action - Open.
3. Wait while Spooled File Manager runs the search for spooled files.
4. Spooled File Manager will present a list of the spooled files that match the search criteria.
5. Click on a spooled file in the list to view its content.



View the content of a spooled file

When you run a search for spooled files, Spooled File Manager will return a list of spooled files that match the search criteria. Figure 9 (page 16) is an example of spooled files in a search results list.

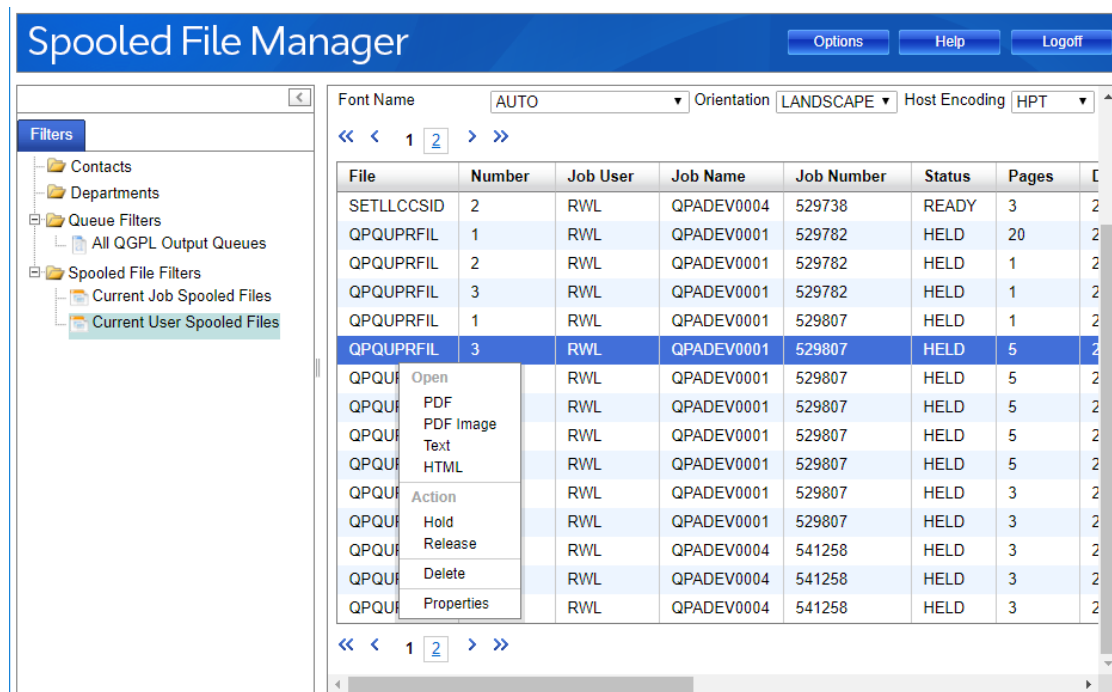


Figure 9: View spooled file content options and spooled file actions

Clicking on a row in the list of spooled files will display a menu with options for viewing, holding, releasing and deleting spooled files.

View as PDF

To open a spooled file and view the content as a PDF:

1. Click on a row in the search results list to select the spooled file you want to open.
2. From the floating menu choose Open - PDF.
3. Wait while Spooled File Manager retrieves the spooled file content and opens a new window.
4. Spooled File Manager will display the spooled file formatted as a PDF.

Figure 10 (page 17) shows spooled file content displayed in a PDF document.

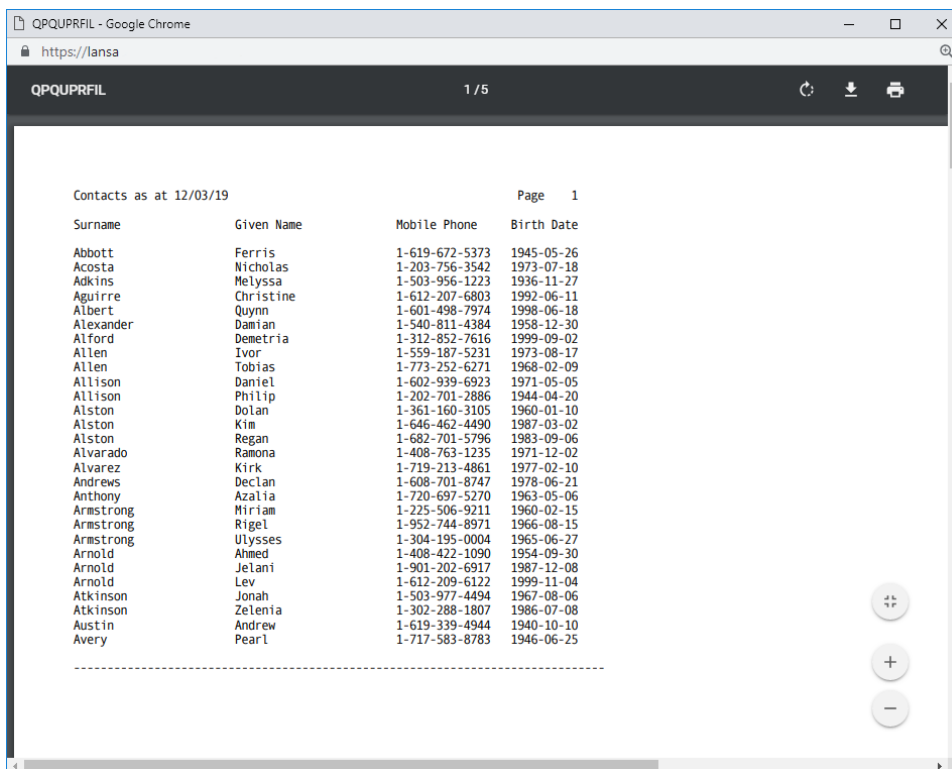


Figure 10: View spooled file as PDF

Click the printer icon to send the spooled file to a printer.

Click the icons on the bottom-right of the page to resize the view:

Fit to whole page and fit to page width

Zoom in (+)

Zoom out (-)

View as PDF image

To open a spooled file and view the content as a PDF image:

1. Click on a row in the search results list to select the spooled file you want to open.
2. From the floating menu choose Open - PDF Image.
3. Wait while Spooled File Manager retrieves the spooled file content and opens a new window.
4. Spooled File Manager will display the spooled file formatted as a PDF image.

Spooled File Manager renders each page in the PDF as an image.

Figure 11 (page 18) shows spooled file content displayed in a PDF image document.

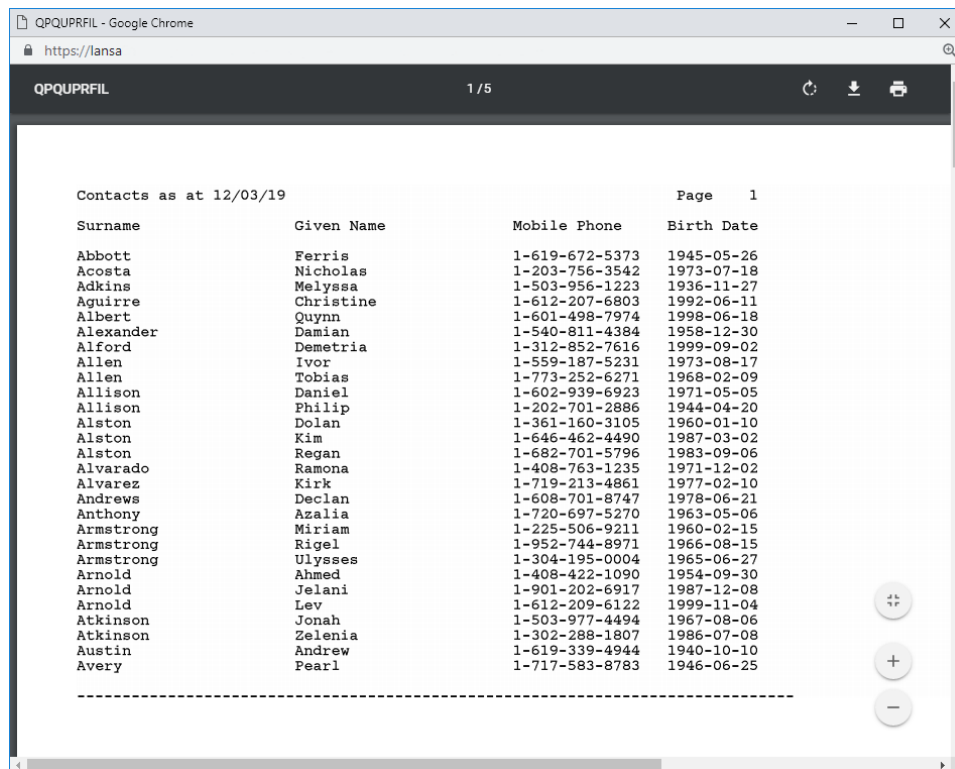


Figure 11: View spooled file as PDF image

Click the printer icon to send the spooled file to a printer.

Click the icons on the bottom-right of the page to resize the view:

Fit to whole page and fit to page width

Zoom in (+)

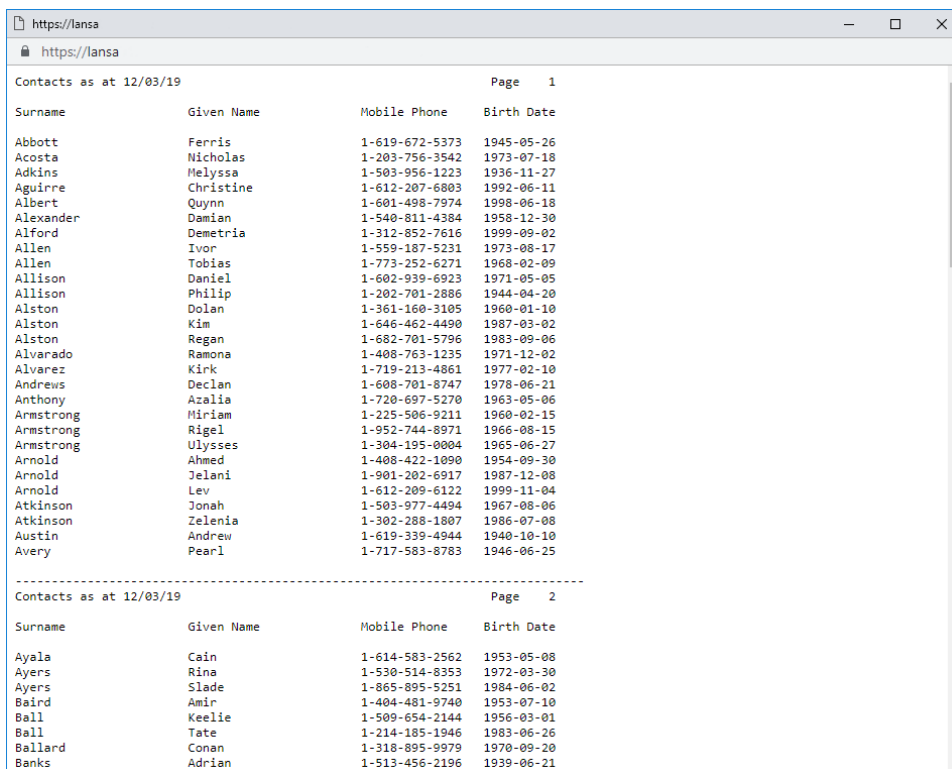
Zoom out (-)

View as text

To open a spooled file and view the content as text:

1. Click on a row in the search results list to select the spooled file you want to open.
2. From the floating menu choose Open - Text.
3. Wait while Spooled File Manager retrieves the spooled file content and opens a new window.
4. Spooled File Manager will display the spooled file formatted as text.

Figure 12 (page 19) shows spooled file content displayed as text.



Contacts as at 12/03/19				Page 1
Surname	Given Name	Mobile Phone	Birth Date	
Abbott	Ferris	1-619-672-5373	1945-05-26	
Acosta	Nicholas	1-203-756-3542	1973-07-18	
Adkins	Melyssa	1-503-956-1223	1936-11-27	
Aguirre	Christine	1-612-207-6803	1992-06-11	
Albert	Quynn	1-601-498-7974	1998-06-18	
Alexander	Damian	1-540-811-4384	1958-12-30	
Alford	Demetria	1-312-852-7616	1999-09-02	
Allen	Ivor	1-559-187-5231	1973-08-17	
Allen	Tobias	1-773-252-6271	1968-02-09	
Allison	Daniel	1-602-939-6923	1971-05-05	
Allison	Philip	1-202-701-2886	1944-04-20	
Alston	Dolan	1-361-160-3105	1960-01-10	
Alston	Kim	1-646-462-4490	1987-03-02	
Alston	Regan	1-682-701-5796	1983-09-06	
Alvarado	Ramona	1-408-763-1235	1971-12-02	
Alvarez	Kirk	1-719-213-4861	1977-02-10	
Andrews	Declan	1-608-701-8747	1978-06-21	
Anthony	Azalia	1-720-697-5270	1963-05-06	
Armstrong	Miriam	1-225-506-9211	1960-02-15	
Armstrong	Rigel	1-952-744-8971	1966-08-15	
Armstrong	Ulysses	1-304-195-0804	1965-06-27	
Arnold	Ahmed	1-408-422-1090	1954-09-30	
Arnold	Jelani	1-901-202-6917	1987-12-08	
Arnold	Lev	1-612-209-6122	1999-11-04	
Atkinson	Jonah	1-503-977-4494	1967-08-06	
Atkinson	Zelenia	1-302-288-1807	1986-07-08	
Austin	Andrew	1-619-339-4944	1940-10-10	
Avery	Pearl	1-717-583-8783	1946-06-25	

Contacts as at 12/03/19				Page 2
Surname	Given Name	Mobile Phone	Birth Date	
Ayala	Cain	1-614-583-2562	1953-05-08	
Ayers	Rina	1-530-514-8353	1972-03-30	
Ayers	Slade	1-865-895-5251	1984-06-02	
Baird	Amir	1-404-481-9740	1953-07-10	
Ball	Keelie	1-509-654-2144	1956-03-01	
Ball	Tate	1-214-185-1946	1983-06-26	
Ballard	Conan	1-318-895-9979	1970-09-20	
Banks	Adrian	1-513-456-2196	1939-06-21	

Figure 12: View spooled file as text

You can copy and paste the content of a spooled file rendered as text.

View as HTML

To open a spooled file and view the content as HTML:

1. Click on a row in the search results list to select the spooled file you want to open.
2. From the floating menu choose Open - HTML.
3. Wait while Spooled File Manager retrieves the spooled file content and opens a new window.
4. Spooled File Manager will display the spooled file formatted as HTML.

Figure 13 (page 20) shows spooled file content displayed as HTML.

Surname	Given Name	Mobile Phone	Birth Date
Abbott	Ferris	1-619-672-5373	1945-05-26
Acosta	Nicholas	1-203-756-3542	1973-07-18
Adkins	Melyssa	1-503-956-1223	1936-11-27
Aguirre	Christine	1-612-207-6803	1992-06-11
Albert	Quynn	1-601-496-7974	1996-06-18
Alexander	Damian	1-540-811-4384	1958-12-30
Alford	Demetria	1-312-852-7616	1999-09-02
Allen	Ivor	1-559-187-5231	1973-08-17
Allen	Tobias	1-773-252-6271	1968-02-09
Allison	Daniel	1-602-939-6923	1971-05-05
Allison	Philip	1-202-701-2886	1944-04-20
Alston	Dolan	1-361-160-3105	1960-01-10
Alston	Kim	1-646-462-4490	1987-03-02
Alston	Regan	1-682-701-5796	1983-09-06
Alvarado	Ramona	1-408-763-1235	1971-12-02
Alvarez	Kirk	1-719-213-4861	1977-02-10
Andrews	Declan	1-608-701-8747	1978-06-21
Anthony	Azalia	1-720-697-5270	1963-05-06
Armstrong	Miriam	1-225-506-9211	1960-02-15
Armstrong	Rigel	1-952-744-8971	1966-08-15
Armstrong	Ulysses	1-304-195-0004	1965-06-27
Arnold	Ahmed	1-408-422-1090	1954-09-30
Arnold	Jelani	1-901-202-6917	1987-12-08
Arnold	Lev	1-612-209-6122	1999-11-04
Atkinson	Jonah	1-503-977-4494	1967-08-06
Atkinson	Zelenia	1-302-288-1807	1986-07-08
Austin	Andrew	1-619-339-4944	1940-10-10
Avery	Pearl	1-717-583-8783	1946-06-25

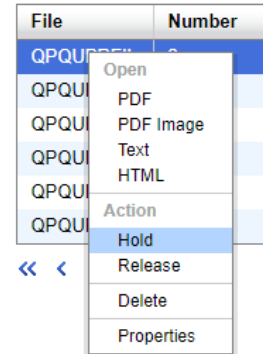
Figure 13: View spooled file as HTML

Hold and release spooled files

Hold a spooled file

To hold a spooled file:

1. Click on a row in the search results list to select the spooled file you want to hold.
2. From the floating menu choose Action - Hold.
3. Wait until Spooled File Manager asks you to confirm the hold action.
4. Answer Yes to hold the spooled file.

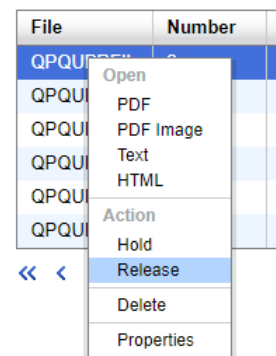


Held spooled files remain on output queues until released for printing.

Release a spooled file

To release a spooled file:

1. Click on a row in the search results list to select the spooled file you want to release.
2. From the floating menu choose Action - Release.
3. Wait until Spooled File Manager asks you to confirm the release action.
4. Answer Yes to release the spooled file.



Releasing a spooled file allows the spooled file to print.

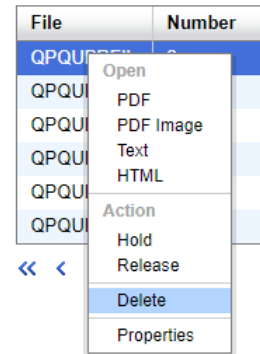
Delete spooled files

Delete a spooled file

Deleting a spooled file removes the spooled file from its output queue. To delete a spooled file:

To delete a spooled file:

1. Click on a row in the search results list to select the spooled file you want to delete.
2. From the floating menu choose Action - Delete.
3. Wait until Spooled File Manager asks you to confirm the delete action.
4. Answer Yes to delete the spooled file.



Why can't I delete a spooled file?

Administrators can set the Spooled File Manager configuration to allow or prevent spooled file deletion.

Warning: You cannot undelete a spooled file. Exercise care when deleting spooled files.

Display spooled file properties

You can display the properties (or attributes) of a spooled file. The properties contain metadata describing the nature of the spooled file. You can view and optionally change the properties.

To display the properties of a spooled file:

1. Click on a row in the search results list to select the spooled file you want to use.
2. From the floating menu choose Properties.
3. Wait until Spooled File Manager creates a new tab in the right-hand panel of the page and presents the spooled file's properties.
4. Browse and optionally change the properties.
5. Click the Save button to keep the changes.
6. Spooled File Manager will ask you to confirm the save action.
Answer Yes to save or No to abandon the changes.

Figure 14 (page 23) shows the spooled file properties of a selected spooled file.

The screenshot shows the 'Spooled File Manager' application. On the left is a 'Filters' pane with a tree view containing 'Contacts', 'Departments', 'Queue Filters', 'All QGPL Output Queues', 'Spooled File Filters', 'Current Job Spooled Files', and 'Current User Spooled Files'. The main area has a tabbed interface with three tabs: 'Properties (QPQUPRFL 3 QPADEV0001 RWL)', 'Result (Current User Spooled Files)', and 'Welcome'. The 'Properties' tab is active, displaying a list of properties for the selected file. The properties are as follows:

File Name	QPQUPRFL
File Number	3
Job Name	QPADEV0001
Job User	RWL
Job Number	529807
Create Date	2019-01-31
Create Time	16:14:30
Status	HELD
Page Width	132
Page Length	66
Page Count	5
Copies	1
Priority	5
Starting Page	0
Ending Page	*END
Form Type	*STD
Form Feed	*DEVD
File Separators	0
Align Page	*NO
Print Quality	*STD
Print Fidelity	*CONTENT

Figure 14: Spooled file properties

The greyed properties are unavailable for edit.

You need an understanding of IBM server spooled file properties to make meaningful changes.

Consult documentation available from the IBM i Information/Knowledge Center.

Spooled file questions and answers

Table 1 (page 24) presents questions and answers related to spooled files.

Table 1: Spooled file questions and answers

Questions	Answers
Are there sample spooled file filters?	Spooled File Manager comes with a sample spooled file filter. Use the filter as a model when building your filters.
Can I hold a spooled file when it is printing?	Not once the spooled file has started to print.
Can I save spooled file filters?	Yes; you save filters in folders. Use the default folders or create your own folders.
Can I view the content of multiple spooled files simultaneously?	Yes. Spooled File Manager opens a new window for each spooled file you view. You can leave the windows open while you run other searches.
Do I need to save a spooled file filter to run a search?	You can create a filter, run the search, select a spooled file from the search results and view the content of the spooled file as one task, without saving the filter. If you do not want to keep the filter, close the filter edit tab.
Why can't I delete a spooled file?	Administrators can set the Spooled File Manager configuration to allow or prevent spooled file deletion. One reason you can't delete a spooled file is the false setting for the allow spooled file delete parameter. <parameter name="allow.file.delete" value="false"/>

Output queues

How to search for output queues: quick reference

To search for output queues:

1. Create an output queue filter.
2. Define the search criteria in the filter.
3. Open the filter to run the search.
4. Spooled File Manager will display the search results as a list of output queues.
5. Select an output queue from the search results list.
6. Choose All to see all spooled files in the output queue.
Choose Current User to see only spooled files for the user logged on.

Output queue filters

Output queue filters define search criteria Spooled File Manager will use when searching for output queues. This section describes tasks required to manage output queue filters.

Figure 15 (page 25) shows the edit tab for an output queue filter and highlights the search criteria.

The screenshot displays the 'Spooled File Manager' application window. On the left, a 'Filters' sidebar shows a tree structure with 'Queue Filters' expanded, containing 'All QGPL Output Queues', 'Spooled File Filters', 'Current Job Spooled Files', and 'Current User Spooled Files'. The main area shows the 'All QGPL Output Queues' filter edit form. The form has a 'Queue' field with the value '*ALL' and a 'Library' field with the value 'QGPL'. A blue box labeled 'Search criteria' points to these two fields. Below these are 'Title' and 'Description' fields. The 'Title' field contains 'All QGPL Output Queues' and the 'Description' field contains 'All output queues in library QGPL'. At the bottom of the form are 'Search', 'Reset', and 'Save' buttons. A blue box labeled 'Output queue filter edit form' points to the entire form area.

Figure 15: Search criteria in an output queue filter

Spooled File Manager uses the output queue name and the library name as search criteria. You may use any combination of these properties for searches.

Spooled File Manager follows the conventions for partial names and wildcards implemented by the IBM server operating system.

Create an output queue filter

To create an output queue filter:

1. In the Filters panel, click a folder name.
2. From the floating menu choose Queue Filter.
3. Wait until Spooled File Manager shows the tab to edit the filter.
4. Type your search criteria and filter details.
To start over, click the Reset button to clear the tab.
5. Click the Save button to save the filter in a folder.
6. Spooled File Manager will ask you to confirm the save action.
Answer Yes to save the filter or No to abandon the filter.
7. Click the Search button to start searching immediately.
You can search without saving the filter.

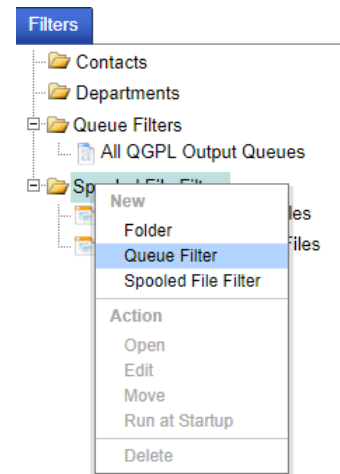


Figure 16 (page 26) shows the edit tab for an output queue filter.

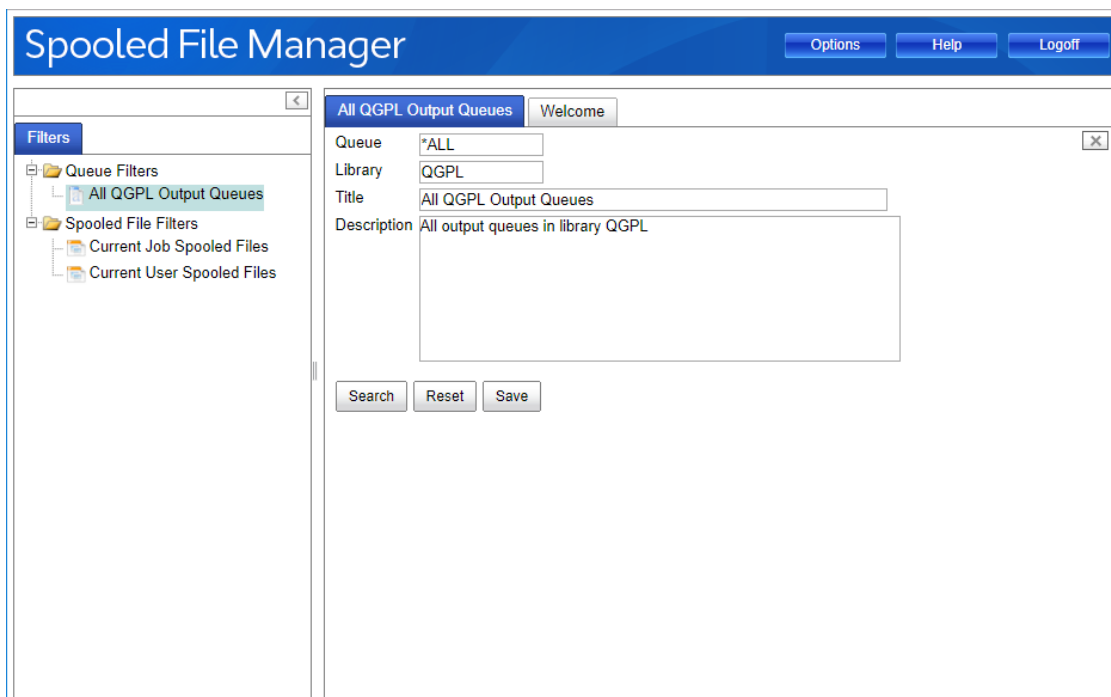


Figure 16: Create and edit an output queue filter

Edit or change an output queue filter

To edit an output queue filter:

1. In the Filters panel, click an output queue filter name.
2. From the floating menu choose Action - Edit.
3. Wait until Spooled File Manager shows the filter edit tab.
4. Change filter details and/or type new search criteria.
Click the Reset button to clear the tab and start over.
5. Click the Save button to save the filter.
6. Spooled File Manager will ask you to confirm the save action.
Answer Yes to save or No to abandon the changes.
7. Click the Search button to start searching immediately.
You can search without saving the filter.

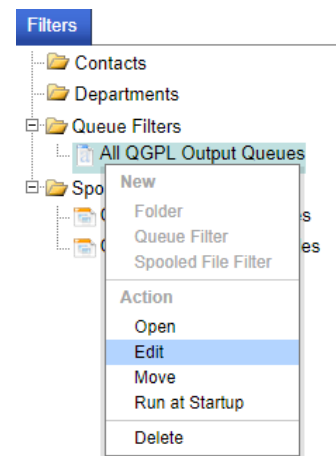
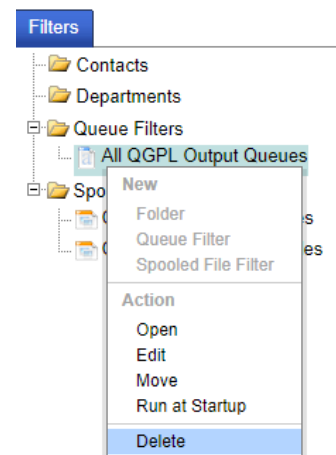


Figure 16 (page 26) shows an example of an edit tab for an output queue filter.

Delete an output queue filter

To delete an output queue filter:

1. In the Filters panel, click an output queue filter name.
2. From the floating menu choose Action - Delete.
3. Spooled File Manager will ask you to confirm the filter delete action.
4. Answer Yes to delete the filter or No to abandon the delete.



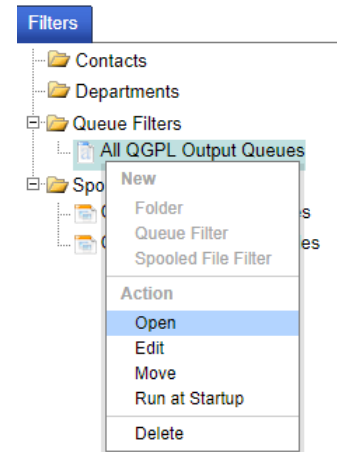
Warning: You cannot undelete an output queue filter. Exercise care when deleting output queue filters.

Search for output queues

Searching for output queues with an output queue filter will return a list of output queues that match the search criteria defined in the filter. The list of output queues will display in a tab in the right-hand panel.

To open an output queue filter and run a search:

1. In the Filters panel, click on an output queue filter name.
2. From the floating menu choose Action - Open.
3. Wait while Spooled File Manager runs the filter.
4. Spooled File Manager will create a new tab and present a list of output queues that match the search criteria.
5. Click on an output queue to view the spooled files in the queue.



Spooled File Manager will display the search results as a list of output queues (Figure 17, page 28).

Spooled File Manager Options Help Logoff

Filters

- Queue Filters
 - All QGPL Output Queues
- Spooled File Filters
 - Current Job Spooled Files
 - Current User Spooled Files

Result (All QGPL Output Queues) Welcome

31 records returned

<< < 1 2 > >>

Queue	Library	Status	Files
ABEL	QGPL	RELEASED	4
ABELN	QGPL	RELEASED	0
ADMIN	QGPL	RELEASED	0
ALICK	QGPL	RELEASED	0
ANURA	QGPL	RELEASED	0
AXESTEST	QGPL	RELEASED	0
DD	QGPL	RELEASED	0
DEJOUTQ	QGPL	RELEASED	0
DIYOUTQ	QGPL	RELEASED	0
HAI	QGPL	RELEASED	0
HP	QGPL	RELEASED	0
HPL5	QGPL	RELEASED	1
I2@USER	QGPL	RELEASED	0
IBMSUP	QGPL	RELEASED	0
KEEP	QGPL	RELEASED	0
KEEPLICENS	QGPL	RELEASED	0

Figure 17: Search results returned by the all output queues in QGPL filter

Figure 17 (page 28) shows the results obtained by searching for all output queues in the QGPL library.

Clear an output queue

Clearing an output queue removes all spooled files from the output queue.

Figure 18 (page 29) shows a list of all output queues in the QGPL library. You create this list by running an output queue filter with search criteria set for all output queues in library QGPL.

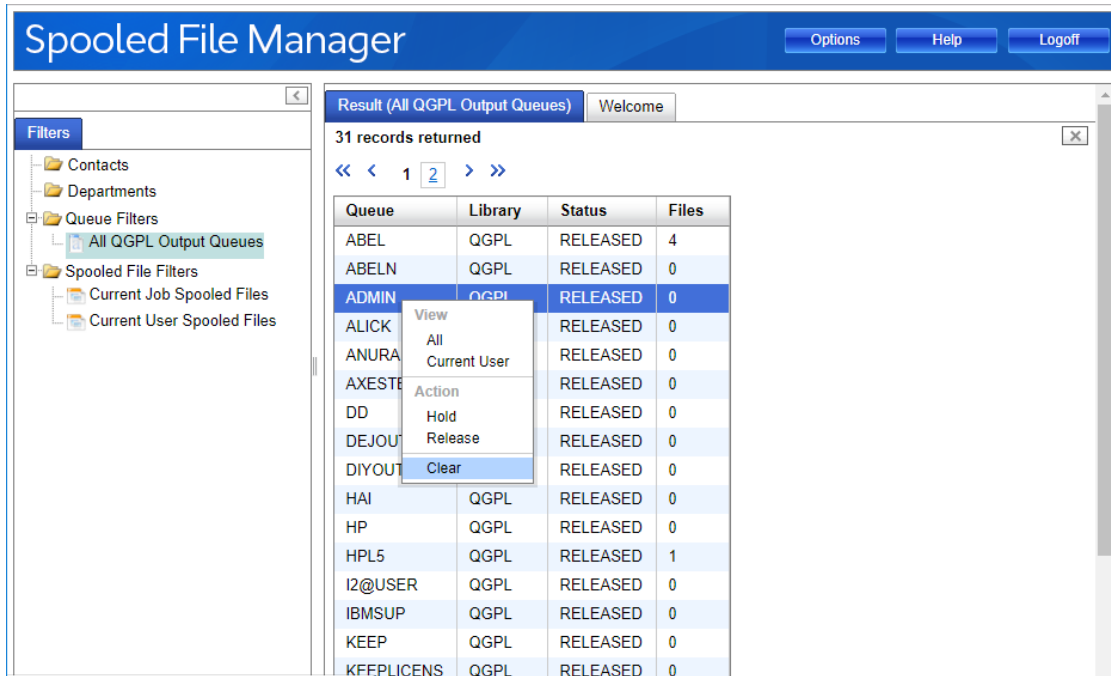


Figure 18: Clear an output queue

To clear an output queue:

1. Click on a row in the search results list to select the output queue you want to clear.
2. From the floating menu choose Action - Clear.
3. Wait until Spooled File Manager asks you to confirm the clear action.
4. Answer Yes to clear the output queue or No to take no action.
Spooled File Manager will issue a clear command only if you answer Yes.

Use with care: The clear command removes all spooled files from the output queue.

Hold an output queue

Holding an output queue prevents spooled files in an output queue from being printed (Figure 19, page 30). The hold command applies to all spooled files in the output queue waiting to start printing and all new spooled files added to the output queue after issuing the hold output queue command.

Spooled files printing when the hold command is issued will continue to print.

You must release the output queue to resume printing the remaining spooled files in the output queue.

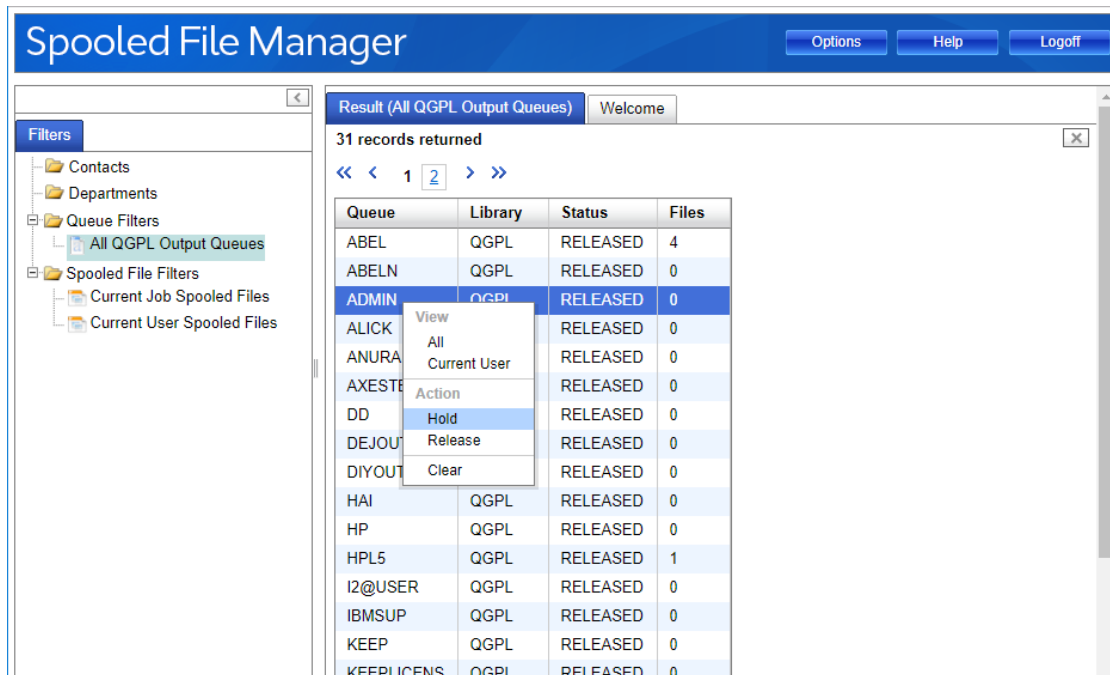


Figure 19: Hold an output queue

To hold an output queue:

1. Click on a row in the search results list to select the output queue you want to hold.
2. From the floating menu choose Action - Hold.
3. Wait until Spooled File Manager asks you to confirm the hold action.
4. Answer Yes to hold the output queue or No to take no action.

Release an output queue

Releasing an output queue resumes printing for spooled files in the output queue (Figure 20, page 31). The release command applies only to held output queues.

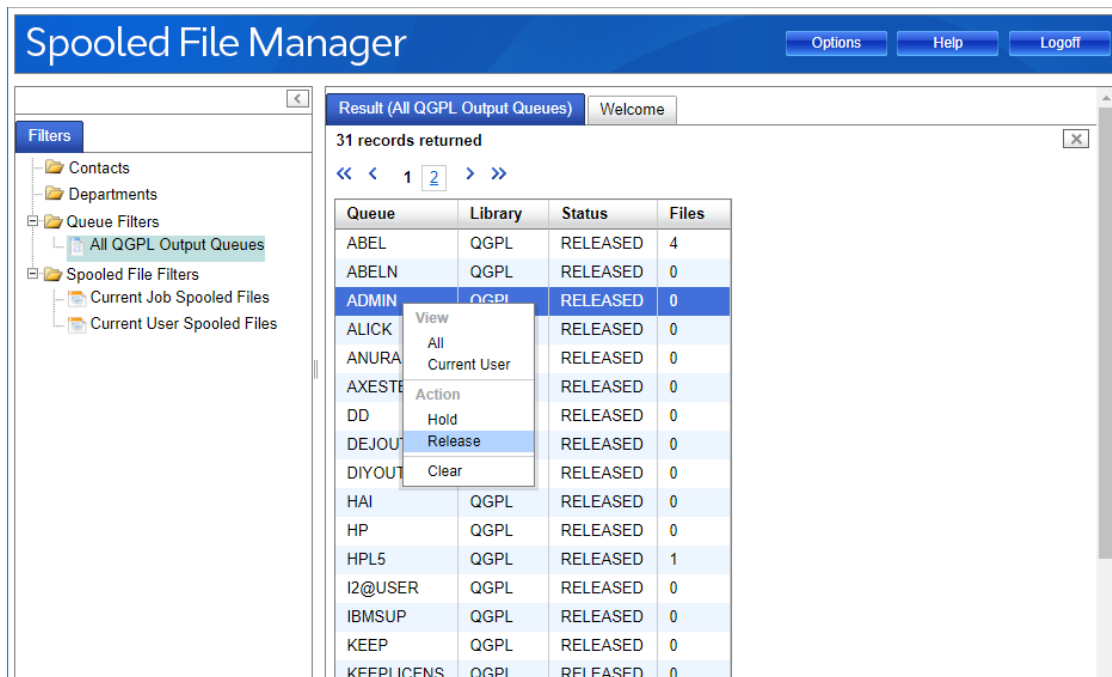


Figure 20: Release an output queue

To release an output queue:

1. Click on a row in the search results list to select the output queue you want to release.
2. From the floating menu choose Action - Release.
3. Wait until Spooled File Manager asks you to confirm the release action.
4. Answer Yes to release the output queue or No to take no action.

Output queue questions and answers

Table 2 (page 32) presents questions and answers related to output queues.

Table 2: Output queue questions and answers

Questions	Answers
Are there sample output queue filters?	Spooled File Manager comes with a sample output queue filter. Use the filter as a model when building your filters.
Can I open multiple tabs?	Spooled File Manager delegates the responsibility for closing tabs to the user. Each output queue search will add two tabs, one tab displays the output queue filter and the second tab displays the search results.
Can I save output queue filters?	Yes; you save filters in folders. Use the default folders or create your own folders.
Do I need to save an output queue filter to run a search?	You can create a filter, run the search, select a spooled file from the search results and view the content of the spooled file as one task, without saving the filter. If you do not want to keep the filter, close the filter edit tab.

Folder management

Folders help you manage spooled file filters and output queue filters. You can create multiple folders and save filters in an appropriate folder.

Create a folder

To create a folder:

1. Click a folder in the Filters panel.
2. Choose Folder from the floating menu.
3. Allocate a title for the folder, then click OK.

Create a folder Figure 21 (page 33) from the Filters panel or the folder option under Create New on the Welcome screen.

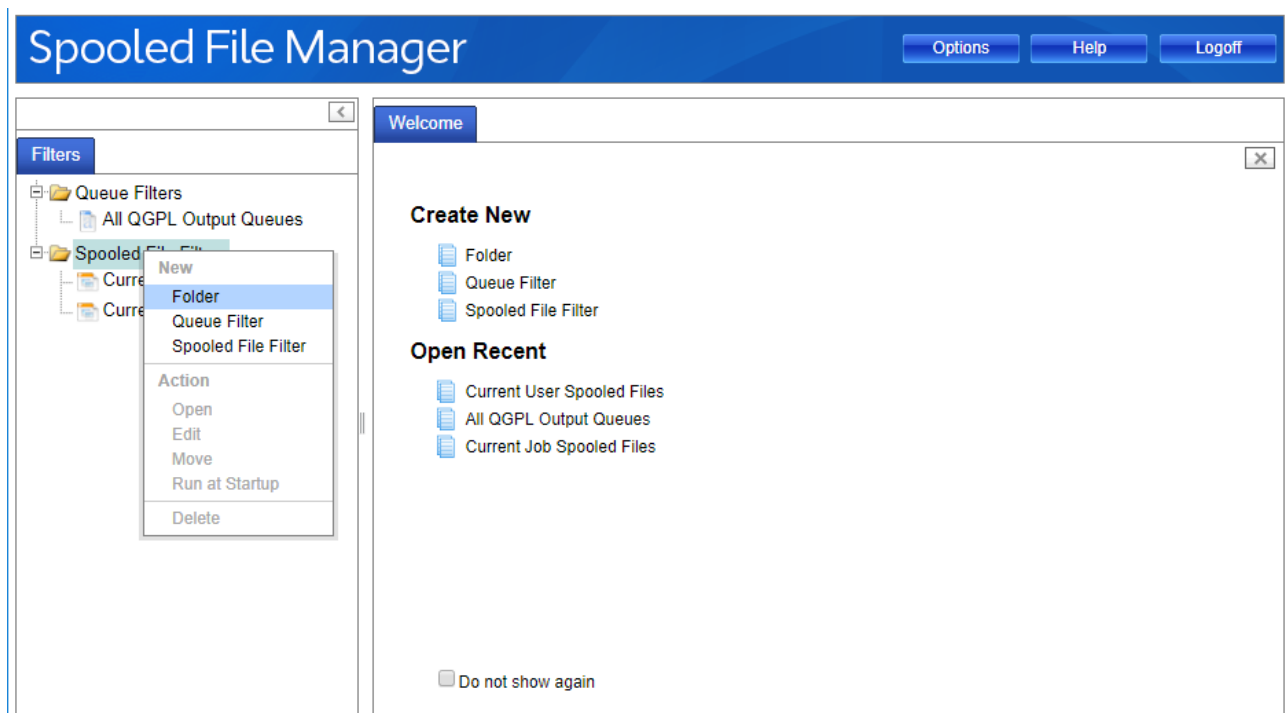


Figure 21: Create folder

Figure 22 (page 34) illustrates the allocation of a folder title (or name).
Click OK to create the folder or Cancel to abandon the folder creation.

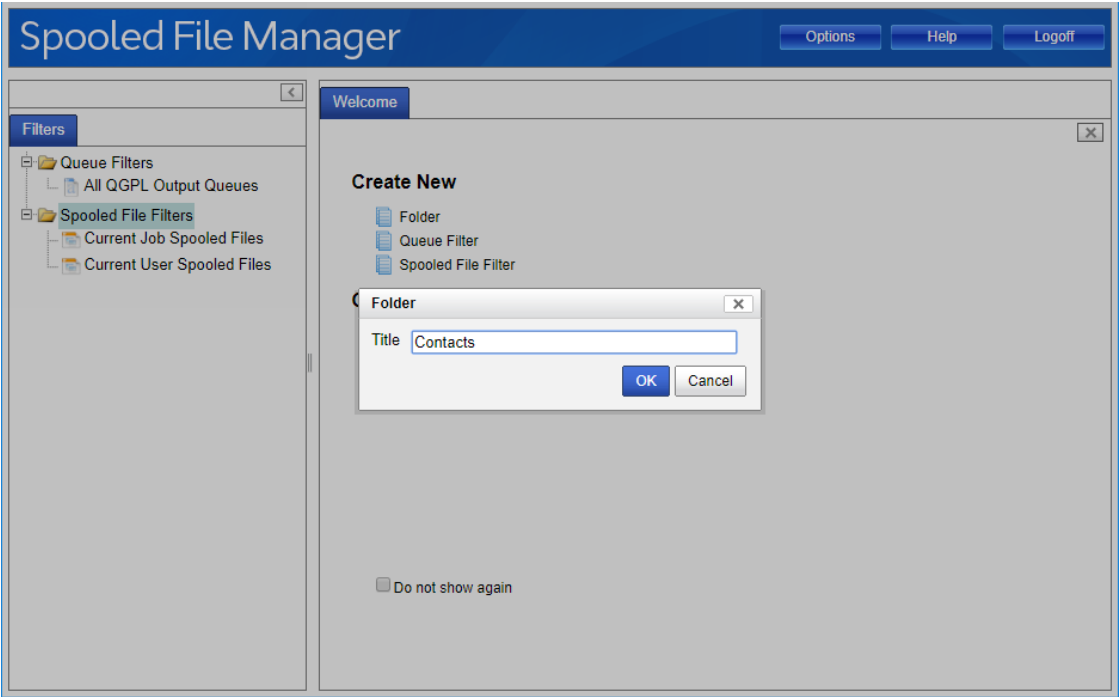


Figure 22: Allocate folder title

Edit or change a folder title

To edit a folder title:

1. Click the folder in the Filters panel you want to change.
2. Click Action - Edit from the floating menu.
3. Change the title, then click OK.

Edit a folder (Figure 23, page 35) to change a folder title.

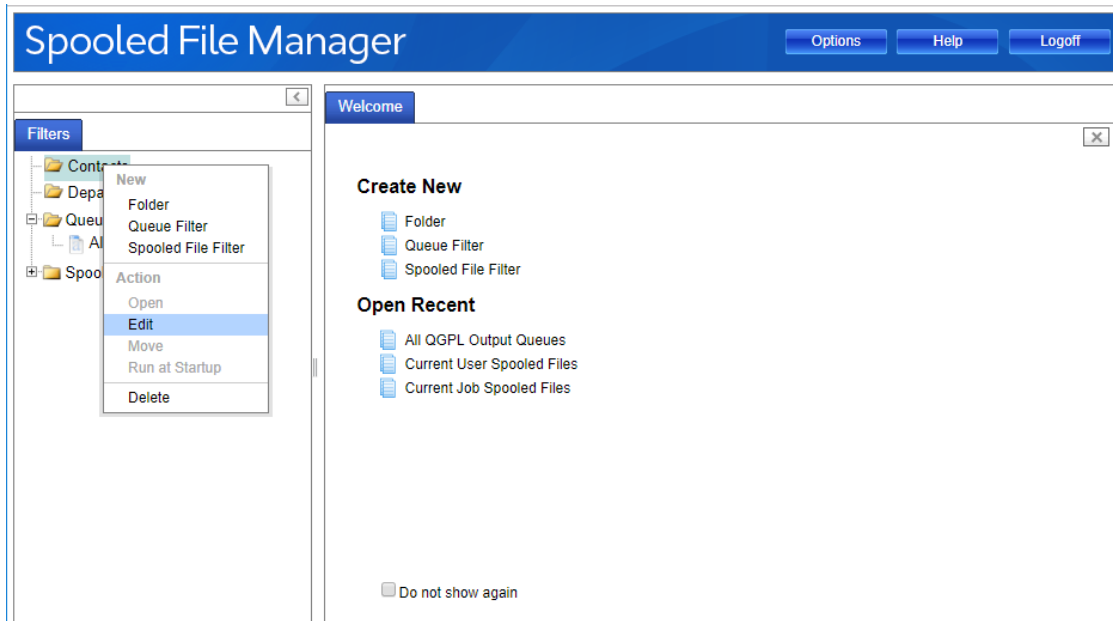
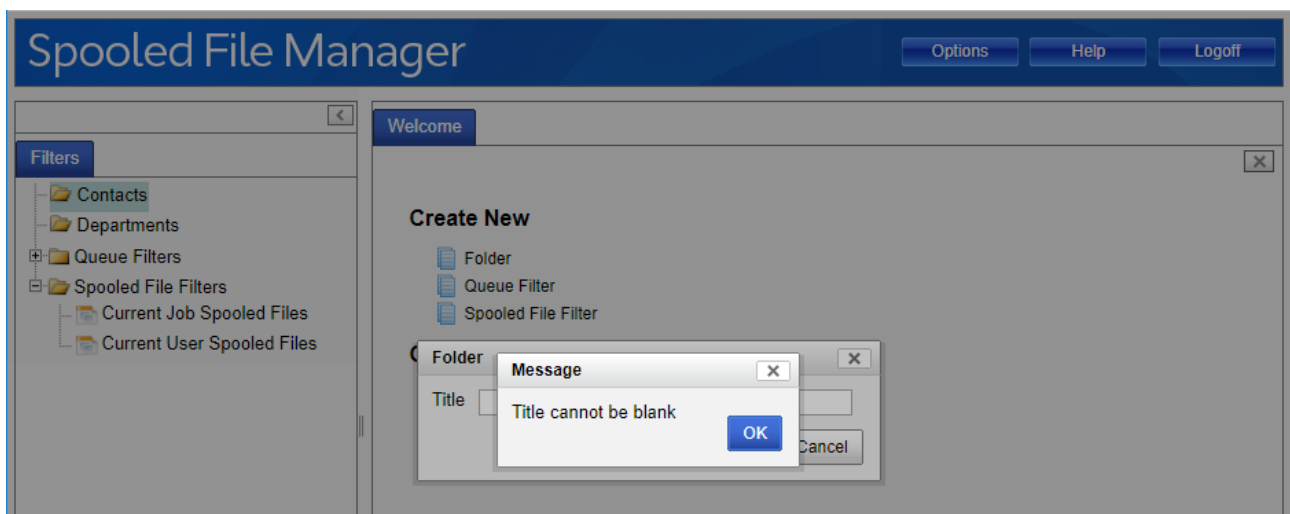


Figure 23: Edit (change) a folder title

Spooled File Manager will display the Folder dialog where you can change the folder title.

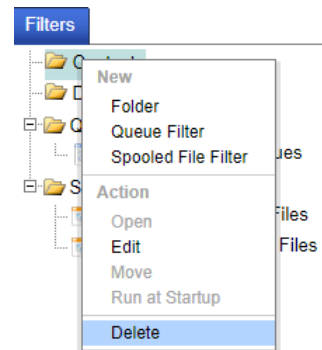
A blank folder name is not allowed.



Delete a folder

To delete a folder:

1. Click the folder in the Filters panel you want to delete.
2. Click Action - Delete from the floating menu.
3. Click Yes to delete the folder.



Spooled File Manager asks for delete folder confirmation (Figure 24, page 36).

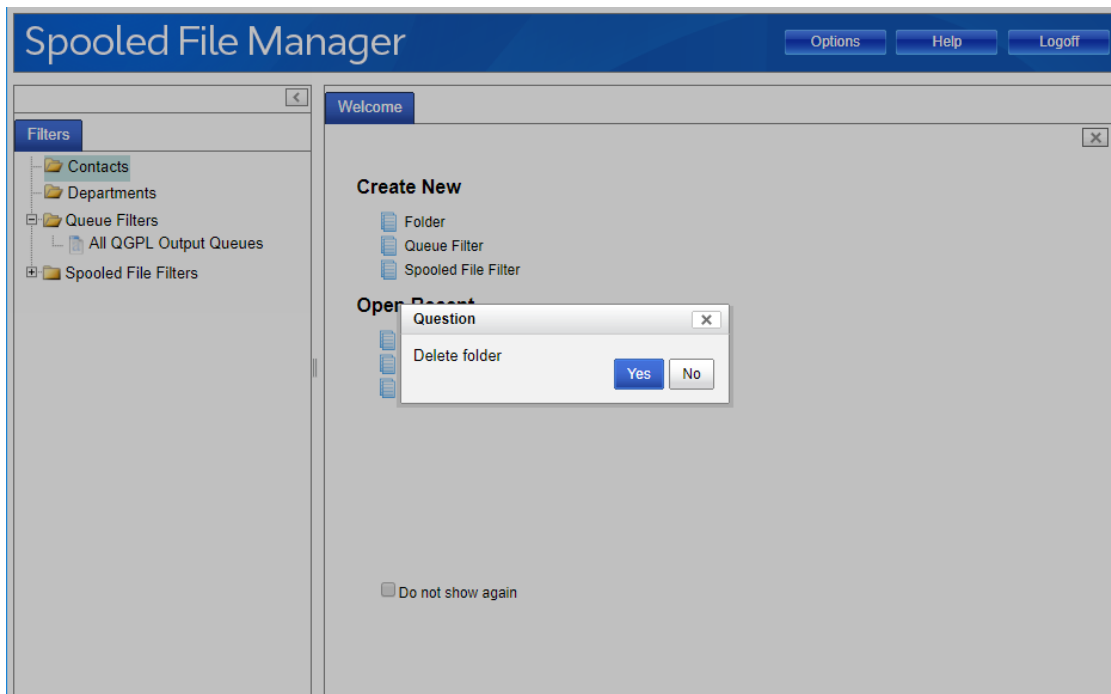


Figure 24: Delete a folder

Click Yes to delete the folder or No to keep the folder.

Deleting a folder will also delete filters residing in the folder.

Move filters from one folder to another

You can move filters from the folder in which they reside to another folder.

The move procedure is the same for spooled file filters and output queue filters.

To move a filter from one folder to another:

1. In the Filters panel, click a filter name.
2. Choose Action - Move from the floating menu.
3. Wait until Spooled File Manager shows a list of available destination folders.
4. Choose a folder from the list and click on the name.
5. Click OK to complete the move.

Figure 25 (page 37) illustrates choosing a folder to move to another folder.

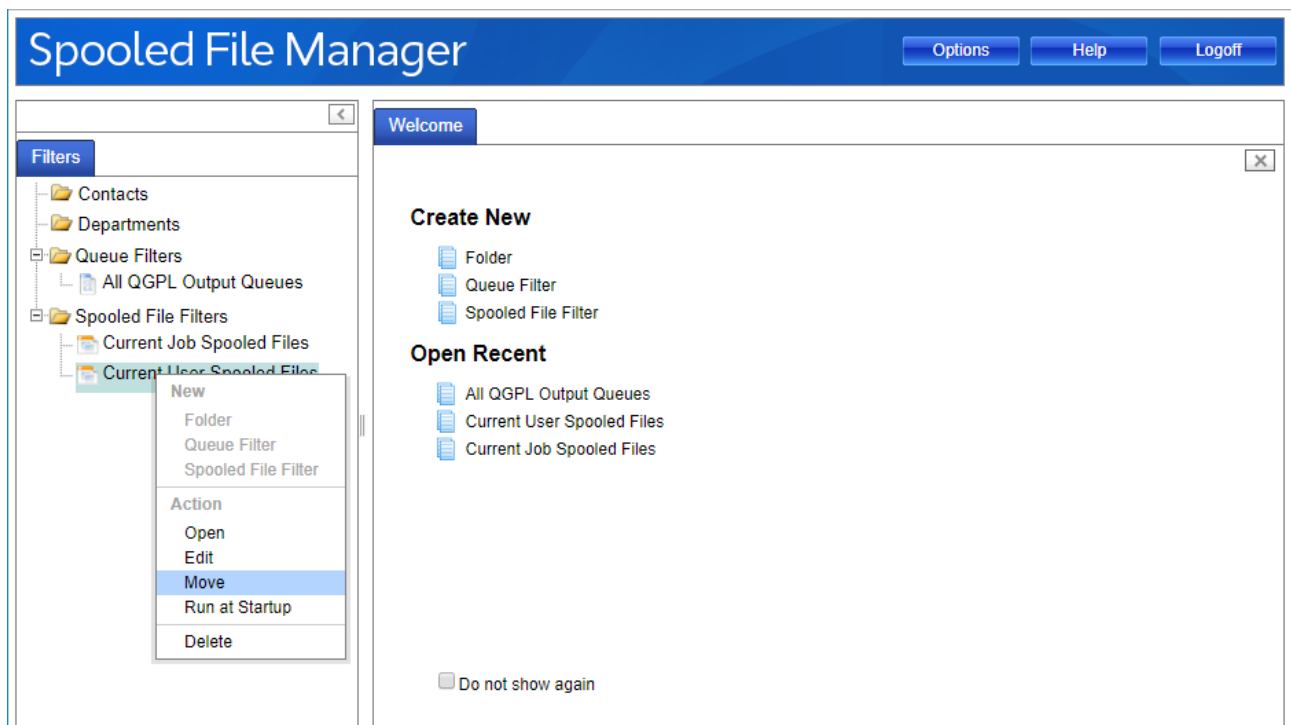


Figure 25: Move a filter to another folder - choose a folder to move

Figure 26 (page 38) illustrates selecting the destination folder.

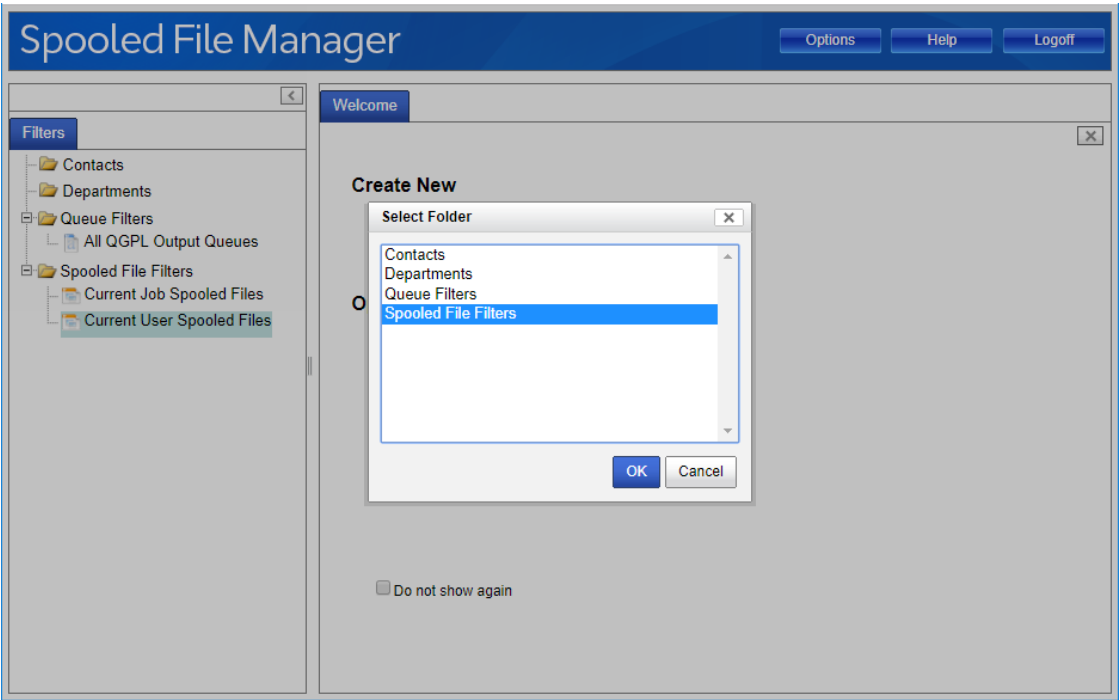


Figure 26: Move a filter to another folder - select destination folder

Folder questions and answers

Table 3 (page 39) presents questions and answers about folders.

Table 3: Folder questions and answers

Questions	Answers
Blank folder name?	Folder names cannot be blank.
Can I delete folders?	You can delete folders you create.
Can I move a folder?	No. Spooled File Manager displays folders in title sequence.
Can I move output queue filters from one folder to another?	Yes
Can I move spooled file filters from one folder to another?	Yes
Can I save all filters in one folder?	Yes. However, finding filters will become more difficult as the list of filters grows, unless you implement precise conventions for naming your filters.
Can I undelete folders?	No
Is there a limit to the number of folders?	Spooled File Manager imposes no limit to the number of folders.
Queue Filters folder?	The Queue Filters folder is a reserved system folder and unavailable for deletion. You can save filters in the Queue Filters folder.
Spooled File Filters folder?	The Spooled File Filters folder is a reserved system folder and unavailable for deletion. You can save filters in the Spooled File Filters folder.
What happens to the filters in a folder when I delete the folder?	Deleting a folder deletes all filters in the folder and the folder itself.
What is the maximum number of characters allowed in a folder title?	Eighty (80) characters, including spaces.
Why can't I delete a folder?	The folders, Queue Filters and Spooled File Filters are reserved system folders and unavailable for deletion.
Why use multiple folders?	Multiple folders will help you organise and find saved filters. They provide a way to categorise filters into subject matter groups.

Spooled File Manager provides two default folders, Queue Filters and Spooled File Filters and each folder contains a model filter. These folders and filters are examples of how you might create and save your filters.


Concepts

This section describes the concepts and features of Spooled File Manager.

Questions and answers

Table 4 (page 40) presents questions and answers about Spooled File Manager.

Table 4: Questions and answers

Questions	Answers
Can I edit the name of the start-up filter on the Options tab?	No; you nominate a start-up filter by setting a property in one of the filters. Spooled File Manager manages the filter name shown on the Options tab.
Can I save filters?	Yes; you save filters in folders. Use the default folders or create your own folders.
Do I need to save a filter to run a search?	You can create a filter, run the search, select a spooled file from the search results and view the content of the spooled file as one task, without saving the filter. If you do not want to keep the filter, close the filter edit tab.
How to activate menus?	Position the mouse pointer on a folder or a filter and click the left or right mouse button.
How to close a filter tab?	Click the close icon  , or right-click the tab label and click Close.
How to control user access?	Change the Spooled File Manager configuration to include service.user.allow and service.user.deny parameters.
How to register users automatically?	Change the Spooled File Manager configuration to include the parameter autoregister = "true"
How to stop users deleting spooled files?	Change the Spooled File Manager configuration to include the parameter allow.file.delete = "false"
Why are there two types of filters?	Output queue searches require fewer search criteria than spooled file searches. Using dedicated filter types simplifies the way you define search criteria for both spooled files and output queues.

About filters

Filters contain the search criteria Spooled File Manager uses when running searches.

There are two types of filters, output queue filters and spooled file filters.

Use spooled file filters to search for spooled files across one or more output queues. For example, search for all spooled files associated with the person currently logged on.

Use queue filters to search for spooled files in specific output queues. For example, search for all spooled files in the output queue QPRINT in the library QGPL.

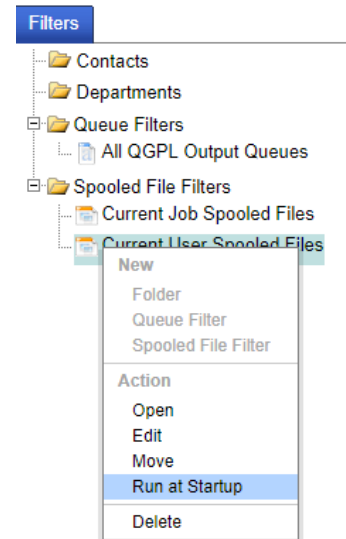
Run a filter when Spooled File Manager starts

Spooled File Manager can run a filter when it starts.

Choose a filter to run when Spooled File Manager starts

To run a filter automatically when Spooled File Manager starts, set the run at start-up action for the filter you want to run:

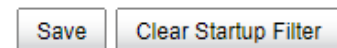
1. In the Filters panel click a filter name.
2. Choose Action - Run at Startup from the floating menu.
3. Spooled File Manager will change the filter name displayed on the Options tab



Stop a filter running when Spooled File Manager starts

To stop a filter running when Spooled File Manager starts, clear the start-up filter from the Options page:

1. Click the button labelled Options.
2. Wait until Spooled File Manager displays the Options tab.
3. Click the Clear Startup Filter button.
4. Wait until Spooled File Manager asks you to confirm the clear.
5. Answer Yes to clear the start-up filter.
Answer No and Spooled File Manager will not clear the start-up filter.



You cannot change the start-up filter by editing the name of the filter on the Options tab.

Manage columns in the search results list

Spooled File Manager displays a set of columns in the search results list. The columns are a subset of the spooled file properties.

You can change the columns that Spooled File Manager displays by hiding one or more of the columns.

You can alter the left to right sequence of the columns in the search results list.

The Options tab includes two lists (Figure 27, page 42), one labelled Show Columns and a second column labelled Hide Columns. The spooled file properties under the Show Columns label will appear in the search results. The spooled file properties under the Hide Columns label will not appear in the search results.

Figure 27 (page 42) illustrates show and hide columns set to show all columns in the search results list. This is the default configuration and the Hide Columns list is empty.

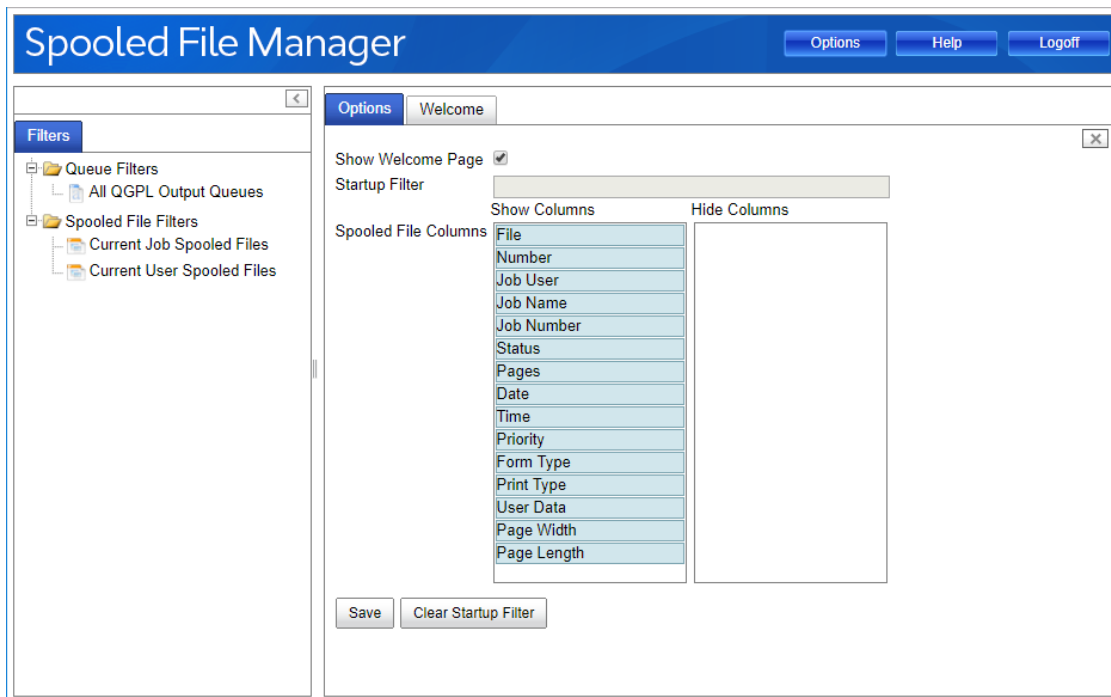


Figure 27: Manage columns displayed in the search results list

Show and hide columns displayed in search results

The Spooled File Columns item on the Options tab (Figure 28, page 42) controls the columns displayed in search results.

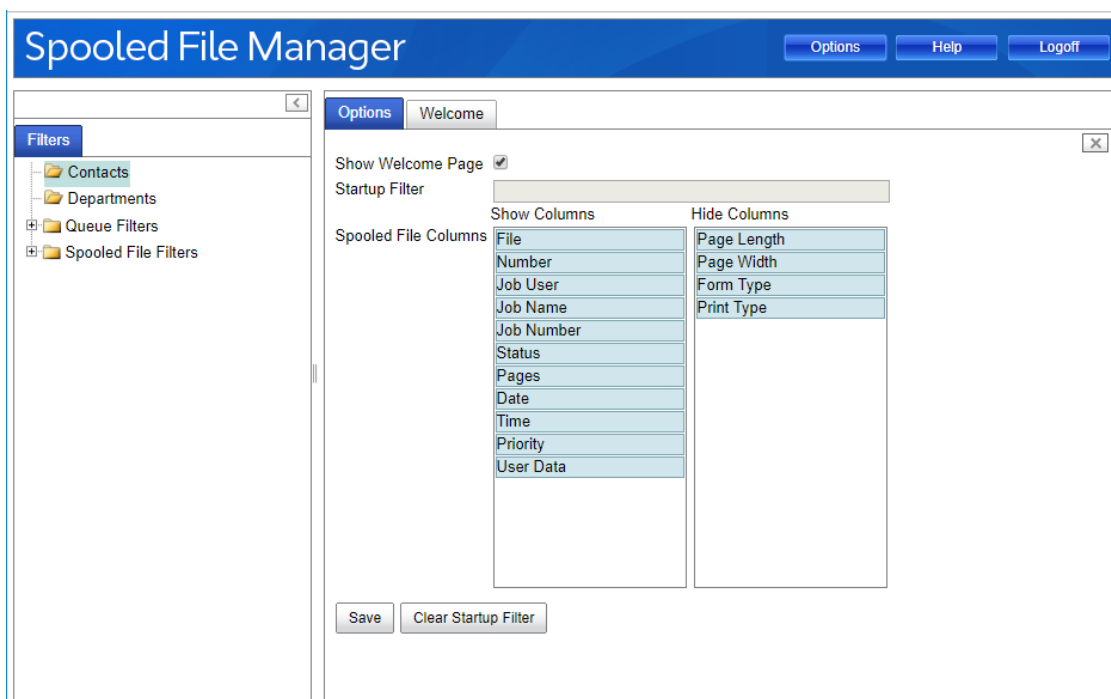


Figure 28: Show and hide columns displayed in search results

To hide columns:

1. Click the button labelled Options.
2. Wait until Spooled File Manager displays the Options tab.
3. Click and hold a mouse button on the spooled file property in the Show Columns list that you want to hide.
The drag icon (four arrows) will appear.
4. Drag the spooled file property into the Hide Columns list and release the mouse button.

To show columns:

1. Click the button labelled Options.
2. Wait until Spooled File Manager displays the Options tab.
3. Click and hold a mouse button on the spooled file property in the Hide Columns list that you want to show.
The drag icon (four arrows) will appear.
4. Drag the spooled file property into the Show Columns list and release the mouse button.

Set the sequence of columns in the search results

Spooled file properties in the Show Columns list display as columns in the search results. The top-to-bottom position of the property in the Show Columns list determines the column sequence from left-to-right in the search results list. The top item in the Show Columns list will be the first column on the left in the search results list and the bottom item will be last column on the right of the search results list.

Set the sequence in which Spooled File Manager displays the columns in the search results by dragging the spooled file properties up or down inside the Show Columns list.

To change the column sequence in the Show Columns list:

1. Click the button labelled Options.
2. Wait until Spooled File Manager displays the Options tab.
3. Click and hold a mouse button on the spooled file property in the list that you want to move.
The drag icon (four arrows) will appear.
4. Drag the spooled file property down or up into another location in the Show Columns list and release.

Spooled file options

Viewing spooled files

Spooled File Manager provides several options for viewing the content of a spooled file. Table 5 (page 44) explains what you see with each option and suggests why and when you might choose an option.

Table 5: Options for viewing the content of spooled files

View format	What you see
HTML	<p>Spooled File Manager presents the spooled file formatted for display using HTML and inserts the page navigation.</p> <p>The browser manages printing.</p> <p>Use this display format when you want to publish a spooled file content as a web page.</p>
PDF	<p>Spooled File Manager converts the spooled file to a PDF.</p> <p>A PDF reader manages content display and printing.</p> <p>Use the PDF format when you want to distribute a spooled file as an email attachment and/or save the PDF in a content management or file system.</p>
PDF image	<p>Spooled File Manager converts each page to an image and inserts the images into a PDF document.</p> <p>A PDF reader manages content display and printing.</p> <p>Copying the content of the spooled file is impractical when displayed as an image. Use this display format when you want to distribute a spooled file that cannot be easily edited.</p> <p>Use the PDF image format when you want to distribute a spooled file as an email attachment and/or save the PDF in a content management or file system.</p>
Text	<p>Spooled File Manager presents the spooled file pages formatted for display as text.</p> <p>The text display option includes no page navigation.</p> <p>The browser manages printing.</p> <p>Use the text format when you want to copy the content of a spooled for use in office tools such as Microsoft Excel.</p>

When Spooled File Manager creates spooled files as PDF or PDF image it inserts the following information into the PDF document properties shown in Table 6 (page 44).

Table 6: PDF document properties set by Spooled File Manager

Properties	Values set by Spooled File Manager
Title	Spooled file name
Author	Spooled file job user
Subject	Spooled file user data
Keywords	Spooled file user data

Keyboard shortcuts when viewing spooled files

Table 7 (page 45) presents keyboard shortcuts available when viewing spooled files as HTML or text. To use shortcuts that have one key, such as F8, click the key. For shortcuts such as Ctrl+P, hold down the first key (Ctrl) and click the second key (the letter P).

Table 7: Keyboard shortcuts when viewing spooled files

Shortcuts		What they do
Select all	Ctrl+A	Selects all the content of the spooled file.
Copy to clipboard	Ctrl+C	Copies the selected part of a spooled file to the clipboard. You need to open an office application like Microsoft Word or Notepad and then use Ctrl+V to paste the content of the spooled file into the application.
Find	Ctrl+F	Opens a find dialogue so that you can search the spooled file.
Print	Ctrl+P	Opens a print dialogue for you to choose a printer to print the content of the spooled file. Ctrl+P behaves like the printer icon at the top of the page in the HTML view.
Save	Ctrl+S	Opens a save as dialogue so that you can save the spooled file to a location and file name of your choice. Ctrl+S behaves like the disk icon at the top of the page in the HTML view. Not available as a keyboard shortcut in Internet Explorer.
Hide and show	F8	This shortcut acts as a switch to hide and show the page navigation when viewing spooled files as HTML. Not available as a keyboard shortcut when viewing spooled files as text.

Different shortcuts apply when viewing spooled files as PDF or PDF image. Consult the PDF viewer documentation for more information.

Formatting printed spooled files

Spooled File Manager can apply formatting when printing the content of spooled files. Table 8 (page 45) presents the list of available formatting controls.

Table 8: Controlling format when printing spooled file content

Properties	Descriptions
Font Leading	Defines the white space between the lines expressed in points
Font Name	Font or font family to use for printing the spooled file
Font Size	Font size in points
Host Encoding	Code page identification
Margins	Margin size in points expressed as: left, right, top, bottom Example: 20,20,30,25

Properties	Descriptions
Orientation	Landscape or portrait
Page Size	Page dimensions definition, A4 and letter are examples.
Pages	Page or pages to display or print, expressed as combinations of single pages and or page ranges Examples: 1, or 1-5, or 4,7,12 or 1,4,6-10
Image Scaling	Defines page size, expressed as a percentage increase or decrease Example: 30% Applies to: PDF image only

The format control properties are members of the spooled file properties collection.

Fonts

Font and host encoding (code page) determine the font Spooled File Manager uses when displaying spooled files. You can choose the font and host encoding or allow Spooled File Manager to make the choice. You set values for the properties Font Name and Host Encoding when you wish to choose the way for Spooled File Manager to display spooled files.

The default settings are Font Name set as AUTO and Host Encoding set as HPT. In this case, Spooled File Manager uses the IBM Host Print Transform and the system host encoding to determine the font.

In most cases, the default mode of auto selection of font and HPT for host encoding will provide the best results.

IBM spooled file attributes and Spooled File Manager properties

Spooled File Manager properties include a subset of the IBM spooled file attributes.

Table 9 (page 46) presents a list of the Spooled File Manager properties you may change, together with the equivalent IBM spooled file attribute names.

Table 9: Spooled File Manager properties and IBM spooled file attributes

Properties	Corresponding IBM Spooled File Attribute
Align Page	Align Page
Copies	Copies
Create Date	Creation Date
Create Time	Creation Time
Ending Page	Page range to print - Ending Page
File Name	File
File Number	File Number
File Separators	File Separators

Properties	Corresponding IBM Spooled File Attribute
Form Definition	Form Definition and Form Definition Library
Form Feed	Form Feed
Form Type	Form Type
Job Name	Job
Job Number	Job Number
Job User	Job User
Page Count	Total Pages
Page Length	Page Size Length
Page Width	Page Size Width
Pages Per Side	Pages Per Side
Print Both Sides	Print on Both Sides
Print Fidelity	Print Fidelity
Print Quality	Print Quality
Print Sequence	Print Sequence
Priority	Output Priority
Restart Printing	Restart Printing
Save	Save File
Source Drawer	Source Drawer
Starting Page	Page range to print - Starting Page
Status	Spooled File Status
User Data	User Defined Data

You can view the properties for a spooled file by choosing the Properties option from the menu available when working with search results.

Welcome page

The Welcome page (Figure 29, page 48) is the default page displayed when you start Spooled File Manager for the first time. The Welcome page will show each time Spooled File Manager starts unless you choose to hide it.

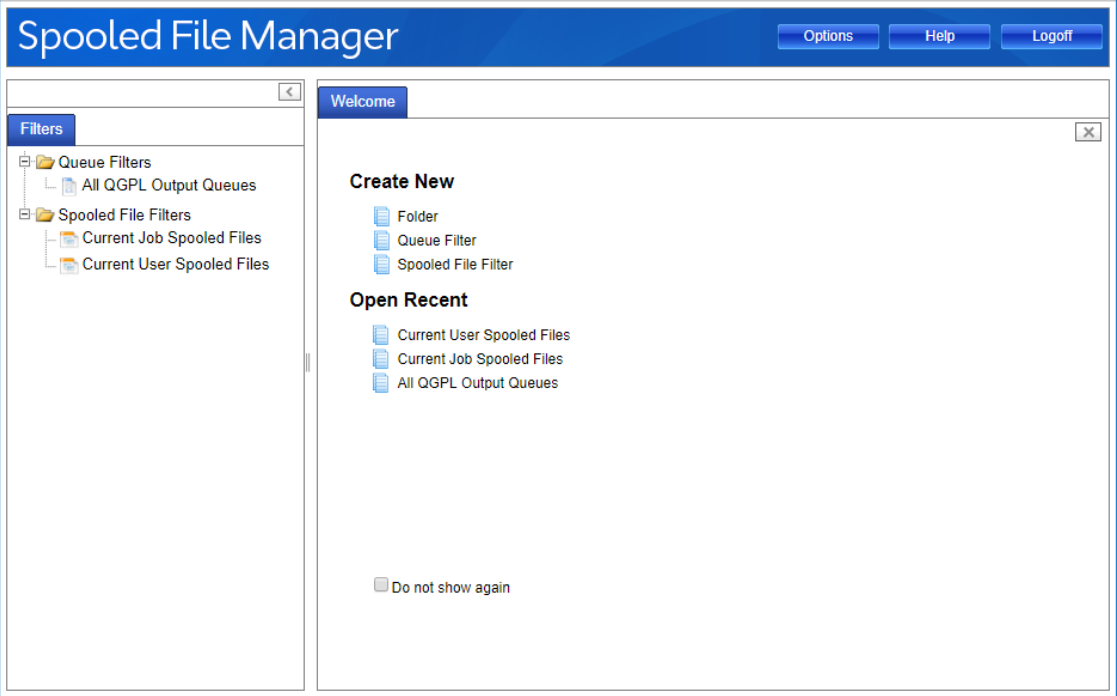


Figure 29: Spooled File Manager Welcome page

The Welcome page consists of a tab showing a list of the recently used filters, options for creating folders and filters and links to the documentation.

Create New	Click on Folder to create a folder. Click on Queue Filter to create a filter to search by output queue. Click on Spooled File Filter to create a filter to search for spooled files.
Open Recent	Open Recent is the list of recently used filters. Clicking on a filter in the recent list will open a new tab and run the search.

Show the Welcome page

If the Welcome page is turned off and you want to see the Welcome page, turn the Welcome page on from the Options tab. Click the Options button at the top of the page and click the box adjacent to the Show Welcome Page label so that it shows a tick (☑) image.

Hide the Welcome page

If you prefer not to see the Welcome page each time you start Spooled File Manager, tick the box adjacent to "Do not show again". This action will turn off the Welcome page and it will not show the next time Spooled File Manager starts.

Close the Welcome page by clicking the Close icon  located at the top right of the Welcome page tab.

Options

The Options tab (Figure 30, page 49) includes settings that control the way you want to interact with Spooled File Manager.

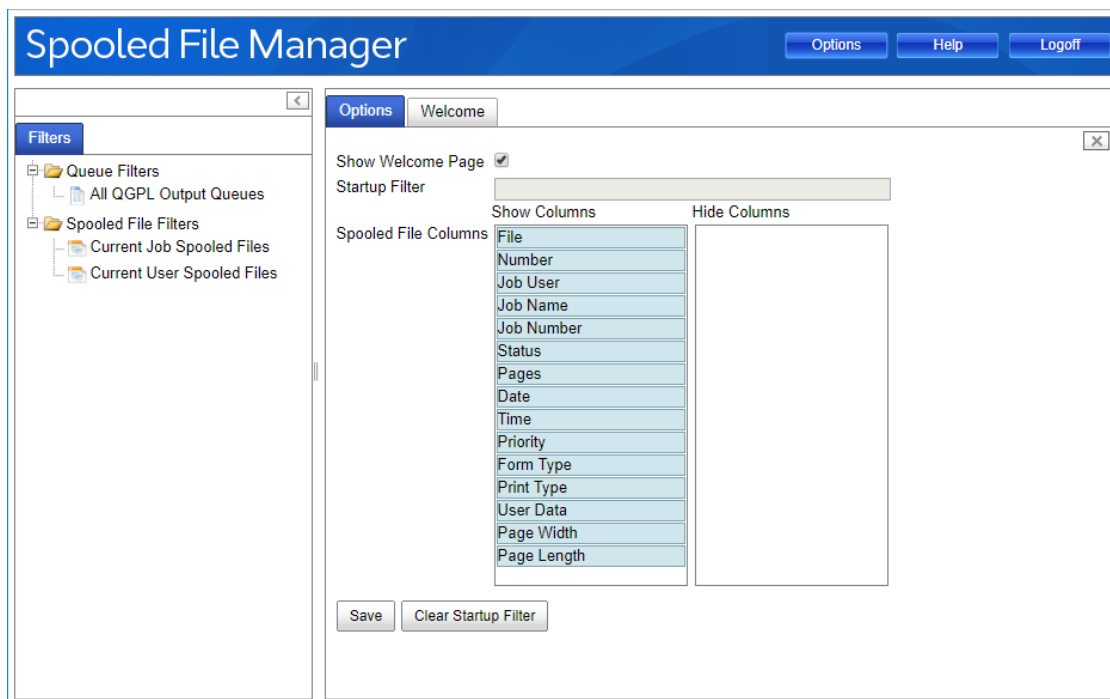


Figure 30: Options tab

To open the options tab:

1. Click the button labelled Options, located at the top right-hand side of the page.
2. Wait until Spooled File Manager displays the Options tab.
3. Once the Options tab is in view you can change any of the available options:
 - Show Welcome Page
 - Set the start-up filter
 - Manage columns in the spooled file search results list
 - Clear the start-up filter

Register users

Why register users?

People using Spooled File Manager have access to corporate data in spooled files. Corporate best practice suggests that companies ought to know and control who accesses data in their spooled files. Compliance and regulatory obligations require companies to maintain audit logs describing who accesses corporate information.

For these reasons you should ensure that only registered users can use the services to access spooled files. Each person needs identifying credentials comprising unique user name and password. Shared or generic user profiles will compromise the ability to determine who accesses spooled files.

What is user registration?

Spooled File Manager maintains lists of registered users and verifies user registration during the log on process. Each user requires an active IBM server user profile and password to register and operate Spooled File Manager.

The configuration file includes a parameter that controls user registration. The parameter allows two behaviours:

- Administrator registration
- Automatic registration

Administrator registration requires an administrator to add each authorised user to the list of registered users before the person can use Spooled File Manager.

Automatic (or self) registration allows Spooled File Manager to register users automatically when they first log on.

Registering large numbers of users will be a significant effort for administrators. One way to reduce the effort is to allow automatic registration for a short period after installation. As users log on, Spooled File Manager will register their user profile. At the end of a short automatic registration period, change the registration parameter to false. This approach will allow people to register automatically and reduce the administrative effort needed to register users.

Use the correct CCSID

Using an appropriate CCSID is essential when registering users manually. Spooled File Manager uses databases that are DBCS, use a graphic field (CCSID 1200), and data in the tables includes square brackets [] and braces { }, also known as curly brackets.

Use CCSID 37 as the job CCSID to ensure correct character conversions. This recommendation applies to all methods that register users manually, both interactive SQL and programmatic updates.

Using an inappropriate CCSID may produce incorrect conversions, for example:

CCSID 37 produces correct data: {"startupfilterid":0,"recent":15,"showwelcome":true}

CCSID 500 produces incorrect data: {"startupfilterid":0,"recent":¢15!,"showwelcome":true}

The data created using CCSID 500 interprets the square brackets incorrectly, [becomes ¢ and] becomes !. CCSID 37 produces the correct result.

The command to set CCSID 37 for a job is: CHGJOB CCSID(37)

Configuration

Architecture

Figure 31 (page 51) illustrates the architecture of Spooled File Manager. Spooled File Manager is a web application consisting of server components and a user interface presented in a browser. The user interface is a browser page consisting of HTML, CSS and JavaScript.

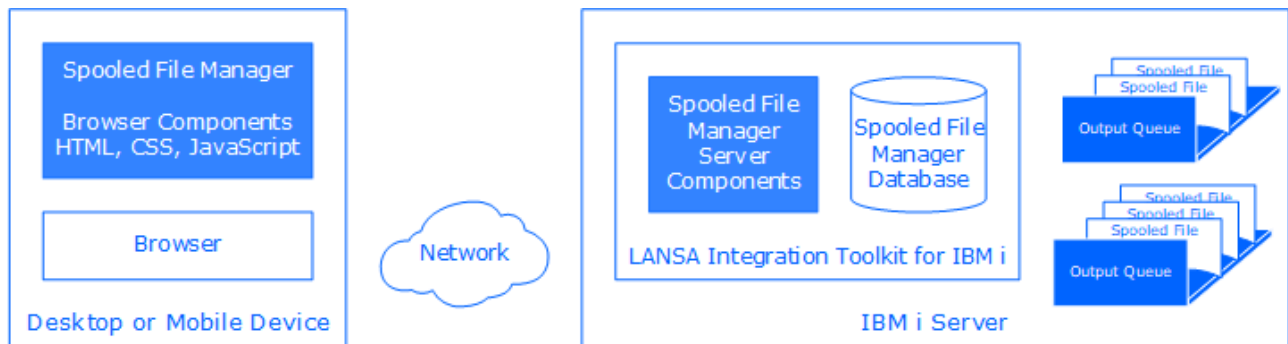


Figure 31: Spooled File Manager architecture and components

Users can work with output queues and spooled files from their browser using Spooled File Manager. They search for output queues, search for spooled files and request spooled files to view. Spooled File Manager initiates the searches on the server, marshals search results, retrieves spooled files and sends the data to the browser. The server components are the LANSAs Integration Toolkit and the Spooled File Manager server services.

Spooled File Manager employs a database to store registered users, the folders they create, and the spooled file filters and table filters they build. The Spooled File Manager database comprises the tables listed in Table 10 (page 51).

Table 10: Spooled File Manager database and tables

Table names	Object type	Purpose
SFMUSER	*FILE PF-DTA	The user table contains details about registered users
SFMFOLDER	*FILE PF-DTA	The folder table describes folders created by users
SFMFILTER	*FILE PF-DTA	The filter table describes the filters created by users

Spooled File Manager creates and manages the tables.

The configuration file defines the library where the tables reside.

Administrators are responsible for designing and executing backup processes for the databases.

User profiles beginning with the letter Q

Spooled File Manager prohibits users logging on with a user profile that begins with the letter Q.

If you wish to override this policy and allow the use of these user profiles, you must configure a service.user.allow parameter for each user profile you wish to allow.

Directives and parameters

The Spooled File Manager configuration controls the behaviour of Spooled File Manager using a set of directives and parameters.

Spooled File Manager will operate with the default configuration, but the default configuration may not satisfy your requirements.

The configuration file name is httpd.xml and it contains a section for each LANSa Integrator service. Table 11, page 52 presents an example of the Spooled File Manager section of the configuration file.

Table 11: Spooled File Manager configuration

```
<match uri="/service/sfm-service.jsp" rewrite=""
  class="com.lansa.mobile.service.HTTPServiceSpool"
  trace="false"
  clienttrace="false">
  <parameter name="service.default.host"      value="LOCAL"/>
  <parameter name="service.remote.activation" value=""/>
  <parameter name="service.origin"           value="*/>
  <host name="LOCAL" system="LOCALHOST">
    <parameter name="service.access.log" value="www/instance/logs/sfm.log"/>
    <parameter name="service.user.allow" value="*USER"/>
    <parameter name="autoregister"      value="true"/>
    <parameter name="database.host"     value="LOCALHOST"/>
    <parameter name="database.library"  value="{INSTALL_LIB}"/>
    <parameter name="allow.file.delete" value="true"/>
  </host>
</match>
```

Administrators set parameter values in the file including user access and automatic registration.

Configure user registration

Table 12 (page 52) explains how to set configuration parameters to control user registration.

Table 12: Configure Spooled File Manager for automatic or administrator user registration

Action	Parameter name and values
Allow automatic registration	autoregister="true"
Prevent automatic registration	autoregister="false"

Spooled File Manager will register users automatically when automatic registration is set to true.

An administrator must register users when automatic registration is set to false.

Spooled file deletion

Table 13 (page 53) explains how to set configuration parameters to control spooled file deletion.

Table 13: Configure Spooled File Manager for spooled file deletion

Action	Parameter name and values
Allow spooled file deletion	allow.file.delete ="true"
Prevent spooled file deletion	allow.file.delete ="false"

Spooled file deletion is a global control and the parameter allow.file.delete = "false" prevents all users from deleting spooled files when using Spooled File Manager.

Users can open a 5250 terminal session to manage and delete spooled files.

User access controls

Table 14 (page 53) explains how to set configuration parameters to control user access.

Users must be registered to use Spooled File Manager.

Table 14: Configure Spooled File Manager to control user access

Action	Parameter name and values
Allow all users	service.user.allow value="*USER" Omit the service.user.deny parameter.
Allow individual users	service.user.allow value="MARY" Include a value for each allowed user.
Prevent individual users	service.user.deny value="JOHN" Include a value for each denied user.
Prevent certain users and allow all other users	Create a set of deny parameters and one allow parameter: service.user.deny value ="JOHN" service.user.deny value ="MARY" service.user.allow value ="*USER" Place all service.user.deny parameters first when the service.user.allow parameter value is *USER.

Table 15 (page 53) illustrates an incorrect user access configuration. The intention is to allow JOHN, allow MARY and prevent access to all other users. The deny parameter for all users (*USER) will prevent access for all users including JOHN and MARY. Spooled File Manager will ignore the allow parameters for JOHN and MARY.

Table 15: Incorrect configuration to control user access

Action	Incorrect configuration
Allow certain users and prevent all other users.	service.user.deny value = "*USER" service.user.allow value = "JOHN" service.user.allow value = "MARY"

Spooled File Manager processes authorisation in the sequence of the service.user.allow and service.user.deny parameters. Be careful when using service.user.deny value = "*USER" as this value prevents all user access to Spooled File Manager.

User registration management

To register a user manually, insert a row in the table SFMUSER.

Several insert options are available for adding a user:

- Use SQL
- Write a program
- Load multiple users as a batch job using SQL and/or a program

Before loading a new user, check the SFMUSER table to ensure that the user is not already registered.

Use SQL to register users

You can register a user by running the following SQL:

```
INSERT INTO [Library]/SFMUSER (PROFILE,OPTIONS)
VALUES('USER','{"startupfilterid":0,"showwelcome":true}')
```

[Library] is the name of the library in which the table resides.

USER is the user profile in uppercase.

To use this SQL the CCSID for the job must not be 65535. Use the CHGJOB command to change the CCSID. The user profile must be an active user profile for the IBM server.

Write a program to register users

To automate user registration, write a program that accepts a user profile and inserts the user into the SFMUSER table. The program may use the SQL above to insert the user.

Register multiple users as a batch job

To load multiple users as a batch job, create a text file containing a list of users. Then load the users into the SFMUSER table using SQL or write a program to load the users into the table from the text file.

How to remove registered users

Remove a registered user by deleting the user profile from the filter table (SFMFILTER), the folder table (SFMFOLDER) and the user table (SFMUSER). Deleting the user from the user table but not the other tables will leave folders and filters without a related user.

The steps in the removal process are:

- | | |
|----|--|
| 1. | Determine the table rows associated with the user profile you want to remove.
For example, run a SELECT query with a WHERE clause to find the user profile. |
| 2. | Delete rows in the filter table using the row identification. |
| 3. | Delete rows in the folder table using the row identification. |
| 4. | Delete rows in the user table using the row identification. |

You can delete the rows manually, write SQL or write a program.

IBM printing support

Host print transform	Spooled File Manager supports Host Print Transform for retrieving the content of spooled files from IBM servers.
Stream files	Spooled File Manager supports stream files (CSF) for retrieving the content of spooled files from IBM servers.

Workstation requirements

This section describes prerequisites and system requirements for running Spooled File Manager on your computer or mobile device.

Hardware

Devices with a faster processor and more memory will provide better performance.

Spooled File manager requires no disk space other than the cache used by the browser.

Software

To use Spooled File manager, you need one of the supported browsers and the device operating system. No other software is necessary.

Connectivity

To use Spooled File manager, you need a TCP/IP connection to an IBM server from an internal network or the internet.

Assumed and prerequisite knowledge

This guide provides no tutorial for creating reports, printing or managing output queues and spooled files. Table 16 (page 55) defines the prerequisite knowledge needed to use the guide.

Table 16: Assumed and prerequisite knowledge

Subject Matter	Explanations
Creating reports	The guide assumes that you understand how to create reports, print reports and the concepts of spooling the reports for immediate or deferred printing.
Libraries	The guide assumes that you understand the concepts behind libraries for IBM servers.
Output queues	The guide assumes that you understand the concepts behind output queues for IBM servers.
Spooled files	The guide assumes that you understand the concepts behind spooled files for IBM servers.