Sterling File Gateway

Build 5008 Updates

Version 2.0 Build 5008



Contents

What's New in Build 5008	3
System Admin	6
Create User Accounts (Build 5008 or Later)	
Add Custom Tabs to myFileGateway (Build 5008 and Later)	8
About Permissions (Build 5008 or Later)	9
User Interface Access (Build 5008 and Later)	10
Assign Custom Permissions to Partners (Build 5008 and Later)	12
Rebrand Sterling File Gateway and myFileGateway (Build 5008 or later)	12
filegateway.properties (Build 5008 and Later)	16
filegateway_ui.properties (Build 5008 and Later)	17
filegateway_protocol.properties	19
About Event Codes (Build 5008 and Later)	20
Sterling File Gateway: Specific Recommendations Checklist	23
About Shared and Linked Mailboxes (Build 5008 or Later)	27
Set Up HTTPS for myFileGateway	
Deploy myFileGateway within an <iframe> HTML Element (Build 5008 and Later)</iframe>	29
Improve Loading Time for myFileGateway	30
Add Custom Protocols	31
Integration Architect	32
About Delivery Channels (Build 5008 or Later)	32
Create a Routing Channel Template (Build 5008 or Later)	33
Create a Broadcast Routing Channel Template (Build 5008 and Later)	35
Broadcast Messages Using Shared Mailboxes (Build 5008 or Later)	36
Route Provisioner	38
Create a Broadcast Routing Channel (Build 5008 or Later)	
Operator	39
Troubleshoot and Resolve Problems with Broadcast File Transfer (Build 5008 or Later)	
Prevent Failed PGP Routes	
myFileGateway	40
Access myFileGateway	
Send a File Using myFileGateway (Build 5008 or Later)	
Retrieve a File Using myFileGateway (Ruild 5008 or Later)	

What's New in Build 5008

New in This Release

The following enhancements are included in this release:

Increased Customization and New Features for myFileGateway

- Extension to *myFileGateway* enabling custom tabs for access to custom functionality controlled by custom permissions.
- Support for displaying *myFileGateway* within an HTML iframe element. See *Deploy myFileGateway within* an *<iFrame> HTML Element*.
- File upload transfer pop up prevents users from other activity during the file transfer
- File transfer continues in background if session times out
- Rebranding for log in page
- Ability to disable hover help

Broadcast File Transfers

- Multi-consumer broadcast. See *Create a Broadcast Routing Channel Template*, *Create a Broadcast Routing Channel*, and *Broadcast Messages Using Shared Mailboxes*.
- Broadcast using shared mailboxes

Improved Control over User Permissions

- Specific permissions can be assigned to user groups or partner users to control which tabs of *myFileGateway* can be accessed and which functionality is available. See *About Permissions*.
- New permissions to control whether the user name is displayed on the web page, and whether the logout URL is displayed on the web page. See *About Permissions*.
- New tabs can be defined and specified in customer_overrides.properties. See *Add Custom Tabs to myFileGateway* and *Assign Custom Permissions to Partners, filegateway_ui.properties.*
- Permissions can be managed to control whether partner users are automatically given access to mailboxes created as a result of routing channels. See *filegateway, properties*.

Other Enhancements

• Delivery channel option to avoid duplicate transfers with FTP push. See *About Delivery Channels* and *Create a Routing Channel Template*.

New Properties in filegateway.properties

Property	Description
fgmaxBroadcastListSize	Maximum allowed size of the consumer list. If the business process returns a list larger than this size, the engine will fail the arrived file without routing to any consumers. By default, the maximum size of a broadcast list is set to 100.
grantIntermediate MailboxPermissions	Controls permissions granted to intermediate mailboxes. Intermediate mailboxes are those between a partner user's virtual root and the leaf mailbox. These mailboxes are created by Sterling File Gateway during either routing channel creation or dynamic routing. Setting this property to true grants View
	& Execute rights to the intermediate mailboxes to eligible partner users. View rights are required to list mailbox contents. Execute rights are required to 'log in' to a mailbox. Setting both rights allows users of the FTP and SFTP protocol adapters to traverse through any intermediate mailboxes to reach the leaf. The default is false.
	For example: grantIntermediateMailboxPermissions=false

New Properties in filegateway_ui.properties

Property	Description
myfilegateway.extension_js_file_x	The name of the JavaScript that defines a custom functionality for tabs in <i>myFileGateway</i> . You can list several .js files by incrementing the final <i>x</i> . The value is in the format:
	<pre>myfilegateway. extension_js_file_1=CustomFunc1.js myfilegateway. extension_js_file_2=CustomFunc2.js where CustomFunc = name of the .js file</pre>
	For example:
myfilegateway.extension_tab_resource_ids	Contains a comma separated list of resource indentifiers that define additional permissions. When setting permissions for users that access <i>myFileGateway</i> , assign myfilegateway.extension_tab_resource_ids for a custom tabs. When you create a custom tab, you can also create a new permission to control whether a user can view that tab. Only new and custom tab permissions are listed in this property.
	Note: Users must have permissions to at least one tab, either the standard upload, download, file activity, or reports tab, or one of the permissions created for a custom tab.

Documentation Enhancements

The following enhancements are available in System Admin documentation:

- Create User Accounts inclusion of initial log in user IDs and passwords, clarification of restrictions for creating System Administrators.
- Rebrand Sterling File Gateway and *myFileGateway* additional instructions for greater customization and clean up of files.

- filegateway_protocol.properties provides details about enabling or disabling protocols for search criteria.
- Sterling File Gateway: Specific Recommendations Checklist recommendation for persistence settings for business processes for translation layers and custom consumer identification. Clarification that number of threads for processes is not limited by licensing.
- Improve Loading Time for *myFileGateway* Partners suggestions for externalizing your static skin images to a hosting server closer to your users.
- Add Custom Protocols clarification of restriction on business process names for implementing custom protocols

The following enhancements are available in Operator documentation:

- Troubleshoot and Resolve Problems with Broadcast File Transfer
- Prevent Failed PGP Routes

Sterling Integrator Enhancements

• Support for Shared and Linked Mailboxes. See *About Shared and Linked Mailboxes* and *Broadcast Messages Using Shared or Linked Mailboxes*.

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System Admin

Create User Accounts (Build 5008 or Later)

When you install Sterling File Gateway, several default accounts are automatically created to get you started. You can use the default accounts to perform the tutorial described in the Overview.

One of the first actions you must take is to create your own accounts with unique IDs and passwords, because the default ones can be known by all Sterling File Gateway customers. Log in to Sterling File Gateway with the following credentials:

- User ID = fg_sysadmin
- Password = password

To create a user account:

- 1. From Sterling File Gateway, select **Tools** > **B2B Console**.
- 2. From within Sterling Integrator, Select Accounts > User Accounts > Create a new Account.
- 3. Complete the steps in the wizard.

Supply the following information about the user:

- Authentication type (Local or external)
- User ID by default, the User ID must be at least five characters. To enable shorter or require longer User IDs, modify the following property in customer_overrides.properties:

```
filegateway_ui.userIdMinLength.ui=(# of characters)
```

The value of # of characters must be greater than zero. This value must match the value set in in ui.properties in Sterling Integrator.

- Password
- · Confirm Password
- Policy choose from:
 - [blank] (default)
 - Default User Policy For the default user policy, the password must be at least six characters and is required to contain at least two of the following characters. (numeral, capital letter, !, @, #, \$, %, ^, &, *)

- You can create a different policy for your system. Create the policy in Sterling Integrator first, then select it from the list when you create a user.
- SSH Authorized User Key
- Session Timeout (in minutes)
- Accessibility
- Dashboard Theme
- 4. Select one or more groups from the following list:
 - File Gateway Integration Architects can only access Sterling File Gateway, not myFileGateway
 - File Gateway Operators can only access Sterling File Gateway, not myFileGateway
 - File Gateway Partner Users can only access myFileGateway
 - File Gateway Route Provisioners can only access Sterling File Gateway, not myFileGateway
 - File Gateway System Administrators can only access Sterling File Gateway, not myFileGateway

Note: For full Sterling File Gateway functionality, each of these groups must have at least one user. By default, the following users are created during installation of Sterling File Gateway:

- fg_sysadmin belongs to all File Gateway groups except File Gateway Partner Users. Also belongs to Sterling Integrator Admin group.
- fg_architect belongs to File Gateway Integration Architects group
- fg provisioner belongs to File Gateway Route Provisioners group
- fg_operator belongs to File Gateway Operators group

A user can belong to multiple groups, but cannot belong to File Gateway Partner Users group while a member of any other administrative group.

Note: To protect the security of your system, change the default passwords.

Note: To create an independent user that is the equivalent of fg_sysadmin, assign the Sterling Integrator Admin group and all File Gateway groups except File Gateway Partner Users group to that user. Ensure that the user is not associated with any Identity (partner) that belongs to the "All Partners" group in Sterling File Gateway. Membership in a partner group prevents log in to Sterling File Gateway as an administrator.

- 5. Select the permissions for the user. (Optional.) The group assignments include the standard permissions for users of each group.
- 6. Supply the following information for the user:
 - First Name
 - Last Name
 - E-mail
 - Pager
 - Preferred Language (English, Japanese)
 - Manager ID
 - Identity
- 7. Review and confirm to create the new user account.

Add Custom Tabs to myFileGateway (Build 5008 and Later)

System Administrators can create new tabs for additional functionality in *myFileGateway* by:

- Define some custom functionality in a new file JavaScript file.
- Reference your JavaScript file by setting the property:
- myfilegateway.extension_js_file_x=customTabCode.js
- Control availability for the extensible elements using permissions created in:

```
myfilegateway.extension_tab_resource_ids
```

Example Custom Tab

One example of a custom tab you can add to myFileGateway is a Welcome Tab.

To create a new Welcome Tab in *myFileGateway*:

- 1. Create a new permission for accessing your new custom tab within *myFileGateway*. From the B2B Console, select **Accounts** > **Permissions**. Create a new permission with Permission Type=File Gateway.
 - Make note of the PERMISSION_ID you create, as it will be used in the JavaScript file in the next step (for example, MYFG_WELCOME).
- 2. Assign the custom tab permission you created to a group. Select **Accounts** > **Groups**. Create a group and assign the permission you created in step 1.
- 3. Navigate to the directory <install_dir>/container/Applications/myFileGateway.
- 4. Create a new directory. For example, "welcomepage".
 - a. Inside this new directory, create a new JavaScript (*.js) file (for example, "welcomepage.js". Copy and paste the following JavaScript into this file:

```
var WelcomePage = function() {
    var createWelcomeLayout = function() {
      return isc.VLayout.create({
        name: "myFqWelcome Layout ",
        autoDraw:false,
        showEdges:false,
        backgroundColor: "#FFFFFF",
        members:[
          isc.Label.create({
          contents: " < b>Welcome to the myFileGateway upload and download
               application.</b><br>",
          icon:"[SKIN]/FGimages/FileTxfr_23.png",
          iconHeight: 23,
          iconWidth: 44,
          padding:5,
          height:1,
          width:400
          })
      });
  };
 var welcomeTab = {
```

```
ID:"WelcomeTab",
    title:"Welcome",
    prompt:"Welcome",
    permission:" MYFG_LOGIN ",
    initTab: function() {
    this.pane = createWelcomeLayout();
    }
  }
  this.welcomeTab = welcomeTab;
}
com.sc.fg.welcomePage = new WelcomePage();
MyFileGatewayManager.addTab(com.sc.fg.welcomePage.welcomeTab);
```

b. Create or edit customer_overrides.properties to reference your new JavaScript file and location URL. For example:

```
filegateway_ui.myfilegateway.extension_js_file_1=
   /myfilegateway/welcomepage/welcomepage.js
```

- 5. Before saving the file, locate in the JavaScript source code the "permission" attribute for the tab control. Change the permission name in this example script to the PERMISSION_ID used when creating the permission. (that is, change MYFG_LOGIN to MYFG_WELCOME)
- 6. Edit the security_filter.properties file under container/Applications/myfilegateway/WEB-INF/classes. Add a new entry for your new JavaScript file (welcomepage.js). For example:

```
loginjsXX=/${WEBAPP_CONTEXT_NAME}/welcomepage/
welcomepage.js
```

where XX is a unique identifier.

- 7. Navigate to <install_dir>/bin.
- 8. Run the following scripts:
 - < install dir>/bin/hardstop.sh
 - < install_dir > /bin/deployer.sh
 - < install dir>/bin/run.sh
- 9. After the deployer is complete, stop and restart Sterling File Gateway.
- 10. Log in to myFileGateway to verify your custom tab is visible.

About Permissions (Build 5008 or Later)

The permissions that control access to the pages of myFileGateway are:

- myFileGateway Login
- myFileGateway Logout
- myFileGateway User Name (whether the user name is displayed on the pages)
- myFileGateway File Activity
- myFileGateway Reports
- myFileGateway Change Password
- myFileGateway Help
- Custom permissions created by System Administrators

• myFileGateway Event Subscription

Note: Partner users with the Event Subscription permission may receive notifications for events they have subscribed to, even if they do not have File Activity permission.

The Event Subscription permission only affects a user's ability to view and modify their subscriptions to events. If the Event Subscription permission is removed from a user or group, the user or members of the group will continue to receive notifications for any events already subscribed to, but cannot subscribe to additional events.

The File Gateway Partner Users group is assigned all of the available permissions, which means that all available pages of myFileGateway are displayed for partner users assigned to the File Gateway Partner Users group. To limit partners to fewer permissions, create a new group and assign only the desired permissions. See *About User Groups and Partner Groups*.

Do not modify the File Gateway Partner Users group, because your changes may be overwritten when later builds are applied.

Other Permissions

The permissions used in Sterling File Gateway are:

- File Gateway Auto-grant Mailbox Permissions
- File Gateway Producer Proxy

The File Gateway Partner Users group is assigned the File Gateway Auto-grant Mailbox Permissions, which indicates to the system whether to configure mailbox permissions automatically. With this permission, partner users are automatically assigned permission to mailboxes created as a result of File Gateway routing channels. File Gateway Producer Proxy is for system use only.

User Interface Access (Build 5008 and Later)

Access to each page of the user interface is authorized based on permission groups assigned when the user is created.

The following table describes which screens and functions each persona can access:

Page	System Admin	Integration Architect	Route Provisioner	Operator	Partner
Routes > Activity	(Default page.) Can search and view details and links to details in B2B Console. Can mark routes as reviewed or not reviewed. Can replay and redeliver.	Can search and view events, but cannot view linked details. Can mark routes as reviewed or not reviewed. Cannot replay or redeliver.	Can search and view events, but cannot view linked details. Can mark routes as reviewed or not reviewed. Cannot replay or redeliver.	(Default page.) Can search and view details and links to details in B2B Console. Can mark routes as reviewed or not reviewed. Can replay and redeliver.	No access to /filegateway.
Routes > Channels	Can view and edit.	No access.	(Default page.) Can view and edit.	No access.	No access to /filegateway.

Page	System Admin	Integration Architect	Route Provisioner	Operator	Partner
Routes > Templates	Can view and edit.	(Default page.) Can view and edit.	No access.	No access.	No access to /filegateway.
Participants > Groups	Can view and edit.	Can view and edit.	Can view and edit.	Can view and edit.	No access to /filegateway.
Participants > Partners	Can view and edit.	Can view and edit.	Can view and edit.	Can view and edit.	No access to /filegateway.
Participants > Communities	Can view and edit.	Can view and edit.	Can view and edit.	Can view and edit.	No access to /filegateway.
Tools > Reports	Can view and edit.	Can view and edit.	Can view and edit.	Can view and edit.	No access to /filegateway.
Tools > Activity Snapshot	Can view and get events and complete details.	Can view and get events, but not details.	Can view and get events, but not details.	Can view and get events and complete details.	No access to /filegateway.
Tools > B2B Console	Can view and edit complete Admin menu.	Can only view and edit Accounts > My Account.	Can only view and edit Accounts > My Account.	Can view and edit Business Processes and Operations menus, and Accounts > My Account.	No access to /filegateway.
Tools > Logs	Complete access to all logs.	No access.	No access.	Complete access to all logs.	No access to /filegateway.
Profile > Notifications	Can subscribe and delete.	Can subscribe and delete.	Can subscribe and delete.	Can subscribe and delete.	No access to /filegateway.
Profile > Password	Can change own password, unless external user. Can change other users passwords.	Can change own password, unless external user.	Can change own password, unless external user.	Can change own password, unless external user.	No access to /filegateway.
myFileGateway > Activity > Upload Files > Download Files > Reports > Profile	No access.	No access.	No access.	No access.	(Default page.) Complete access to search, generate reports, upload files, and download files when Partner is producer or consumer. Can subscribe and unsubscribe to notifications and can change own password.

Page	System Admin	Integration Architect	Route Provisioner	Operator	Partner
myFileGateway > Custom Tab					Custom configuration defined in filegateway_ui,properties.
Help	Can view all Help libraries.	Can view all Help libraries.	Can view all Help libraries.	Can view all Help libraries.	Can only view myFileGateway Help, not the other libraries.

Assign Custom Permissions to Partners (Build 5008 and Later)

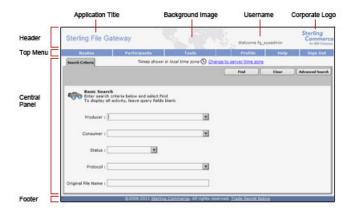
For partners who need access to custom tabs, or where you want to restrict access to certain tabs, you can create a group with custom permissions.

- 1. Select Tools > B2B Console > Groups > Create a Group.
- 2. Name your group and click **create**.
- 3. On the **Assign Permissions** tab, select the myfilegateway permissions you prefer including the custom permissions you defined.
- 4. Save the group.

Rebrand Sterling File Gateway and myFileGateway (Build 5008 or later)

You can rebrand Sterling File Gateway and *myFileGateway* to use your company's logo or other special content. To customize the look of Sterling File Gateway and *myFileGateway*, you create a skin, reference this new skin, and restart your system. You can use the same or different skins for Sterling File Gateway and *myFileGateway*.

The following figure shows the location of the portions of the screens you can rebrand:



The corresponding file names are:

- Header:
 - [skin]/brandingcontent/header.txt
- [skin]/brandingcontent/myFgHeader.txt
- [skin]/load_skin.js
- [skin]/images/FGimages/brandingimages/...
- Top Menu: [skin]/skin_styles.css
- Central Panel:
- [skin]/skin_styles.css
- [skin]/load_skin.js
- [skin]/images/...
- Footer: [skin]/brandingcontent/footer.txt
- [skin]brandingcontent/loginFooter.txt

To rebrand Sterling File Gateway:

- 1. Locate files in the following directories for the default skins:
 - <install_dir>/container/Applications/filegateway/isomorphic/skins/FileGateway
 and
 - <install_dir>/container/Applications/myfilegateway/isomorphic/skins/FileGateway
- 2. Copy and rename the "FileGateway" directory in path:
 - <install_dir>/container/Applications/filegateway/isomorphic/skins/FileGateway

You can use any valid directory name. In the next steps, the renamed directory is referred to as [skin].

- 3. To customize the header, you can change the following elements:
 - Application Title
 - Background Image

- Corporate Logo
- Position of the user name
- HeaderALT
- 4. To change the Application Title:
 - a) Open the following file:

```
[skin]/brandingcontent/header.txt
```

- b) Change line 15 to refer to your company name (padding-left: 15px" nowrap="nowrap">My Company
- c) Open [skin]/brandingcontent/myFgHeader.txt
- d) Change line 15 to refer to your company name (or another name) (padding-left: 15px" nowrap="nowrap">My Company
- 5. To change the browser title text, which appears up in the top left-hand side of the browser (if different from Application Title, mentioned in the graphic, above) set the variables:
 - fgWindowTitle (for Sterling File Gateway)
 - myfgWindowTitle (for myFileGateway)

in customer_overrides.properties as

```
filegateway_ui.fgWindowTitle=xxx
```

and

filegateway_ui.myfgWindowTitle=xxx

- 6. To change the Background Image:
 - a) Create a new Background Image GIF image, 66 pixels high by 800 pixels wide and named "MastheadBkgd_Map.gif"
 - b) Place this GIF in the following directory:[skin]/images/FGimages/brandingimages/
 - c) Open the following file: [skin]/brandingcontent/header.txt
 - d) Change line 3 to refer to your skin's directory where the background image (from step 5) is located (isomorphic/skins/[skin]/images/FGimages/brandingimages/ MastheadBkgd_Map.gif)
 - e) Open [skin]/brandingcontent/myFgHeader.txt
 - f) Change line 3 to refer to your skin's directory where the background image (from step 5a) is located (isomorphic/skins/[skin]/images/FGimages/brandingimages/ MastheadBkgd_Map.gif)
- 7. To change the Corporate Logo:
 - a) Create a new Corporate Logo GIF image, which should be 66 pixels high by 93 pixels wide and named "hdr_logo.gif"
 - b) Place this GIF in the following directory:[skin]/images/FGimages/brandingimages/
 - c) Open the following file: [skin]/brandingcontent/header.txt
 - d) Change line 18 to refer to your skin's directory where the corporate logo image (from step 6a) is located (isomorphic/skins/[skin]/images/FGimages/brandingimages/ hdr_logo.gif)
 - e) Open [skin]/brandingcontent/myFgHeader.txt
 - f) Change line 18 to refer to your skin's directory where the corporate logo image (from step 6a) is located (isomorphic/skins/[skin]/images/FGimages/brandingimages/ hdr_logo.gif)
- 8. To change the position of the user name:
 - a) Open the following file:[skin]/load_skin.js

- b) Change the two variables on Lines 14 and 15 to position the name label where you desire:
 - headerUserNameTop (expressed in absolute pixels from the top)
 - headerUserNameLeft (expressed as a percentage of page width, from the left side)
- 9. To change the headerALT, which is displayed while the header is loading:
 - a) Open the following file:[skin]/load_skin.js
 - b) Change the variable on Line 13 (headerALT) to your company name (e.g. "My Company").
- 10. To change the Log In page footer:
 - a) Open the following file: [skin]/brandingcontent/loginFooter.txt
 - b) Modify the first line to refer to your company name as well as the link to your corporate Web site, if desired: ...href=http://www.MyCompany.com target =_blank>My Company
- 11. To change the footer for all pages after the Log In page:
 - a) Open the following file: [skin]/brandingcontent/footer.txt
 - b) Modify the first line to refer to your company name as well as the link to your corporate Web site, if desired: ...href='http://www.MyCompany.com' target ='_blank'>My Company...
- 12. To suppress hover help:
 - a) Access the file [skin]/load_skin.js
 - b) Around Line 398, find the section titled "11) Hovers"
 - c) Within this section, locate the conditional statement "if (isc.Hover) { ..."
 - d) Modify the property "defaultWidth:200" to a value of 0 (that is, "defaultWidth:0")
- 13. To reference the new [skin], create or open customer_overrides.properties in a text editor. Add the following line:

```
filegateway_ui.fgSkinName=[skin]
```

where [skin] is your new skin name for Sterling File Gateway and

```
filegateway_ui.myfgSkinName=[skin]
```

where [skin] is your new skin name for *myFileGateway*. The values for [skin] can be different for Sterling File Gateway and *myFileGateway*.

14. Open the "load_skin.js" file in your new skin directory ([skin]/load_skin.js) and change the line in the "Specify skin directory" area:

```
isc.Page.setSkinDir([ISOMORPHIC]/skins/FileGateway/
```

to refer to your new skin's name:

```
isc.Page.setSkinDir([ISOMORPHIC]/skins/[skin]/
```

- 15. To change the header only for *myFileGateway*:
 - Modify only the two files, header.txt and myFgHeader.txt in the new directory at:(<install_dir>/container/Applications/myfilegateway/isomorphic/skins/[skin]/brandingcontent
- 16. Run the following scripts:
 - <install_dir>/bin/hardstop.sh
 - <install_dir >/bin/deployer.sh
 - <install_dir >/bin/run.sh

- 17. If any branding files modified contain a matching .gz file (for example, "load_skin.js and load_skin.js.gz"), then the .gz file must be removed. Check the /install/noapp/deploy/myfilegateway/webapp or /install/noapp/deploy/filegateway/webapp directory to ensure your changes have been propagated as expected.
- 18. Refresh your browser cache.

When you launch Sterling File Gateway, the new branding is shown in the header and footer. When your Partner users launch *myFileGateway*, the new branding is shown in the header.

filegateway.properties (Build 5008 and Later)

The filegateway.properties file contains properties which control the operation of Sterling File Gateway.

The following table describes properties in the filegateway.properties file:

Note: Do not edit the filegateway.properties file. Make all changes in the customer_overrides.properties file. For example, to change the pgpCmdline2svcname property, enter the following line into customer_overrides.properties:

filegateway.pgpCmdline2svcname=CUSTOM

substituting CUSTOM with the name of your Command Line 2 adapter.

Property	Description
ignoreFilename	Setting a regex pattern for this will cause any arrived file that matches your regex pattern to be ignored by Sterling File Gateway. This is useful for recognizing and ignoring temporary files sent by producers before they are renamed to the expected name. These will not be routed and are not considered failures. Note: The regex pattern must match the file name in its entirety. Partial matches are not recognized.
ftpClientAdapterName	The FTP Client Adapter instance or service group that the FileGatewayDeliverFTP business process will use. Override this property in customer_overrides.properties if a custom FTP Client Adapter instance must be used to contact trading partners. You can also specify an adapter group name to load-balance outbound FTP sessions across multiple adapter instances. Default is ftpClientAdapterName=FTPClientAdapter.
bpCompletionProbes.1 bpCompletionSleepMsec.1 bpCompletionProbes.2 bpCompletionSleepMsec.2	Timeouts and sleep intervals that control how long Sterling File Gateway waits for every sub-business process it invokes. These control the timeouts when a business process is executed synchronously during routing. Used for consumer identification business processes and for PGP processing. Enables one set of relatively quick probes followed by a second set of slower probes. The first set will be very reactive, but consume more processor time. The second set will activate for longer-running processes and will consume less processor time. First probe 120 times with 100 Milliseconds between, for a total of 12 seconds. Default is bpCompletionProbes.1=120 and bpCompletionSleepMsec.1=100. Then probe 600 times with 2000 Milliseconds between, for a total of 1200 seconds (20 minutes). Default is bpCompletionProbes.2=600 and bpCompletionSleepMsec.2=2000.
pgpCmdline2svcname	The name of the Command Line 2 adapter to be used for PGP packaging and unpackaging. Override this property in customer_overrides.properties if a custom Command Line 2 adapter must be used for PGP operations. You can also specify

Property	Description
	an adapter group name to load-balance outbound PGP sessions across multiple adapter instances. Default is pgpCmdline2svcname=PGPCmdlineService.
fgRoutePGPCmdLineSocket Timeout	Timeout value, in milliseconds, for PGP package and unpackage operations invoked by Sterling File Gateway. Default value is 240000 milliseconds (4 minutes)
fgRouteConcurrentSessionLimit	Limits the number of File Gateway services that can be running concurrently. The services are split into two groups, and each group has this value as a limit. Therefore, there will be a maximum of two times the value of this property services running. It is best to set this somewhat (but not too much) higher than the number of business process threads in queues 4 and 6 (these are the queues where the File Gateway Services run.) The default is 8. To change this value, use the customer_overrides.properties file to set filegateway.fgRouteConcurrentSessionLimit=(# of limit).
required_si_build_ver	The build number (version) of Sterling Integrator that Sterling File Gateway requires. this is checked at system start up. If the current verison of Sterling Integrator does not equal the required_si_build_ver, a warning is issued and the system is shut down. Required.
fgmaxBroadcastListSize	Maximum allowed size of the consumer list. If the BP returns a list larger than this size, the engine will fail the arrived file without routing to any consumers. By default, the maximum size of a broadcast list is set to 100.
grantIntermediateMailbox Permissions	Controls permissions granted to intermediate mailboxes. Intermediate mailboxes are those between a partner user's virtual root and the leaf mailbox. These mailboxes are created by Sterling File Gateway during either routing channel creation or dynamic routing. Setting this property to true grants View & Execute rights to the intermediate mailboxes to eligible partner users. View rights are required to list mailbox contents. Execute rights are required to 'log in' to a mailbox. Setting both rights allows users of the FTP and SFTP protocol adapters to traverse through any intermediate mailboxes to reach the leaf. The default is false. For example:
	grantIntermediateMailboxPermissions=false

filegateway_ui.properties (Build 5008 and Later)

The filegateway_ui.properties file contains properties which control the location of the Help systems for Sterling File Gateway and *myFileGateway*, as well as several other user interface settings.

The following table describes properties in the filegateway_ui.properties file:

Note: Do not edit the filegateway_ui.properties file. Make all changes in the customer_overrides.properties file. For example, to change the URL for the Help system, enter the following line into customer_overrides.properties:

filegateway_ui.help.uri=http://CUSTOM

substituting CUSTOM with your preferred URL.

Property	Description
reportingdirectory	Location of the reports templates.

Property	Description
	Required. Do not modify or override.
dataflowurl	Links to a dataflow in Sterling Integrator. Do not modify.
fgMaxRoutingChannelRecords	Limits the total number of routing channel records returned by a search. Required. Default is 1000. You can change this to fine tune performance by editing the customer_overrides.properties file.
myFgStoragetype	Storage type to use for new documents sent through myFileGateway. Possible values are:
	 default - use the system default db - store documents in database file - store documents in file system
	To change this value, use the customer_overrides.properties file. For example to set it to database, filegateway_ui.myFgStoragetype=db. Default is default.
fgMaxActivityRecords	Limits the total number of Activity Records that will be returned in activity search. This can be edited to fine tune performance. The default is:
	fgMaxActivityRecords=1000
fgWindowTitle	The title of the window that displays in the top browser bar for Sterling File Gateway. Required. Default is Welcome to Sterling File Gateway.
myfgWindowTitle	The title of the window that displays in the top browser bar for myFileGateway. Default is Welcome to Sterling File Gateway.
fgSkinName	The file that contains the branding information for Sterling File Gateway. Required. Default is FileGateway.
myfgSkinName	The file that contains the branding information for <i>myFileGateway</i> . Required. Default is FileGateway.
fgOnboardingDefaultSessionTimeout	The default session timeout in minutes for a Partner User created using the Sterling File Gateway onboarding.
	The default is:
	fgOnboardingDefaultSessionTimeoutInMinutes=15
fgOnboardingDefaultUserGroupId	The group partner users are automatically assigned to when they are created as a result of creating a partner in Sterling File Gateway, migrated from AFT, or the partner's identity is associated with a File Gateway partner group. Required. Default is File Gateway Partners Users Group.
enableEbicsUI	For system use only. Do not modify.
help.uri	Specifies the URL for the Help used by Sterling File Gateway. Required. The default ishttp://help.sterlingcommerce.com/SFG20/index.jsp. This site is hosted by IBM.
	This site is nosted by ibivi.

Property	Description
myFghelp.uri	Specifies the URL for the help used by <i>myFileGateway</i> . Required. The default ishttp://help.sterlingcommerce.com/mySFG20/index.jsp. This site is hosted by IBM.
notification.admin.url	Login URL for admin staff to access FileGateway. Required. Default - notification.admin.url=http:// <si-host-address>;;<si-port-number>/filegateway</si-port-number></si-host-address>
	Note: The specified URL will be included in email messages generated to administrative users.
notification.partner.url	Login URL for partner users to access <i>myFileGateway</i> . Required. Default - notification.partner.url=http://&HOST_ADDR;:&PORT1/myfilegateway
	Note: The specified URL will be included in email messages generated to partner users. If you implement Sterling Secure Proxy (SSP), it is imperative that you change this property to remove the original server details and replace with the SSP-designated URL.
myfilegateway.extension_js_file_x	The name of the JavaScript that defines custom tabs for <i>myFileGateway</i> . You can list several .js files by incrementing the final number. The value is in the format: For example:
	myfilegateway. extension_js_file_1=MYFG_VIEW_DOWNLOAD_APPLET myfilegateway. extension_js_file_2=MYFG_VIEW_UPLOAD_APPLET
myfilegateway.extension_tab_resource_ids	Contains a comma separated list of resource indentifiers that define additional permissions. When setting permissions for users that access <i>myFileGateway</i> , assign myfilegateway.extension_tab_resource_ids for a custom tabs.When you create a custom tab, you can also create a new permission to control whether a user can view that tab. Only new and custom tab permissions are listed in this property.
	Note: Users must have permissions to at least one tab, either the standard upload, download, file activity, or reports tab, or one of the permissions created for a custom tab.

filegateway_protocol.properties

The filegateway_protocol.properties file contains properties which control the protocols available when specifying the search criteria for Sterling File Gateway activity searches.

The following table describes properties in the filegateway_protocol.properties file:

Note: Do not edit the filegateway_protocol.properties file. Make all changes in the customer_overrides.properties file. For example, to change the setting for Connect:Direct Inbound, enter the following line into customer_overrides.properties:

protocol.FG_CDIN=

Property	Description
FG_CDIN	Enables the Connect:Direct Inbound protocol
FG_CDOUT	Enables the Connect:Direct Outbound protocol
FG_CD	Enables the Connect:Direct Inbound and Outbound protocol
FG_FTPIN	Enables the FTP Inbound protocol
FG_FTPOUT	Enables the FTP Outbound protocol
FG_FTP	Enables the FTP Inbound and Outbound protocol
FG_SFTPIN	Enables the SFTP Inbound protocol
FG_SFTPOUT	Enables the SFTP Outbound protocol
FG_SFTP	Enables the SFTP Inbound and Outbound protocol

About Event Codes (Build 5008 and Later)

Each activity during the progress of a file transfer generates an event code. These codes are displayed in the activity details to enable Partners and Operators to see the progress and navigate to more details. System Administrators can create custom event codes and modify the permissions for standard event codes.

The following standard event codes display only in activity details:

Event Code	Name	Description
FG_0201	BusinessProcessStarting	When a business process is started, with the reason for starting it stored in context
FG_0202	BusinessProcessSuccess	When a business process is successfully completed, with a link to the business process
FG_0401	FactDiscovery	When a fact is discovered by the route, for example, matching a pattern on the file name
FG_0404	ProducerFound	When a producer and user are identified based on the arrived file
FG_0407	ConsumerFound	When a consumer is identified based on the route plan
FG_0409	ArrivedFileDeterminingRoutes	When an arrived file starts determining routes
FG_0410	ArrivedFileRouting	When an arrived file starts processing routes
FG_0412	RouteStarted	When a route is started from an arrived file
FG_0413	RouteDeterminingDeliveries	When a route starts determining deliveries
FG_0414	RouteDelivering	When a route starts processing deliveries
FG_0416	DeliveryStarted	When a delivery is started from a route

Event Code	Name	Description
FG_0417	DeliveryTransforming	When a delivery starts to transform the consumer file
FG_0418	DeliveryDelivering	When a delivery starts delivering the consumer file to the consumer
FG_0421	ArrivedFileReplayOf	When an arrived file is a replay of an original arrived file, with a link to the original file
FG_0423	DeliverRedelivering	When a delivery starts redelivering the consumer file to the consumer
FG_0501	ProducerMailboxRouteCandidatesFound	When route candidates are found for an arrived file based on the producer and the mailbox of the message
FG_0502	RouteCandidatesFound	When route plan candidates are found for an arrived file
FG_0503	RouteCandidate	A route plan candidate for an arrived file
FG_0504	Route	When one or more routes are chosen from the candidates
FG_0505	RoutesFound	The number of routes that will be executed
FG_0506	Route Candidate Does Not Match	When a routing channel template contains no matching producer file structure for an arrived file.
FG_0601	TransformedMessage	When a message is transformed to the final format for the consumer
FG_0602	ProducerPayloadExtracting	When the router begins to extract a producer payload file
FG_0603	ConsumerPayloadConstructing	When the router begins to construct a consumer payload file for delivery
FG_0604	ConstructedLayer	When a single layer in the consumer payload file gets constructed
FG_0605	ExtractedLayer	When a single layer in the producer payload file gets extracted
FG_0606	LayerOptions	When options are passed to a business process to process a layer.
FG_0701	DeliveredMailboxMessage	When a message is delivered to a mailbox (either a consumer mailbox or a mailbox for sending to a listening consumer)
FG_0702	DeliveredListeningPartnerMessage	When the file transfer is complete
FG_0703	ChangeDirectory	When the supported protocol changes directory on the listening consumer's server to transfer the file
FG_0704	ConsumerDestinationMailboxFound	When the destination mailbox for the consumer is discovered

Some event codes trigger notifications to subscribers. System Administrators can change the permissions for an event code by using the customer_overrides.properties file to override values in the FGEventCodes.properties file. The following event codes can be subscribed to by Operators, as the permissions are set at initial installation:

Event Code	Name	Description
FG_0050	MailboxAuthorizationFailure	When a user fails to access a mailbox that is monitored
FG_0250	BusinessProcessFailure	When a business process fails, with a link to the business process
FG_0408	ArrivedFileStarted	When a file arrives to be routed
FG_0411	ArrivedFileRouted	When an arrived file completes all its routes
FG_0415	RouteComplete	When a route completes all its deliveries
FG_0419	DeliveryComplete	When a delivery is complete
FG_0420	ArrivedFileReplayed	When an arrived file is replayed, with a link to the replay
FG_0422	Redeliver	When a redelivery is requested by a user
FG_0424	ArrivedFileIgnored	When an arrived file is ignored due to a configured pattern for ignoring files
FG_0425	ArrivedFileDescription	The description of the Arrived File
FG_0450	ProducerMessageNotFound	When a producer message is invalid or cannot be found
FG_0451	ProducerDocumentNotFound	When a producer document is invalid or cannot be found
FG_0455	ArrivedFileFailed	When an arrived file fails
FG_0456	RouteFailed	When a route file fails
FG_0457	DeliveryFailed	When a delivery fails
FG_0550	ZeroRouteCandidatesFound	When no route candidates are found for an arrived file
FG_0551	ZeroRouteChannelsFound	When no route channels are chosen from the list of candidates for an arrived file
FG_0552	InvalidRoute	When a route is invalid
FG_0554	MaxBroadcastGroupSizeExceeded	When the number of consumers in broadcast scenarios is too big
FG_0607	PGPConstructSkipped	When the PGP Construct layer is skipped because the consumer does not handle PGP and it is optional on the Routing Channel Template
FG_0650	ExtractLayerFailed	When extraction of a layer fails
FG_0651	ConstructLayerFailed	When construction of a layer fails

Depending on when the events occur in the processing and transferring of files, some event codes can only send notifications to producers or consumers. System Administrators can change the permissions for an event code by using the customer_overrides.properties file to override values in the FGEventCodes. The following event codes can be subscribed to by Partners, as the permissions are set at initial installation:

Event Code	Name	Description	Notifies Producer, Consumer, or Both
FG_0408	ArrivedFileStarted	When a file arrives to be routed	Both

Event Code	Name	Description	Notifies Producer, Consumer, or Both
FG_0411	ArrivedFileRouted	When an arrived file completes all its routes	Both
FG_0415	RouteComplete	When a route completes all its deliveries	Both
FG_0419	DeliveryComplete	When a delivery is complete	Both
FG_0420	ArrivedFileReplayed	When an arrived file is replayed, with a link to the replay	Both
FG_0422	Redeliver	When a redelivery is requested by a user	Both
FG_0424	ArrivedFileIgnored	When an arrived file is ignored due to a configured pattern for ignoring files	Producer
FG_0425	ArrivedFileDescription	The description of the Arrived File	Producer
FG_0450	ProducerMessageNotFound	When a producer message is invalid or cannot be found	Producer
FG_0451	ProducerDocumentNotFound	When a producer document is invalid or cannot be found	Producer
FG_0455	ArrivedFileFailed	When an arrived file fails	Producer
FG_0456	RouteFailed	When a route file fails	Both
FG_0457	DeliveryFailed	When a delivery fails	Both
FG_0550	ZeroRouteCandidatesFound	When no route candidates are found for an arrived file	Producer
FG_0551	ZeroRouteChannelsFound	When no route channels are chosen from the list of candidates for an arrived file	Producer
FG_0552	InvalidRoute	When a route is invalid	Producer
FG_0554	MaxBroadcastGroupSizeExceeded	When the number of consumers in broadcast scenarios is too big	Producer
FG_0607	PGPConstructSkipped	When the PGP Construct layer is skipped because the consumer does not handle PGP and it is optional on the Routing Channel Template	Consumer
FG_0650	ExtractLayerFailed	When extraction of a layer fails	Producer
FG_0651	ConstructLayerFailed	When construction of a layer fails	Consumer

Sterling File Gateway: Specific Recommendations Checklist

Sterling File Gateway is installed on an instance of Sterling Integrator, and shares many of the resources with the latter, including:

• Communication Adapters

- Business Processes
- Security Services
- Perimeter Services
- Encryption
- Decryption
- Account Management

You should, therefore, tune your Sterling Integrator installation first, and then perform the Sterling File Gateway-specific tuning and troubleshooting tasks. Be aware that the changes you make to Sterling File Gateway can also affect the performance of Sterling Integrator.

Note: Do not edit the properties files. Make all the changes in the customer_overrides.properties file. For example, to change the pgpCmdline2svcname property, enter the following line in the customer_overrides.properties file:

filegateway.pgpCmdline2svcname=CUSTOM

In this line, replace CUSTOM with the name of your Command Line 2 adapter. For more information about the customer_overrides.properties file, refer to the *Sterling Integrator Property Files* documentation.

The following table describes some of the key parameters that must be configured to optimize Sterling File Gateway performance.

In the following table, the Development (Dev) and Production (Prod) columns indicate whether the recommendations are Recommended (R), Critical (C), or Not Applicable (NA) in the development and production environments.

Recommendation	Dev	Prod	Comments
Increase the value of Sterling File Gateway services that run concurrently. Property: fgRouteConcurrentSessionLimit	R	R	Number of Sterling File Gateway services that can be run concurrently. The services are split into two groups, and each group has this value as the limit. Therefore, the total number of services that can run concurrently is equal to the value for this property multiplied by two. Set this to a value that is higher than the sum of business process threads in queues 4 and 6 (where Sterling File Gateway services run). Default value: 8 (Maximum: 64)
If you are processing very large files, increase the probe values to avoid timeout conditions. Property: • filegateway.bpCompletionProbes.2 • filegateway.bpCompletionSleepMsec.2	R	R	Timeouts and sleep intervals that control the period for which Sterling File Gateway waits for each of the sub-business process it invokes. The timeouts and sleep intervals control the timeouts when a business process is executed synchronously during routing. The types of business processes that run during routing are consumer identification and PGP processing. Setting the values for these properties also enables one set of relatively quick probes, followed by a second set of slower probes. The first set will be reactive, but consumes more processor capacity. The second set will be activated for longer-running processes and will consume less processor capacity. First, probe 120 times, with 100 milliseconds between each probe, for a total of 12 seconds. Default value:

Recommendation	Dev	Prod	Comments
			bpCompletionProbes.1=120 bpCompletionSleepMsec.1=100 Then, probe 600 times with 2000 milliseconds between each probe, for a total of 1200 seconds (20 minutes). Default value: bpCompletionProbes.2=600 bpCompletionSleepMsec.2=2000
If you have a high volume of PGP traffic, you can improve your performance by specifying a group for the file gateway. Property: pgpCmdline2svcname	R	R	The name of the Command Line 2 adapter to be used for PGP packaging and unpackaging. You can override this property in the customer_overrides.properties file if a custom Command Line 2 adapter is used for PGP operations. You can also specify an adapter group name to balance the outbound PGP sessions load across multiple adapter instances. Default value: pgpCmdline2svcname=PGPCmdlineService
If you have very large files that will be processed by PGP, increase the value of the file gateway. Property: fgRoutePGPCmdLineSocketTimeout	R	R	Timeout value, in milliseconds, for PGP package and unpackage operations invoked by Sterling File Gateway. Default value: 240000 milliseconds (4 minutes)
If you have high volumes of FTP traffic, you can improve your performance by specifying a group. Property: filegateway.ftpClientAdapterName	R	R	The FTP Client Adapter instance or service group that the FileGatewayDeliverFTP business process will use. You can override this property in the customer_overrides.properties file to use a custom FTP Client Adapter instance to contact trading partners. You can also specify an adapter group name to balance the outbound FTP sessions load across multiple adapter instances. Default value: ftpClientAdapterName=FTPClientAdapter
Decrease the value of evaluation frequency. Property: • MailboxEvaluateAllAutomaticRules or • MailboxEvaluateAllAutomaticRules SubMin	R	R	You can enable either MailboxEvaluateAllAutomaticRules or MailboxEvaluateAllAutomaticRulesSubMin. MailboxEvaluateAllAutomaticRulesSubMin verifies the presence of routable messages once every 10 seconds, and can be edited for other intervals of less than one minute by modifying the MailboxEvaluateAllAutomaticRulesSubMin business process.
Suppress Duplicate Messages Property: mailbox.disallowDuplicateMessages=true	R	R	Prevents duplicate messages from using system resources.
Increase the number of steps a business process must complete prior to returning to the queue. Property: noapp.AE_ExecuteCycle.#	R	R	Number of steps involved in the completion of a business process before the business process returns to the queue. Higher values will accelerate individual business process execution, while lower values will provide smoother multitasking capabilities. Interactive use favors a lower

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Recommendation	Dev	Prod	Comments
			number of steps, while batch processing favors a higher number of steps. The value of noapp.AE_ExecuteCycle.# can be different for each queue# indicates the queue number.
			When a business process has one service to begin a protocol session and another service to use the protocol session, a very low AE_ExecuteCycle may lead many business processes to be in the queue, with only the first service running. This may result in many protocol sessions accumulating in an open state, and session limits being met sooner than is necessary.
Increase the time period that a business process can use a thread, before releasing it to be used for another business process. Property: noapp.AE_ExecuteCycleTime.#	R	R	Maximum time period, in milliseconds, for which a business process can use a thread before releasing it for use by another business process. This value will override the value set for AE_ExecuteCycle. Tuning the value for this property ensures that a series of unusually slow steps will not tie up a thread completely. This value can be different for each queue# indicates the queue number. A value that is too low may result in the accumulation of more sessions than are recommended.
Increase the number of concurrent threads. Property: noapp.MaxThreads	R	R	Total number of concurrent threads that Sterling File Gateway is allowed to use. This value is the total number of threads available to a workflow engine to execute business process steps. Other, nonworkflow engine threads do not come under the purview of this limit. For example, the threads set in fgRouteConcurrentSessionLimit do not come under the purview of this limit.
Increase the number of concurrent threads in HTTP server adapters. Property: http.numOfmaxThread	R	R	Total number of concurrent threads for all HTTP server adapters in your Sterling Integrator installation. The default value is 10. If your users are experiencing slow response when many concurrent connections have been made to the same port, increase this value to 50. Continue tuning this value until the system response is acceptable for the number of concurrent connections that must be supported. Setting this value to a value that is too high could be detrimental to system stability when too many concurrent connections are made.
Set storage type. Property: filegateway_ui.storagetype=file	R	R	File System is more efficient, and enables storage of much larger files. Default value: database
Set persistence setting for business processes that perform protocol translation to System Default.	R	R	Business processes that must have persistence settings set to System Default: • FileGatewayRoutePGPPackageDocument • FileGatewayRoutePGPUnpackageDocument • User defined business processes used for translation of custom file layers

About Shared and Linked Mailboxes (Build 5008 or Later)

Sterling Integrator supports shared and linked mailboxes.

The Shared mailbox functionality allows you to instantly share real-time data with the trading partners. You can use the Linked mailbox functionality to link individual trading partner's mailboxes with one or more shared mailboxes. Linking trading partner mailboxes to shared mailboxes allows the trading partners to view the real-time data stored in the shared mailboxes. In other words, a linked mailbox provides a link to view the data in a shared mailbox. The linked mailbox is a read-only copy of the shared mailbox and the data in the mailbox cannot be modified or deleted.

To enable the shared and linked mailbox functionality, set the mailbox.enableSharedLinkedMailboxes property to true in the customer_overrides.properties file. By default, this property is set to false.

More information on the shared and linked mailbox feature can be found in the Sterling Integrator 5.0 documentation.

Sterling File Gateway either creates new or reuses existing mailboxes as necessary to support producer drop off and consumer pick up of messages for a routing channel. Sterling File Gateway does not create or update any mailbox to be shared or linked. Sterling File Gateway will, however, reuse an existing shared or linked mailbox within the usage constraints placed upon those mailboxes. The constraints upon shared/linked mailboxes are documented in the Sterling Integrator online library, and should be reviewed in detail for compatibility with the intended usage by Sterling File Gateway and the respective partners. For example, linked mailboxes are read only and would not be suitable for use as either a routing channel producer or consumer mailbox since there would be no way to add messages to that mailbox. A shared mailbox could be used, but a system administrator would be responsible for creating the shared and linked mailboxes, aligning the routing channel and routing channel template with them, and establishing appropriate user permissions on the linked mailboxes.

To protect system integrity, Sterling File Gateway does not allow a Partner mailbox to be changed to type "shared" whether by UI, import, or other method. Any mailbox whose top level is a Sterling File Gateway Partner name is considered a Partner mailbox. If a shared mailbox is meant to participate in a routing channel it must be created in Sterling Integrator in an alternate mailbox location and administered separately.

Sterling File Gateway does not allow creation of a routing channel if due to preexisting configuration the routing channel would use a linked producer or consumer mailbox. Since these mailboxes would not be writable they are not suitable for this use in routing channels.

Set Up HTTPS for myFileGateway

To run *myFileGateway* inside your secure network, no configuration is required. An HTTP Server adapter configuration (named Http Server Adapter) comes with Sterling File Gateway that enables the clients on the same network as Sterling File Gateway to access *myFileGateway*.

To run *myFileGateway* in a DMZ, an HTTP Server adapter must be configured that uses a remote perimeter server.

After a Perimeter Server has been configured in Sterling Integrator, its name is available to the HTTP Server adapter configuration, in the Perimeter Server Name list on the HTTP Connection Properties page.

To configure *myFileGateway* to run in the DMZ:

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- 1. Set up a perimeter server in the DMZ.
- 2. Configure a new Perimeter Server in Sterling Integrator.

The port specified in the Perimeter Server configuration must *not* be the HTTP listen port (to which trading partners are expected to connect), which is specified in a subsequent stage.

- 3. Ensure that the remote perimeter server is running.
- 4. Create a new instance of the HTTP Server Adapter configuration.
 - a) Log into Sterling File Gateway as a system administrator.
 - b) Select **Tools** > **B2B** Console.
 - c) From the Sterling Integrator Admin menu, select **Deployment** > **Services** > **Configuration**.
 - d) Under Create, next to New Service, click Go!
 - e) For Service Type, open the List View, select HTTP Server Adapter and click Save, then Next.
 - f) Give the adapter a new unique name and description. If you are using a clustered environment, from the **Environment** list, select the node where the remote perimeter server is to be assigned. Click **Next**.
 - g) For the **HTTP Listen Port**, specify the port that the Partner is expected to connect to. This port must not be used by a different application on the computer that the remote perimeter server is installed on. No two HTTP Server adapter configurations can listen on the same port on the same remote perimeter server computer. The default port for Sterling File Gateway is 33, so select a different port number.
 - h) From the **Perimeter Server Name** list, select the name of the Perimeter Server (previously configured) that corresponds to the specific remote perimeter server to be used. The name is in the format *node* & *name*, where name is what you specified.
 - i) For **Total Business Process queue depth threshold**, enter a number of business processes to allow in queue. The value of this setting has no effect if Sterling File Gateway is the only application hosted on this HTTP Server adapter, because Sterling File Gateway does not initiate business processes.
 - j) For **Document Storage** and **User Authentication Required**, you can accept the default or change to match your system.
 - k) For **Use SSL**, select **Must** to implement stronger security. Click **Next**. See the Sterling Integrator documentation for more information about settings for the SSL Settings page. Click **Next**.
 - 1) On the Services Configuration page, click **add**, type the URI /myfilegateway.
 - m) Select War File. Click Next.
 - n) **Enter the War File Path**. The *myFileGateway* War file is located at *<install dir>\SI\container\Applications\myfilegateway.war*. (For UNIX, *<install dir>/container/Applications/myfilegateway.war*.)
 - o) Click Save.
 - p) In the **Confirm** page, verify that all parameters are as specified.
 - q) Ensure the **Enable Service for Business Process** check box enabled.
 - r) Click Finish.
- 5. If you have access to the computer on which the remote perimeter server is running, log in to that computer and run the following command:

```
netstat -an | grep <httpListenPort>
```

where <httpListenPort> is the port previously specified. If a row is found that reads, LISTEN, the HTTP Server adapter is ready to handle requests from external clients.

6. Verify that the HTTP Server adapter is listening and that *myFileGateway* is configured correctly by pointing an HTTP browser to the following URL:

```
https://<host>:<httpListenPort>/myfilegateway
```

where <host> is the IP address or host name of the computer where the remote perimeter server is running and <httpListenPort> is the port previously specified. Set your browser options to select TLS 1.0 (in the Advanced tab). A dialog opens, requesting the user name and password to use with myFileGateway. If instead the browser encounters an error, verify that <htpListenPort> is being listened on. If it is listening, verify that some other application has not reserved this port. To do this, disable the HTTP Server adapter and verify that this port is not being listened on. If it is, find the application that has the port bound and shut it down. Alternately, select a different HTTP Listen Port and try again.

Note: If you have many concurrent users, you may find some degradation of performance. All HTTP server adapters in your Sterling Integrator installation share the setting for maximum number of threads. To increase the maximum number of threads running at the same time, edit customer_overrides.properties to modify the following property:

```
http.numOfmaxThread = X
```

where is *X* is the number of threads. The default value is 10. If your users are experiencing slow response when many concurrent connections have been made to the same port, increase this value to 50. Continue tuning this value until the system response is acceptable for the number of concurrent connections that must be supported. Setting this value to a value that is too high could be detrimental to system stability when too many concurrent connections are made. See the Sterling Integrator documentation for more information about changing property values.

Deploy myFileGateway within an <iFrame> HTML Element (Build 5008 and Later)

There are some specific parameters and guidelines that must be followed to deploy *myFileGateway* in an iFrame:

- The <iframe> block must be well-formed (that is, every use of <iframe> must be closed by </iframe>).
- Change references in any .js page to "top" to refer to the encapsulating page.
- Although a minimum of 800 x 500 pixels resolution for the encapsulating page will work, 950 x 600 pixels or greater is preferred.
- If any new extensions are created, ensure you reference ".top" if the window DOM hierarchy is needed, since this may refer to the encapsulating page.

Set the doctype appropriately. For example:

```
<DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"
"http://www.w3.org/TR/html4/loose.dtd">
```

The iFrame tag should be specified.

The following is an example of an HTML file that could be used to implement myFileGateway in an <iFrame>:

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```
<title>Test Page for SFG within an iframe</title>
    <style type="text/css">
        <!--
        body {
        font-family: Arial, Helvetica, sans-serif;
        font-size: 12px;
        font-style: normal;
        color: #FFFFFF;
        -->
    </style>
    </head>
    <body>
        <div style="WIDTH:100%;HEIGHT:30;BACKGROUND-COLOR:#000099">
        NON-SFG Application Area 1
        </div>
       <iframe frameborder="0" title="Secure File Transfer" src="/myfilegateway/"</pre>
style="WIDTH:100%; HEIGHT:100%" hastray="true" fullpage="true" > < /iframe >
        <div style="WIDTH:100%;HEIGHT:30;BACKGROUND-COLOR:#000099">
        NON-SFG Application Area 2
        </div>
    </body>
</html>
```

Improve Loading Time for myFileGateway

To improve latency from the time *myFilegateway* is requested until the log in page is rendered, externalize the *myFilegateway* skin directory assets on servers in closer proximity to users accessing *myFilegateway*.

The myfilegateway.war file is built from the contents of the *<install_dir>*/container/Applications/myfilegateway directory, which in turn contains several files named load_skin.js. Locate:

```
container/Applications/myfilegateway/isomorphic/skins/CustomSkin/load_skin.js
```

To externalize the *myFilegateway* skin directory assets:

1. Make a copy of the FileGateway skin directory at:

```
container/Applications/myfilegateway/isomorphic/skins/
```

2. If you have rebranded *myFilegateway*, there will be an additional directory that contains load_skin.js, which for the purposes of illustration will be assumed to be:

```
container/Applications/myFileGateway/isomorphic/skins/CustomSkin
```

3. Edit container/Applications/myfilegateway/isomorphic/skins/CustomSkin/load skin.js and replace:

```
isc.Page.setSkinDir("[ISOMORPHIC]/skins/CustomSkin/")
with
isc.Page.setSkinDir("https://servername:portnumber
/myfilegatewayparts/isomorphic/skins/CustomSkin")
```

4. Install the skin directory on the server that you are pointing to with the isc.page.setSkinDir line.

5. You or a vendor can stage the files on geographically dispersed web servers, so that users in distant locations have less lag time to access the skin files and use *myFileGateway*.

In this case, each user thinks they are accessing https://servername:portnumber but in reality, they access a different server based upon their geographic location, from which they can download files quicker.

Add Custom Protocols

You can add support for custom protocols for listening consumers in addition to the ones preconfigured in Sterling File Gateway.

The information you provide in performing this procedure determines the text displayed in the Partner management wizard. That is, after you perform this procedure, new choices are available for protocols offered by Sterling File Gateway when creating a community and when creating a listening consumer in a community that is configured for the custom protocol.

- 1. Write a business process that implements the custom protocol. The business process name must be unique for each custom protocol. Do not use an underscore character (_) in the name of the business process.
- 2. Use the existing AFTExtensions.xml as a guide to create an AFTExtensionsCustomer.xml file to describe the protocol. Do not edit the AFTExtensions.xml file.

```
The AFTExtensions.xml file is located in the following directory:<install_dir>/container/Applications/aft/WEB-INF/classes/resources/xml.
```

- 3. Save the AFTExtensionsCustomer.xml file to the same directory as AFTExtensions.xml.
- 4. Use the existing AFTExtensions.properties file as a guide to create the AFTExtensionsCustomer.properties file. Do not edit the AFTExtensions.properties file. The AFTExtensions.properties is located in the following directory:

```
<install_dir>/container/Applications/aft/WEB-INF/classes/resources
```

Note: The user interface elements to describe the protocol are specified in the htmlType parameter. Valid values are text, password, select. When "select" is chosen for htmlType, the UI presents a list whose contents are derived from an "options" class. An example of an "options" class list is in the AFTExtensions.xml file (the text starts with "<OPTION name="SSHRemoteProfiles" class=")

5. Save the AFTExtensionsCustomer.properties file to the same directory as AFTExtensions.properties, namely:

```
<install_dir>/container/Applications/aft/WEB-INF/classes/resources
```

- 6. Reference the business process you created in step 1 in a new AFTExtension element in the AFTExtensionsCustomer.xml file.
- 7. Stop Sterling File Gateway.
- 8. Run < install_dir > /bin/setupfiles.sh.
- 9. Run < install_dir > /bin/deployer.sh.
- 10. Start Sterling File Gateway.

The additional protocol will be available when adding and editing communities. After this protocol has been chosen for a community, it then becomes available when creating and editing partners in that community.

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Integration Architect

About Delivery Channels (Build 5008 or Later)

The delivery channel defines what will be delivered to a consumer.

A routing channel template contains one or many delivery channels. Each delivery channel consists of:

- One consumer mailbox name pattern
- One consumer file structure

The mailbox name pattern can be specified using the following:

- System facts (for example, /\${ConsumerName}/Inbox) where the actual name would be determined dynamically
- Explicit strings (for example, /\${ConsumerName}/myInbox)
- Provisioning facts (for example, /\${ConsumerName}/\${myUserName} that are specified on the Provisioning Facts tab of the Routing Channel Template wizard
- A combination of system facts, explicit strings, and provisioning facts. The mailbox pattern must always start with /\${ConsumerName}

You can specify that a mailbox be created at the time of routing.

Note: The root mailbox for the user must already exist; only a submailbox for the partner is created by Sterling File Gateway.

You can specify that a message be delivered using a consumer listening protocol if available. The default is to always attempt to deliver to a listening protocol if available, but if you have two delivery channels and you only want to send to one listening protocol, uncheck this option for one of the delivery channels. This is useful in scenarios where you have two delivery channels, (for example the second is used to deliver to an archive mailbox) and you want only one of the delivery channels to deliver outbound to a listening consumer to avoid delivering a duplicate message.

The Integration Architect creates a delivery channel as part of the process of creating a routing channel template.

Create a Routing Channel Template (Build 5008 or Later)

To create a routing channel template:

- 1. From the main menu, select **Routes** > **Templates**.
- 2. Click Create.
- 3. On the **Type** tab, enter a descriptive name for the template. Only alphanumerics, underscores, and <space> characters are allowed in the template name.

The following are system-designated prefixes and must not be used for user-created templates:

- AFT
- FileGateway
- FG
- 4. Select **Static** or **Dynamic**. If Dynamic, select how the consumer is determined, whether by facts or by business process. If by facts, specify the ConsumerName or ConsumerCode facts in every producer file structure. If by business process, specify the business process name and the element name in ProcessData that identifies the consumer.
- 5. On the **Special Characters** tab, select how special characters in producer file names should be handled. Use this when the file name the producer gives a file is incompatible with the naming convention the consumer uses. Select from the following:

Selection	Other Input and Results
None	Do not change any special characters.
Substitute characters individually	Enter which characters to substitute with what new characters. The number of characters specified in the search for and replace fields must match. The characters are case-sensitive.
	For example, Search for character sequence ABC, Replace with 123 would translate a producer file name of:
	Abbot.txt to a consumer file name of 1bbot.txt ABBOT.TXT to a consumer file name of 122OT.TXT
	Search for abcdef, Replace with ABCDEF would translate producer a file name of:
	abbot.txt to a consumer file name of ABBot.txt
Replace characters, then omit consecutive replacements	Enter which sequence to substitute with what new sequence.
	For example, Search for [*%\$] Replace with -, would translate all of the following producer file names:
	• A*B.txt • A***B.txt
	• A%%%B.txt
	• A*%B.txt
	• A\$\$**%%B.txt
	• A*\$%\$%*\$*%B.txt
	to a consumer file name of A-B.txt

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Selection	Other Input and Results
Remove characters	Enter the characters to remove from the producer file name to create the consumer file name.
Remove Windows invalid characters \(\Lambda:^*?"<> ;%	Characters that are invalid or cause problems in the Windows operating system are removed from producer file names prior to delivering to consumers.
Remove UNIX invalid characters /;\'!#\$&* '"?<>)	Characters that are invalid or cause problems in the UNIX operating system are removed from producer file names prior to delivering to consumers.
Remove all characters, except alphanumeric, dash, and period	All special characters are removed from producer file names prior to delivering to consumers.

6. On the **Groups** tab, click **Add** beneath each group box. Select from the drop down lists the producer groups and consumer groups that can use the template. You can select one or more producer groups and consumer groups by clicking **Add** and selecting additional groups from the lists.

Note: Select the **All Partners** group in the producer and consumer lists to enable all partners present in the application to use the RCT.

- 7. On the **Provisioning Facts** tab, click **Add** to specify facts for the users to provide values at the time of creating a routing channel. Provisioning facts are optional. Enter the following information for each provisioning fact:
 - Display Label the short name that would identify the fact at routing channel provision time. Maximum length allowed is 255. Valid characters are alphanumeric, comma, hyphen, space, and underscore. Unicode characters that represent alphanumeric in various languages are also allowed.
 - Fact name the name of the fact for use in mailbox and file name creation. Maximum length allowed is 255. Valid characters are alphanumeric in English only and the hyphen. Fact name must begin with case-insensitive "my".
 - Description the description of the fact, to be displayed as a tool tip during route channel provision to guide users in supplying values. Maximum length allowed is 255. Valid characters are alphanumeric, comma, hyphen, space, and underscore. Unicode characters that represent alphanumeric in various languages are also allowed.

Note: For the fact value - Maximum length allowed for a fact value is 255. Valid characters are alphanumeric, equal, and space characters. Unicode characters that represent alphanumeric in various languages are also allowed. The following characters are explicitly prohibited because they are not allowed in a mailbox path: ? < > | "": / % *

Click **Save**. The values entered in the form are validated. If a validation error occurs, the validation message is displayed and the Provisioning Fact is not saved. If validation succeeds, the Provisioning Fact is saved and is displayed in the Routing Channel wizard.

- 8. On the **Producer** tab, specify the producer mailbox name pattern and producer file structure. Mailbox paths are case insensitive and should therefore be unique without regard to case.
- 9. On the **Consumer** tab, specify the consumer mailbox pattern.

Check the following:

If checked, mailboxes matching this pattern may be created on demand. For a dynamic template, this mailbox creation at run time is required.

Note: The root mailbox for the user must already exist; only a submailbox for the partner is created by Sterling File Gateway.

If checked, the delivery channel will attempt to deliver to a listening protocol if available.

Note: If you have two delivery channels and you only want to send to one listening protocol, uncheck this option for one of the delivery channels. This is useful in scenarios where you have two delivery channels, (for example the second is used to deliver to an archive mailbox) and you want only one of the delivery channels to deliver outbound to a listening consumer to avoid delivering a duplicate message.

10. Specify the delivery channel, including the consumer file structure. The innermost layer of the consumer file structure must match the innermost layer of the producer file structure, or be Unknown. The consumer file structure defines the file name format delivered to the consumer. To pass the file name through unchanged, enter:\${ProducerFilename}

Note: There can only be one consumer file structure for each delivery channel. If you click **Add** and specify another file structure, it will overwrite the previously defined file structure.

11. Click **Save** to complete the routing channel template. Sterling File Gateway validates the routing channel template and displays errors for invalid criteria. You will get a confirmation when the template is successfully validated and saved.

Create a Broadcast Routing Channel Template (Build 5008 and Later)

Dynamic routing channel templates can be created to route copies of the same payload file to mulitple consumers. The set of consumers receiving a copy of the payload file can be defined either through the system fact *ConsumerBroadcastGroup* or through a business process that returns multiple consumer partner names.

Use of Sterling File Gateway is not strictly limited to the selections provided in this procedure. To simplify your initial use of broadcast with Sterling File Gateway, some suggested selections are provided.

To create a simple routing channel template to broadcast messages to a list of consumers using the ConsumerBroadcastGroup fact:

- 1. Select Routes > Templates.
- 2. Click Create.
- 3. Type a name, for example DynamicBroadcastFromFact.
- 4. Select Dynamic.
- 5. Select 'Facts in producer file structure' for "What will determine the consumer?"
- 6. Select your preferences for special character handling, producer groups, and consumer groups.
- 7. Create a new provisioning fact with:
 - Fact Name = ConsumerBroadcastGroup
 - Display Label = name of SFG Partner Group Defining Braodcast List
 - Description = SFG Partner Group Defining Broadcast List
- 8. For Producer File Structure and Consumer File Structure, select your preferences.
- 9. Save the Routing Channel Template.

When a routing channel is created using the routing channel template above, a value for the provisioning fact, ConsumerBroadcastList, must be specified and the value must correspond to a File Gateway Partner Group. Each member of the specified Partner Group will receive a copy of any file processed through the resulting routing channel.

Note: The fact ConsumerBroadcastGroup does not have to be set as a provisioning fact, it may also be set as a producer file structure file name pattern.

Use a Business Process to Identify Consumers

To create a simple routing channel template to broadcast messages to a list of consumers using a consumer identification BP, create a business process that populates a list of consumer names at the same process data element levelFor example, a BP named MyBroadcastList might generate the following list of three consumers in process data:

Using the name and sample process data above, create the routing channel template as follows:

- 1. Select Routes > Templates.
- 2. Click Create.
- 3. Type a name, for example DynamicBroadcastFromBP
- 4. Select Dynamic.
- 5. Select 'Business Process' for "What will determine the consumer?"
- 6. Select 'MyBroadcastList' for 'Business Process Name.
- 7. Select 'ConsumerNameList/ConsumerName' for 'Process Data Element Name.'
- 8. Select the desired Special Character Handling, Producer Groups and Consumer Groups
- 9. Define the desired Producer File Structure and Consumer Delivery Channels
- 10. Save the Routing Channel Template.

Broadcast Messages Using Shared Mailboxes (Build 5008 or Later)

You can broadcast messages to several consumers by using shared mailboxes feature in Sterling Integrator.

To broadcast messages to several consumers by using shared mailboxes.

- 1. Create a shared mailbox in Sterling Integrator by selecting **Tools** > **B2B Console** > **Deployment** > **Mailboxes** > **Configuration**. Select **Mailbox Type** = **Shared**.
- 2. Note the specific mailbox path from step 1.
- 3. Create a partner group in Sterling File Gateway that will contain all consumers who should receive the file when broadcast.
- 4. Create a dynamic routing channel template with the following configurations:

- Specifes fact name to identify consumer
- Consumer Groups value specifies the partner group from step 3
- PFS file name pattern includes a capturing group that maps to the ConsumerBroadcastGroup fact name
- Consumer Mailbox Path specifies shared mailbox from step 1
- 5. Create producer and consumer partners.
- 6. Associate consumer partners with partner group from step 3.
- 7. Create a routing channel that uses the routing channel template from step 4.
- 8. Edit consumer partner mailboxes in Sterling Integrator to make them linked mailboxes, and link them to the shared mailbox from step 1.
- 9. To use your configuration, log in to *myFileGateway* as the producer (or use FTP client) and upload (send) a file, ensuring that the file name specifies the appropriate Consumer Group name (defined in the routing channel template).

Route Provisioner

Create a Broadcast Routing Channel (Build 5008 or Later)

Use of Sterling File Gateway is not strictly limited to the selections provided in this procedure. To simplify your initial use of broadcast with Sterling File Gateway, some suggested selections are provided.

To create a routing channel for use to broadcast messages to a list of consumers:

- 1. Select **Routes** > **Channels**.
- 2. Click Create.
- 3. For Routing Channel Template, select one created for broadcasting, for example, DynamicBroadcastFromFact.
- 4. For Producer, select the partner that will send the file.
- 5. For Consumer, select the group that is the list of recipients of the file.

Operator

Troubleshoot and Resolve Problems with Broadcast File Transfer (Build 5008 or Later)

Broadcast Specific Error Behavior:

- If a consumer identification business process returns a consumer name that does not correspond to an existing Sterling File Gateway Partner, a route will be attempted for the invalid consumer and will fail, raising event FG_0456. Routing and delivery will complete for any valid consumers returned by same business process invocation.
- If the list of consumer names returned by a consumer identification business process contains the same consumer multiple times, the duplications will be silently ignored such that a consumer will receive only a single delivery regardless of how many times they appear in returned list.

Prevent Failed PGP Routes

Failed PGP routes or other failed routes may be due to incorrect persistence settings for business processes.

Set persistence settings for business processes that perform protocol translation or translation of custom file layers to System Default.

Business processes that must have persistence settings set to System Default:

- FileGatewayRoutePGPPackageDocument
- FileGatewayRoutePGPUnpackageDocument
- User defined business processes used for translation of custom file layers

myFileGateway

Access myFileGateway

A System Administrator must establish an account for a Partner before the Partner can access myFileGateway.

To access *myFileGateway*:

- 1. Obtain the URL for *myFileGateway* from the System Admin.
- 2. Disable pop up blocker in your browser.
- 3. Set your browser options to select TLS 1.0 (in the Advanced tab).
- 4. Log in to myFileGateway with the user name and password supplied by the System Admin.

Note: Administrative users of Sterling File Gateway cannot access *myFileGateway*.

Send a File Using myFileGateway (Build 5008 or Later)

To send a file:

- In myFileGateway, click on the Upload tab.
 Only mailboxes that you have upload permission to are displayed in the list.
- 2. Select the mailbox path where the file should be dropped off.
- 3. Enter the name and location of the file or browse to the file to be uploaded.
- 4. If you want to rename the file, enter the new file name.
- 5. Click Send.

Note: During the file transfer, a popup box appears indicating that the file upload is in progress. If you click **Cancel**, the transfer is stopped. If a session times out, a notification is posted. You cannot perform any other functions in *myFileGateway* while the upload is in progress. If the file is very large and the session times out during the upload, the upload is not affected. The file upload continues in the background despite the session time out. After the upload completes, a popup box indicates that the session has timed out and the file upload is complete.

Retrieve a File Using myFileGateway (Build 5008 or Later)

In myFileGateway, Partners retrieve a file from a mailbox.

To retrieve a file:

- 1. From *myFileGateway*, click on the Download tab.
- 2. Select a file from the list of files. Only files present in the mailbox that you have permission to download are provided in the list. You can filter the list for specific character strings. Enter the characters in the field above the column headings.

Note: The filter finds any occurrence of the requested string. For example, if you want to find records from the date that contain a 13, the filter will also return records that have a 13 in the time field, or any other field.

- 3. Select whether to open or save the file.
- 4. To save the file, browse to the location for the file to be saved. Select the location and click Save.

Note: During the file transfer, if you click **Cancel**, the transfer may or may not be stopped, depending on the size of the file and rate of transfer. Click **Refresh** to see if the file is still available for download. If the cancel was received before the transfer, the file will still be available in the list. If you clicked cancel after the file was transferred, the file will not be listed anymore.

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Index

C

checklist Sterling File Gateway 23