

Sterling File Gateway

Build 5004 Updates

Version 2.0 Build 5004



Contents

- What's New in Build 5004.....3**
- Overview.....4**
 - Tutorial (Build 5004 or Later).....4
- System Admin.....8**
 - filegateway_ui.properties (Build 5004 or Later).....8
- Integration Architect.....10**
 - About Routing Channel Templates (Build 5004 or Later).....10
 - About Facts (Build 5004 or Later).....11
 - About Provisioning Facts (Build 5004 or Later).....13
 - Use Provisioning Facts (Build 5004 or Later).....14
 - About Producer File Structures (Build 5004 or Later).....14
 - About Delivery Channels (Build 5004 or Later).....16
 - About Consumer File Structures (Build 5004 or Later).....16
 - Create a Routing Channel Template (Build 5004 or Later)18
- Route Provisioner.....22**
 - About Routing Channels (Build 5004 or Later).....22
 - Create a Routing Channel (Build 5004 or Later).....22
 - Edit a Routing Channel (Build 5004 or Later).....23
 - Delete a Routing Channel (Build 5004 or Later).....24
- Operator.....25**
 - Search for a File (Build 5004 or Later).....25
 - Generate Reports (Build 5004 or Later).....29
 - Troubleshoot and Resolve Blank Arrived Files.....31
 - Troubleshoot and Resolve Pending Transfers After a System or Node Failure.....32
 - Troubleshoot and Resolve Incomplete File Transfers.....33
 - Confirm File Delivery.....33
- myFileGateway.....36**
 - Generate Reports in myFileGateway.....36

What's New in Build 5004

Enhancements in This Release

The following enhancements are included in this release:

Increased Customization and New Features for *myFileGateway*

- Ability to define and use provisioning facts. Provisioning facts provide a controlled way to customize particular routing channels (RCs) within the context of a particular routing channel template (RCT).
- A new field in `filegateway_ui.properties` to control the maximum number of records displayed for file activity searches and reports.
- Additional troubleshooting and resolution added to the Operator library.
- Sterling Integrator 5.0 and Sterling File Gateway 2.0 Build 5004 and later provide support for features of Oracle RAC 11g as follows:
 - Oracle Database 11g Standard and Enterprise Editions, Release 1 (11.1.0.0.0 RAC or higher within version 11.X.X.X.X).
 - RAC environment provides high availability and failover, but at a cost of reduced performance. Sterling Integrator supports the following RAC features:
 - Supports two node RAC environment for high availability and failover
 - Connection time load balance
 - SCI App failover (Unprocessed new routes and business processes will failover)
 - Active/Active mode

Note: Sterling Integrator with Oracle 11g database RAC environment does not support run time load balance and transaction failover (Oracle TAF).

Overview

Tutorial (Build 5004 or Later)

To learn how Sterling File Gateway works from end to end, perform the following procedure using sample files that you create to use with the tutorial.

Only the high-level tasks are listed here. For specific instructions for each step, see the topics in the appropriate persona library. Use the following log on information for users that are automatically installed with Sterling File Gateway:

Role	User ID	Password
System Administrator	fg_sysadmin	password
Integration Architect	fg_architect	password
Route Provisioner	fg_provisioner	password
Operator	fg_operator	password

1. Log in to Sterling File Gateway as fg_sysadmin.
2. Configure an FTP Server adapter.
See [Prepare Communication Adapters](#).
3. Log out.
4. Log in as fg_architect.
5. From the main menu, select **Participants > Communities** to create a community with the following values:

Field	Value
Community Name	FirstComm
Partner Initiates Protocol Connection	X
Partner Listens for Protocol Connections	X
FTP or FTPS	X
Should Receive Notification	Yes

See [Create a Community](#).

6. Select **Participants** > **Groups** to create a group named Group1.

See *Create a Group*.

7. Log out of Sterling File Gateway.
8. Log in as fg_provisioner.
9. Create two partners with the following values:

Field	Value For First Partner	Value For Second Partner
Community	FirstComm	FirstComm
Partner Name	Partner1	Partner2
Phone	333	444
E-mail	y@x.com	x@y.com
User Name	partner1	partner2
Password	password	password
First Name	partner	partner
Last Name	1	2
Partner Role	Is a consumer of data • Initiates a connection	Is a producer of data
Use SSH	No	No
PGP Settings	• No • No	• No • No

See *Create Partner*.

10. Associate the partners with Group1. Select **Participants** > **Groups**, then click **Add Partner**. Select the partners and the group, and click **Execute**.

See *Add Partners to Groups*.

11. Log out.
12. Log in as fg_architect.
13. Select **Routes** > **Templates** > **Create** to create a routing channel template with the following values:

Field	Value
Template Name	FirstStatic
In the Type tab	
Type	Static
In the Special Characters tab	
Special Characters	None
In the Groups tab	
Producer Group	Group1
Consumer Group	Group1
In the Provisioning Facts tab	

Field	Value
Fact Name	myUserId
Display Label	UserID
Description	The user ID to send it to
In the Producer tab	
Producer Mailbox Path	/\${ProducerName}/Inbox
Producer File Structure	Click Add
Producer File Type	Text
File name pattern as regular expression	.+
File name pattern group fact names, comma delimited	(leave blank)
In the Consumer tab	
Delivery Channel Description	Click Add
Pattern for Consumer Mailbox Path	/\${ConsumerName}/\${myUserId}/Outbox
If checked, mailboxes matching this pattern may be created on demand	Check the box
Consumer File Structures	Click Add
Consumer File Type	Text
Consumer file name format	\${ProducerFilename}

See *Create a Routing Channel Template*.

14. Log out.
15. Log in as fg_provisioner.
16. Create a routing channel with the following values:

Field	Value
Routing Channel Template	FirstStatic
Producer	Partner2
Consumer	Partner1
User ID	User1

See *Create a Routing Channel*.

17. Log out.
18. Log in to *myFileGateway* as Partner2.
19. Upload a file to the / mailbox.
See *Send a File from myFileGateway*.
20. Log out.
21. Log in to Sterling File Gateway as fg_operator.
22. Search for the file you uploaded.

See *Search for a File*.

23. Click on the arrived file and observe the details about the events, the routing channel, and the routing channel template.
24. Log out.
25. Log in to *myFileGateway* as Partner1.
26. Download a file.
See *Retrieve a File from myFileGateway*.
27. Log out.
28. Log in to Sterling File Gateway as fg_operator.
29. Search for the file you downloaded.
30. Click on the arrived file and observe the details about the events, the routing channel, and the routing channel template.
31. Replay the route.
See *Replay From the Beginning of a Transfer*.

System Admin

filegateway_ui.properties (Build 5004 or 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. Default - <code>reportingdirectory=&INSTALL_DIR/reporting</code> Required. Do not modify or override.
help.uri	Specifies the URL for the Help used by Sterling File Gateway. Required. The default is <code>http://help.sterlingcommerce.com/SFG20/index.jsp</code> . This site is hosted by IBM.
myFghelp.uri	Specifies the URL for the help used by <i>myFileGateway</i> . Required. The default is <code>http://help.sterlingcommerce.com/mySFG20/index.jsp</code> . This site is hosted by IBM.
notification.admin.url	Login URL for admin staff to access FileGateway. Required. Default - <code>notification.admin.url=http://&HOST_ADDR;:&PORT1/filegateway</code>

Property	Description
	<p>Note: The specified URL will be included in email messages generated to administrative users.</p>
notification.partner.url	<p>Login URL for partner users to access <i>myFileGateway</i>. Required.</p> <p>Default - notification.partner.url=http://&HOST_ADDR;&PORT1;/myfilegateway</p> <p>Note: The specified URL will be included in email messages generated to partner users.</p>
fgMaxRoutingChannelRecords	<p>Limits the total number of routing channel records returned by a search. Required. Default is 1000. To change this value, use the customer_overrides.properties file to set filegateway_ui.fgMaxRoutingChannelRecords=(# of records).</p>
fgMaxActivityRecords	<p>For the Arrived File page and reports, the maximum number of records to be displayed. Default is 1000. To change this value, use the customer_overrides.properties file to set filegateway_ui.fgMaxActivityRecords=(# of records).</p>

Integration Architect

About Routing Channel Templates (Build 5004 or Later)

The routing channel template (RCT) defines the structure through which routing occurs. The RCT specifies producer and consumer mailbox structures and file structures. The RCT functions as a policy that mandates which partners can participate in various file transfer scenarios and which file formats they must use.

An RCT is required to create a routing channel, which establishes the producer-consumer relationship for file transfers. Integration architects create routing channel templates.

Routing channel templates are comprised of:

- Template type - static or dynamic, with a method of determining if dynamic
- Rules for handling special characters in the producer file name
- One or more producer groups
- One or more consumer groups
- Zero or more provisioning facts for specifying values at routing channel creation that are unique for a specific channel
- One producer mailbox name pattern
- One or more producer file structures
- One or more delivery channels, each of which specifies one consumer file structure and one consumer mailbox name pattern

Template Types

Routing channel templates can be static or dynamic. A static routing channel template requires that the corresponding routing channels specify a single consumer and does not allow for any variability in that consumer.

A dynamic routing channel template specifies one of the following methods to determine the consumer for each file transfer:

- Specify the `ConsumerName` or `ConsumerCode` system facts in the producer file structure. For example, to dynamically identify the consumer based on file name, use parenthesis to group a portion of the file layer regular expression that represents the consumer and assign that grouping the `ConsumerName` or `ConsumerCode` system fact. If the following is entered:

`(.+)_(.+)[.](.+)` *ConsumerName,myFilenameBase,myFilenameExtension*

The characters preceding the underscore in the file name determine the consumer that the file will route to. The consumer must be identified in the outer layer, or the first layer of an outer zip layer.

- Specify a business process and ProcessData element name. With this method, you create and deploy a business process that returns a ProcessData xml element that holds the consumer name.

About Facts (Build 5004 or Later)

Facts are name-value-pairs that contain information about routing channels, active routes and the files being routed.

Some facts are specified during route provision, others are intrinsic to the route, and still others are determined from the producer file name. A fact is a named piece of known information for or about a routing channel, for example:

- A part of a file name
- The time a message arrived from the producer
- The name of the producer
- A user who is associated with the producer
- The name of the consumer
- A user who is associated with the consumer

When a fact becomes known it is frozen. During route execution, facts never lose their value or change values. A different route can have different values for the same facts.

Sterling File Gateway provides system facts and supports the specification of file name facts and provisioning facts during routing channel template creation. Provisioning facts and most system facts can be used to build out the pattern for producer and consumer mailboxes and to define the producer and consumer file structures in the routing channel template. Provisioning facts are given their values at the point of routing channel creation. System facts are given their value at the point of routing channel creation or during route execution. File name facts are given their values during route execution.

Use system facts as follows:

Fact Name	Description	When Derived	Where Used
ConsumerName	The name of the consuming partner	Derived: <ul style="list-style-type: none"> • During routing channel identification • As the result of a consumer identification business process • When associated to a file name regular expression parenthetic grouping 	Producer Mailbox, Consumer Mailbox, Producer File Structure, Consumer File Structure
ConsumerCode	The code of the consuming partner	Derived: <ul style="list-style-type: none"> • During routing channel identification • As the result of a consumer identification business process 	Producer Mailbox, Consumer Mailbox, Producer File Structure, Consumer File Structure

Fact Name	Description	When Derived	Where Used
		<ul style="list-style-type: none"> When associated to a file name regular expression parenthetic grouping 	
ProducerFilename	The name of the file that the producer sent	During early routing channel identification	Consumer Mailbox, Consumer File Structure
ProducerName	The name of the producing partner	During early routing channel identification	Producer Mailbox, Consumer Mailbox, Producer File Structure, Consumer File Structure
ProducerCode	The code of the producing partner	During early routing channel identification	Producer Mailbox, Consumer Mailbox, Producer File Structure, Consumer File Structure
RoutingTimestamp	When the routing began (when the route was identified)	Producer file arrival time	Consumer Mailbox, Consumer File Structure
ConsumerPgpExtension	<p>The extension of a file based on the consumer's PGP preferences.</p> <p>Value=</p> <ul style="list-style-type: none"> .pgp - consumer is getting a PGP file .asc - consumer is getting an ASCII encoded pgp file (blank) - consumer is not getting a PGP file <p>Only available for the PGP file layer type.</p>	PGP layer packaging time	Consumer File Structure

When using system facts in the producer and consumer mailbox or in the consumer file structure, certain notations are required:

Notation	Description
<code>\${factname}</code>	Replaced with the value of factname
<code>\${fmt:factname}</code>	Replaced with the value of factname, formatted according to fmt. The fmt string can be any format string supported by java.util.Formatter or a Timestamp value.
<code>\$(x:y:z)</code>	Any use of more than one colon is an error and is rejected at RCT creation time.
<code>\$(factname</code>	An unclosed reference is an error and is rejected.
<code>\$\$({</code>	Produces a literal \$({
<code>{factname}</code>	Is not an error, but produces a literal {factname} and is not replaced with the value of factname.

Example formats and results are:

- No format - For most facts this will just result in their value. For RoutingTimestamp this will produce an 8-digit string like "20100821" <year, month, and date> for August 21, 2010.

- s - The value of the fact
- S - The value of the fact mapped to all upper case
- .5s - the value of the fact right truncated to 5 characters

Formats for RoutingTimestamp use the Java Formatter class formats with an enhancement that allows multiple formats to be specified for one value. Essentially, this is either a 't' or 'T' followed by multiple time format specifiers. 'T' forces the results to upper case. In addition pieces of literal text may be included in ' characters.

Examples of RoutingTimestamp are:

- tYmd - An 8-digit string consisting of a 4-digit year, 2-digit month, and 2-digit day of the month. For example, 20080201 (default).
- tHMS - A 6-digit Hour, Minute, Second value using a 24-hour clock. For example, 053027.
- tMSP - A 5 or 6-digit Hour, Minutes, Seconds value using a 12-hour clock. For example, 53027am.
- TMS' 'p - Like above, but in upper case with an embedded space. For example, 53027 AM.
- Ta' - 'b' - 'd' - 'Y - Textual date, in upper case. For example, FRI-APR-21-2008.
- tYmdHMSL - A 17-digit string consisting of a 4-digit year, 2-digit month, 2-digit day, 3-digit minute, 3-digit second, and 3-digit millisecond. For example, 20090813142111920.

Note: For more information about the Java Formatter class formats, see <http://java.sun.com/j2se/1.5.0/docs/api/java/util/Formatter.html>.

In addition to using system facts, you can create your own facts in the producer file structure. User-created facts must be prefixed with the string "my" to clearly delineate between custom and system facts. Custom facts may be used in the consumer mailbox pattern (for mailboxes created on demand), and in the consumer file structure.

System facts and custom facts are searchable on the Advanced Search page. Facts can be used to enforce policy where the fact values must match when used in more than one layer.

About Provisioning Facts (Build 5004 or Later)

Provisioning facts provide a controlled way to customize particular routing channels (RCs) within the context of a particular routing channel template (RCT).

For example, if you need to create a mailbox of the form /PartnerName/UserId/ within an RCT, the UserId can be specified as a parameter for the RC using the provisioning fact. At provision time, while selecting an RCT, producer, and consumer, an additional prompt is made to specify the UserId. The value of UserId is then bound to the new RC and can be used for creating mailboxes (at either provision time or routing time) as well as creating file names (at routing time). Provisioning facts are available for static and dynamic templates.

You are not required to define any provisioning facts when creating an RCT.

You can edit provisioning facts as part of RCT edit. However, provisioning fact values cannot be edited after being set in a routing channel.

You can add a maximum of ten provisioning facts to an RCT.

The same provisioning fact can be used in more than one template. For example, both Template 1 and Template 2 can have a "myUserID" provisioning fact.

Use Provisioning Facts (Build 5004 or Later)

To use provisioning facts:

1. When you create a routing channel template, use the Provisioning Facts tab to create a provisioning fact. The provisioning fact name must start with "my". Valid characters are alphanumeric in English only and the hyphen.
2. Refer to the fact created in step 1 using the "\${myfactname}" notation in the producer mailbox path, consumer mailbox path, or the "File name format" field within the layers of the consumer file structure.
3. During creation of a routing channel, the user is prompted for the value to be assigned to the fact.
4. The value of the fact is substituted for the references used in the producer mailbox path, consumer mailbox path, or the consumer file structure. It also becomes a fact attached to the executing route and can be used like a discovered fact, for example as input to a custom layer.

About Producer File Structures (Build 5004 or Later)

A producer file structure contains a description of the basic content structure and naming conventions for files the producer sends. The Integration Architect specifies a pattern for the producer mailbox and a producer file structure when creating a routing channel template.

The default pattern for the producer mailbox path is:

```
/${ProducerName}
```

The pattern can be specified using the following:

- System facts (for example, `/${ProducerName}/Inbox`) where the actual name would be determined dynamically
- Explicit strings (for example, `/${ProducerName}/myInbox`)
- Provisioning facts (for example, `/${ProducerName}/${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 `/${ProducerName}`

Note: If creating a dynamic routing channel template, do not specify `ProducerName` or `ProducerCode` in the producer mailbox path. In the New Delivery Channel window, check the box, *If checked, mailboxes matching this pattern may be created on demand.*

A producer file structure specifies the kind of file that producers are expected to send to Sterling File Gateway. A file structure is an ordered list of file layers, from outside to inside. A producer file structure may have one or more file layers. The layers are of a certain type, have a specific regular expression pattern, and may specify facts to be defined when a file matching the pattern is received.

There are two types of layers:

- Container layers- contain other container or non-container layers. For example, a PGP layer can contain a ZIP layer and a ZIP layer can contain a TEXT layer. A zip file can only contain multiple files if it is the outermost layer. All layers except the innermost layer must be one of:
 - ZIP
 - GZIP

- PGP
- Non-container layers - or primitive layers, do not contain any nested layers. The innermost layer must be a primitive layer of type:
 - Text
 - Unknown

There is no limit to the number of layers for a file structure. Certain processing operations, such as the special character handling feature, only apply to the outermost layer. Also, route identification occurs at the outermost layer, except in the case of an outer ZIP file layer. With an outer ZIP layer, the second layer is also used to perform route identification.

If the layer type of the consumer file structure is text, the layer types of every producer file structure must be text and must not be unknown. If the layer type of the consumer file structure is unknown, the producer file structure can include either unknown or text.

By using regular expressions, a powerful standardized pattern matching language, the Sterling File Gateway application can match file names and gather facts related to file names. In defining facts for a particular regular expression, you have the flexibility to use the following system facts:

Fact Name	Description
ConsumerFilename	The name of the ultimate consumer file.
ConsumerName	The name of the consuming partner
ConsumerCode	The code of the consuming partner Note: The ConsumerCode may or may not be the same as the ConsumerName. The ConsumerCode is derived from the consuming partner name and characters may be truncated (if the partner name exceeds 24 characters), replaced (if the partner name includes characters that are not alphanumeric), or removed (if the partner name includes one or more spaces).
ProducerFilename	The name of the file the producer sent
ProducerName	The name of the producing partner
ProducerCode	The code of the producing partner
RoutingTimestamp	Date when routing began (when the route was identified)

Or, you can create your own facts. User-created facts must be prefixed with the string "my" to clearly delineate between custom and system facts. You can specify a Provisioning Fact, as defined in the Routing Channel Template, in the file name pattern.

Facts are useful for describing the meaning of the regular expression language. The regular expression carries in it the definition of the file expected from the producer. Because a file name may carry different categories of information, it is helpful to divide those categories of information into groups. In the regular expression, each group of information is contained within parentheses "()". Each group within the regular expression must have a corresponding fact, either system or custom. Consider the following example:

File Format in Regular Expression

```
(\p{Alnum}+[-_]?(\d{4})_(\d{2})_(\d{2})\.zip)
```

where:

- the full expression, `(\p{Alnum}+[-_]?(\d{4})_(\d{2})_(\d{2}))\.zip`, = capturing group 1 with fact = "mySanitizedFilename"
- `(\d{4})` = capturing group 2 with fact = "myFileYear"
- `(\d{2})` = capturing group 3 with fact = "myFileMonth"
- `(\d{2})` = capturing group 4 with fact = "myFileDay"

The corresponding file name pattern group fact name entry for the above expression is:

```
mySanitizedFilename,myFileYear,myFileMonth,myFileDay
```

You can use the same fact in different layers of a producer file structure or in multiple file structures for the same routing channel template. During execution the value of this fact must not change. If it does change, Sterling File Gateway generates an error.

The simplest pattern that matches any name, and defines no facts, is:

```
.+
```

The File name pattern as regular expression field is case insensitive when matching file names.

After you specify a file layer type and click **Next**, you cannot change the file layer type. You can click **Edit** to change the fact names or regular expressions. To change the file layer type, click **Delete**, then click **Add** to create a new file layer.

About Delivery Channels (Build 5004 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}`

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

About Consumer File Structures (Build 5004 or Later)

A consumer file structure contains a description of a file's basic content structure and naming conventions.

A consumer file structure specifies the kind of file that consumers expect from Sterling File Gateway. A file structure is an ordered list of file layers, from outside to inside. The layers are of a certain type and they may have a specific format pattern and may include unique parameters.

The Integration Architect must create a consumer file structure when creating a delivery channel.

To create a file structure with multiple file layers, the outside layer must be a container layer of one of the following types:

- ZIP
- GZIP
- PGP

The innermost layer of a producer file structure must be a non-container layer of one of the following types :

- TEXT
- Unknown

If the layer type of the consumer file structure is text, the layer types of every producer file structure must be text and must not be unknown. If the layer type of the consumer file structure is unknown, the producer file structure can be either unknown or text.

For each layer, the file name format pattern is used to generate the new file name. The file name format pattern uses system or custom facts to define how the consumer file should be named. The following system facts may be used in building the file name format pattern:

Fact Name	Description	When Derived
ConsumerFilename	The name of the ultimate consumer file	During routing channel identification or as the result of a consumer identification business process
ConsumerName	The name of the consuming partner	During routing channel identification or as the result of a consumer identification business process
ConsumerCode	The code of the consuming partner Note: The ConsumerCode may or may not be the same as the ConsumerName. The ConsumerCode is derived from the consuming partner name, and characters may be truncated (if the partner name exceeds 24 characters), replaced (if the partner name includes characters that are not alphanumeric), or removed (if the partner name includes one or more spaces).	During routing channel identification or as the result of a consumer identification business process
ProducerFilename	The name of the file that the producer sent	During early routing channel identification
ProducerName	The name of the producing partner	During early routing channel identification
ProducerCode	The code of the producing partner Note: The ProducerCode may or may not be the same as the ProducerName.	During early routing channel identification

Fact Name	Description	When Derived
	The ProducerCode is derived from the producing partner name, and characters may be truncated (if the partner name exceeds 24 characters), replaced (if the partner name includes characters that are not alphanumeric), or removed (if the partner name includes one or more spaces).	
RoutingTimestamp	<p>When the routing began (when the route was identified)</p> <p>Note: The RoutingTimestamp format for file names and mailboxes is restricted so that the generated file name is legal. Characters from literal text, text fact values, and formatted timestamp fact values must be valid.</p> <p>For example, the format string: <code>\${tH}'M:RoutingTimestamp}</code> is a legal format, but it will produce an invalid name, because it produces a name like 05:23. Colons are not allowed.</p>	Producer file arrival time
ConsumerPgpExtension	<p>The extension of a file based on the consumer's PGP preferences. Only available for the PGP file layer type.</p> <p>Value=</p> <ul style="list-style-type: none"> • .pgp - consumer prefers a PGP file • .asc - consumer prefers an ascii encoded pgp file • (nothing) - consumer does not prefer a PGP file 	PGP layer packaging time

If custom facts are used, they must exactly match the custom facts specified in the producer file structure. If provisioning facts are used, they must exactly match the provisioning facts as specified on the Provisioning Facts tab of the Routing Channel Template creation wizard. If the value discovered for the provisioning fact at route execution time contradicts the value given at routing channel creation time, the route will fail.

In the following example, the file name format pattern uses both system and custom facts:

```
${mySanitizedFilename}_${RoutingTimestamp}.zip
```

In this example, "mySanitizedFilename" was defined as a custom fact in the producer file structure, and "RoutingTimestamp" is a system fact. When Sterling File Gateway receives the producer's file, it will derive the facts and then use the facts to determine the values to place in the consumer file name.

Create a Routing Channel Template (Build 5004 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 alphanumeric, 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	<p>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.</p> <p>For example, Search for character sequence ABC, Replace with 123 would translate a producer file name of:</p> <ul style="list-style-type: none"> • Abbot.txt to a consumer file name of 1bbot.txt • ABBOT.TXT to a consumer file name of 122OT.TXT <p>Search for abcdef, Replace with ABCDEF would translate producer a file name of:</p> <ul style="list-style-type: none"> • abbot.txt to a consumer file name of ABBot.txt
Replace characters, then omit consecutive replacements	<p>Enter which sequence to substitute with what new sequence.</p> <p>For example, Search for [*%\$] Replace with -, would translate all of the following producer file names:</p> <ul style="list-style-type: none"> • A*B.txt • A***B.txt • A%%%%B.txt • A*B.txt • A\$\$\$*%B.txt • A*\$%\$%*\$*%B.txt <p>to a consumer file name of A-B.txt</p>
Remove characters	Enter the characters to remove from the producer file name to create the consumer file name.
Remove Windows invalid characters \:.*? "<> ; %	Characters that are invalid or cause problems in the Windows operating system are removed from producer file names prior to delivering to consumers.

Selection	Other Input and Results
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.

- 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.

- 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.

- 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.
- On the **Consumer** tab, specify the consumer mailbox pattern. To have a mailbox created for the partner when the file is routed, check the box. For a dynamic template, mailbox creation at run time is required.
- 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.

Route Provisioner

About Routing Channels (Build 5004 or Later)

Routing channels match incoming producer files to the appropriate consumer, then transform the file and file name according to the policies of the consumer.

Route Provisioners create routing channels. Before routing channels can be created, the Integration Architect must have already created a routing channel template and the Route Provisioner must have created the producer and consumer Partners.

For a static routing channel, the consumer is explicitly identified during the configuration, and there is only one consumer.

For a dynamic routing channel, no consumer is explicitly specified. The routing channel permits routing to any consumer belonging to the consumer group specified in the routing channel template.

You cannot create duplicate routing channels. A routing channel using the same routing channel template, producer, and consumer is a duplicate. At least one parameter must be different, with one exception. When using a static routing channel template where the ConsumerName or ConsumerCode fact is specified for the producer file structure in the outer file layer, or in the second file layer for ZIP files, you can use the same static routing channel template for multiple consumers. For example:

- StaticRCT1UsingConsumerFact, Producer1, Consumer1
- StaticRCT1UsingConsumerFact, Producer1, Consumer2

With provisioning facts, two routing channels that would normally be considered duplicates are in fact not duplicate if the producer mailbox is different due to provisioning facts being used with different values.

Create a Routing Channel (Build 5004 or Later)

To create a routing channel:

1. From the Routes menu, select **Channels**.
2. Click **Create**, or right-click on the page and click **Create Routing Channel**.
3. Select a routing channel template from the list. If you select a static template, select a producer and a consumer. If you select a dynamic template, select only a producer.

To select from the lists, type characters in the box to narrow the list to items containing these characters. Scroll to select an item from the list. Backspace to remove the characters and to return to the full list. Specifying more field values narrows your search.

To create multiple routing channels with the same template, producer, and producer mailbox, you must use a static template where the ConsumerName or ConsumerCode fact is specified in all producer file structures at the outer file layer, or the second file layer for ZIP files.

4. If prompted for additional values that represent provisioning facts, the maximum length allowed for a fact value is 255. Valid characters are:
 - Alphanumeric characters
 - Equal and space characters
 - Unicode characters that represent alphanumeric in various languages

The following characters are explicitly prohibited because they are not allowed in a mailbox path:

```
? < > | ' " : / \ % *
```

Edit a Routing Channel (Build 5004 or Later)

You can edit routing channels, individually or in multiples, by changing which routing channel template they are associated with.

You should only edit routing channels during a time of no activity, such as a maintenance window. You can disable routing for maintenance by disabling the routing rule (FileGatewayRoutingRule) or by disabling the currently enabled routing schedule (either MailboxEvaluateAllAutomaticRulesSubMin or MailboxEvaluateAllAutomaticRules).

When changing the routing channel template associated with a routing channel, the new template may only differ from the original template in the following ways:

- The producer file structure can be different.
- The consumer file structure can be different.
- The special character handling can be different.
- Producer groups can be added.
- Consumer groups can be added.
- The consumer identification policy for a dynamic template can be different.
- The mailbox created on demand setting can be different.

There are some constraints on the revisions you can make to a routing channel template if you want the template to be associated with an existing routing channel:

- You cannot change the producer mailbox structure.
- You cannot change the consumer mailbox structure.
- You cannot change the number of delivery channels.
- You cannot delete groups.
- You cannot change the template type (static or dynamic).
- You cannot edit provisioning facts.

If the new template you select to apply to the routing channel is different in any of the listed ways, the update will fail and the routing channel will not be modified.

To edit routing channels:

1. From the main menu, select **Routes > Channels**.
2. Under **Template**, click on the down arrow for the drop down list.
To select from the lists, type characters in the box to narrow the list to items containing these characters. Scroll to select an item from the list. Backspace to remove the characters and to return to the full list. Specifying more field values narrows your search.
3. Select a template from the list.

Note: All routing channels you edit at one time must all be associated originally with the same routing channel template.

4. Click **Find**.
5. From the results list, select the routing channel to edit. Shift-click to select multiple contiguous channels or control-click to select multiple separated channels.
6. Click **Edit**.
7. Next to **Routing Channel Template**, click the down arrow for the drop down list.
8. Select a template from the list to apply to the channels you are editing, complying with the constraints stated above.
9. Review the results report to see the channels successfully and unsuccessfully edited.

Delete a Routing Channel (Build 5004 or Later)

Delete a routing channel when it is no longer needed, or if the producer PGP settings have changed, thereby invalidating the routing channel.

You cannot delete a routing channel that is currently in use. To delete a routing channel:

1. From the **Routes** menu, select **Channels**.
2. Search for the routing channel to delete.
3. Select the routing channel to delete in the list.
4. Click **Delete**, or right-click and select **Delete this Routing Channel**.
5. If the routing channel is currently being used to route a file, you will receive a message to wait until that routing is complete. Confirm that you are deleting the correct routing channel.

Note: Information about operations that involved the deleted routing channel are retained until purged.

If the routing channel has Provisioning Facts, the fact names and user-supplied values are displayed in a confirmation dialog when you select Delete.

Operator

Search for a File (Build 5004 or Later)

The **Basic Search** page enables you to search for a file based on criteria you select. The **Advanced Search** page provides more options for criteria.

You can specify more criteria to narrow your results, or fewer criteria to widen your results. For any field, leave blank to select all values.

1. On the **Search Criteria** tab, enter the basic search criteria. This page is useful for finding files in major categories. To search for more-specific files, select **Advanced Search**. All of the criteria on the Basic Search page are also available on the Advanced Search page, along with many more criteria.
2. For **Producer**, select from the list or type the producer name. Leave this field blank to search for files from all producers.
3. For **Consumer**, select from the list or type the consumer name. Leave this field blank to search for files from all consumers.
4. For **Status**, select from:
 - Started - includes Started, Determining Routes, and Routing
 - Succeeded - includes Routed
 - Failed - includes Failed

Leave blank to search for files with any status.

Note: For a status of Determining Routes or Started, details are not available for Routes/Deliveries or Events.

5. For **Protocol**, select from:
 - FTP
 - SFTP
 - Connect:Direct

Leave blank to search for files routed using any of the protocols, which also includes routing between mailboxes.

6. For **Original File Name**, type the full or partial name of the file the producer sent. This field is case-insensitive. File names containing the string will be matched in the search. Leave this field blank to search for all file names.
7. Click **Find** to initiate the search.
The Search Results tab opens and the Arrived File pane is displayed with results matching all of your criteria. A maximum of 1000 files (or another limit set by your System Administrator) is displayed. The following information is provided for each arrived file:
 - Reviewed
 - Status
 - Producer
 - File Name
 - Discovery Time
8. If more than 1000 files (or another limit set by your System Administrator) match your criteria, a message is displayed indicating that you have more than 1000 matches and need to narrow your search. The first 1000 files are displayed.
9. Sort the results by clicking on any column header. Click again to change from descending order to ascending order. The default sort is by **Discovery Time**, in descending order.
10. To search for a file with more specific criteria, click on **Advanced Search**.
11. Select criteria in the Arrived File section from the following fields:

Field	Description
Producer	The partner who creates and sends files. Select from the list. Type the producer name to obtain unpurged data for producers who have been deleted. Leave blank to search for files from all producers.
Producer Code	The code for the producer. Select from the list. Type the producer code to obtain unpurged data for producers who have been deleted. Leave blank to search for files from all producers.
Producer Group	The group the producer is a member of. Select from the list. Type the producer group to obtain unpurged data for groups that have been deleted. Leave blank to search for files from all groups.
IP Address	The host IP address of the producer.
User	User ID of the protocol authentication.
Protocol	Select from: <ul style="list-style-type: none"> • FTP • SFTP • Connect:Direct Leave blank to search for files using all protocols, including routing between mailboxes.
Original File Name	Full or partial name of the file the producer sent. This field is case-insensitive.
File Size (Min) (kilobytes)	Smallest file size to search for.
File Size (Max) (kilobytes)	Largest file size to search for.

Field	Description
Status	<p>Select from:</p> <ul style="list-style-type: none"> • Started - includes Started, Determining Routes, and Routing • Succeeded - includes Routed • Failed - includes Failed <p>This is the status of the Arrived File. Leave blank to search for files with any status.</p> <hr/> <p>Note: For a status of Determining Routes or Started, details are not available for Routes/Deliveries or Events.</p>
Reviewed	<p>Select to:</p> <ul style="list-style-type: none"> • Show both reviewed and unreviewed arrived files. • Show only unreviewed arrived files. • Show only reviewed arrived files. <hr/> <p>Note: Use these options to manage your review process of file transfers.</p>
Message ID	The numeric message ID of the arrived file.
Mailbox Path	Full or partial name for the mailbox directory path of the arrived file. This field is case-insensitive.
Dataflow ID	The numeric dataflow ID for the file.
Date (From)	Click on the calendar icon to select the date to begin the search.
Date (To)	Click on the calendar icon to select the date to end the search.
Time (From)	The arrival hour, in 24-hour format, to begin the search. If the date fields are left blank, the time fields are ignored. If 0 is entered, records for all times are returned.
Time (To)	The arrival hour, in 24-hour format, to end the search. If the date fields are left blank, the time fields are ignored. If 0 is entered, records for all times are returned.

12. Select criteria in the Route section from the following fields:

Field	Description
Consumer	The partner who receives files directly or in a mailbox. Select from the list. Type the consumer name to obtain unpurged data for consumers who have been deleted. Leave blank to search for files from all consumers.
Consumer Code	The code for the consumer. Select from the list. Type the consumer code to obtain unpurged data for consumers who have been deleted. Leave blank to search for files from all consumers.
Consumer Group	The group the consumer is a member of. Select from the list. Type the consumer group to obtain unpurged data for groups that have been deleted. Leave blank to search for files from all groups.

Field	Description
Template Name	Routing Channel Template applied to the file transfer. Note: Finds files that successfully routed based on the template.
Facts	Select from: <ul style="list-style-type: none"> • ConsumerCode • ConsumerFilename • ConsumerName • ConsumerPgpExtension • ProducerCode • ProducerFilename • ProducerName Note: The list will also include any custom facts defined by the Integration Architect, with a prefix of "my".
Fact Value	Value for the fact selected above. Required when Fact is selected. This field is case-insensitive.
Status	Select from: <ul style="list-style-type: none"> • Started - includes Started, Determining Delivery, and Delivering • Succeeded - includes Complete • Failed - includes Failed This is the status of the Route. Leave blank to search for files with any status. Note: For a status of Determining Routes or Started, details are not available for Routes/Deliveries or Events.

13. Select criteria in the Delivery section from the following fields:

Field	Description
IP Address	Host IP address for the delivered file. Do not use with In Mailbox specified as the protocol.
User	User ID of the protocol authentication. Do not use with In Mailbox specified as the protocol.
Protocol	Delivered file protocol. Select from: <ul style="list-style-type: none"> • FTP • Inbound FTP • Outbound FTP • SFTP • Inbound SFTP • Outbound SFTP • Connect:Direct • Inbound Connect:Direct • Outbound Connect:Direct • In Mailbox (for files that have not been retrieved)

Field	Description
	Leave blank to search for files using all protocols, including routing between mailboxes.
Delivered File Status	Select from: <ul style="list-style-type: none"> • Started - includes Transforming, Delivering, and Redelivery • Succeeded - includes Complete • Failed - includes Failed This is the status of the delivered file.
Delivered File Name	Full or partial name of the delivered file. This field is case-insensitive.
File Size (Min) (kilobytes)	Smallest file size to search for.
File Size (Max) (kilobytes)	Largest file size to search for.
Message ID	The numeric message ID of the delivered file.
Mailbox Path	Full or partial name for the mailbox directory path of the delivered file. This field is case-insensitive.
Date (From)	Click on the calendar icon to select the date to begin the search.
Date (To)	Click on the calendar icon to select the date to end the search.
Time (From)	The delivery hour, in 24-hour format, to begin the search. If the date fields are left blank, the time fields are ignored. If 0 is entered, records for all times are returned.
Time (To)	The delivery hour, in 24-hour format, to end the search. If the date fields are left blank, the time fields are ignored. If 0 is entered, records for all times are returned.

Note: Searches using the characters _ and % (underscore and percent) may produce more results than expected, because these characters are interpreted as wildcards. Specify more characters to narrow your search, or visually search for the matches within the returned results.

Generate Reports (Build 5004 or Later)

Several standard reports are defined in Sterling File Gateway.

To generate reports:

1. From the main menu, select **Tools > Reports**.
2. Select the information you would like the report to contain. Leave any field blank to select all possible values. Options are:

Field	Description
Producer	Select a producer for the arrived files to report on. Do not use if Producer Group is specified.

Field	Description
Producer Group	Select a producer group for the arrived files to report on. Do not use if Producer is specified.
Consumer	Select a consumer for the arrived files to report on. Do not use if Consumer Group is specified.
Consumer Group	Select a consumer group for the arrived files to report on. Do not use if Consumer is specified.
Status	Select from: <ul style="list-style-type: none"> • Started - includes Determining Delivery and Delivering • Succeeded - includes Complete • Failed - includes Failed
Date (From)	Click on the calendar icon to select a starting date.
Date (To)	Click on the calendar icon to select an ending date.
Time (From)	Specify a time in the format hh:mm:ss. Note: Query in server time. Report results will be in server time, regardless of the header label.
Time (To)	Specify a time in the format hh:mm:ss. Note: Query in server time. Report results will be in server time, regardless of the header label.
Group By	Select from: <ul style="list-style-type: none"> • Producer • Consumer
Format	Select from: <ul style="list-style-type: none"> • HTML • PDF • XLS
Report Type	Select from: <ul style="list-style-type: none"> • Detailed - includes a Producer ID (assigned by the system), Consumer, Discovery Time, Completion Time, Status, Original File Name, and File Size • Summary - includes Total File Size and Total Count by Success, Error, In Progress, and Failure Reviewed Note: Error count is the number in Failed status that have not been reviewed.
Sort By	Click and drag the following fields into the desired order for sorting: <ul style="list-style-type: none"> • Status • File Name • File Size

3. Select Generate Report.

Depending on your selections, the report has the following contents:

Field	Definition
Created On	Date and time report was requested
Created By	User ID that requested the report
Group By	How the data is grouped
Report Config	Selections made for report
Filters	How the data is ordered
Producer ID	ID assigned by the system for the producer that created and sent the file
Consumer	Partner that received the file
Discovery Time	Time file first entered system, in the server time zone, regardless of the header label
Completion Time	Time file transfer was completed, in the server time zone, regardless of the header label
Status	Status when report was generated
Original File Name	Name given to the file by the producer
File Size	Size of the transferred file
Summary	For each producer, the total file size transferred in the report period, total count of files transferred in the report period, and a count for each status category.
<ul style="list-style-type: none"> • Producer • Total File Size • Total Count • Success • Error • In Progress • Failure Reviewed 	<p>Note: Error count is the number in Failed status that have not been reviewed.</p>

Note: By default, reports only include the first 1000 activity records that match the specified criteria. Your System Administrator may set another value for the number of records to be included in reports.

Troubleshoot and Resolve Blank Arrived Files

If an arrived file is blank, with no original file name or producer name, a system failure may have caused the Sterling File Gateway router to be unable to process the incoming message.

There are several known situations that cause this:

- When a protocol client that uploads files to Sterling File Gateway and performs renaming of files upon transfer.
- **Why this happens** - the original file is deleted and renamed to a file with a new name. If Sterling File Gateway tries to route the file with the original name that was deleted, a failed blank arrived file is created. This happens because the file got deleted before information like producer, original file name and so forth are retrieved.

- **What to do** - click on the blank arrived file. In the details, locate the message Id. Go to **Tools > B2B Console > Correlation Search** and enter the message Id and click **Find**. In the results, locate the file name and mailbox path to determine the producer. Contact the producer to confirm that their client that uploads files is set to rename files upon transfer. Ensure that the file with the new name is routed correctly.
- When a file is sent and immediately sent again, overwriting the first.
 - **Why this happens** - Allow `duplicates=false` in the Mailbox configuration. The second file overwrites and deletes the first file. If this happens before Sterling File Gateway reads the data about this file, then you have a blank route.
 - **What to do** - this is harmless if both files contain the same data because the second file is routed correctly. If multiple files with the same name and different data are to be sent to the system, configure the system so these files go to different mailboxes, or set `Allow duplicates`
- When a system configured with a redundant Oracle RAC has a node failure.
 - **Why this happens** - the arrived file temporarily cannot see the message because of the failure and creates a blank arrived file to show that something was supposed to happen, and then immediately fails the arrived file.
 - **What to do** - replay the arrived file to get it to reroute. If this does not work, the message was deleted before the replay. Investigate the database, the logs, and the Activity list to find which message did not get added or got deleted prematurely. Determine the producer and ask them to re-send the file.
- Both AFT and Sterling File Gateway are enabled at the same time.
 - **Why this happens** - no AFT Routing Rules should be active after Sterling File Gateway is installed.
 - **What to do** - when Sterling File Gateway is installed, AFT is disabled. Do not re-enable AFT Routing Rules.

Troubleshoot and Resolve Pending Transfers After a System or Node Failure

In a failover scenario, some producer messages may not get deleted from the Producer Mailbox. To resolve this situation:

1. Determine whether the message got routed. Select **Tools > B2B Console > Deployment > Mailboxes > Messages** to search for files in the mailbox and locate the message Id.
2. Use **Advanced Search** in Sterling File Gateway to find the message Id.
3. If you find a result, it should be failed. Replay the arrived file. This resolves the issue without producer partner involvement.
4. If you did not find a result, contact the producer partner and have them rename the file.
 1. The Producer logs in to their producer mailbox and notes the name of the message. It must be the same user that added the file for Sterling File Gateway to detect the route.
 2. The Producer navigates to the mailbox directory that contains the message using the protocol originally used, such as FTP or SFTP.

3. The Producer renames the message using the exact same name. The rename command may have different names for different protocols and clients. For example, in FTP and SFTP command line it is "rename filename filename".
4. If Allow Duplicates=false, then the producer partner can re-put the file which will overwrite the one that did not get routed.

Troubleshoot and Resolve Incomplete File Transfers

If the business process responsible for a route fails or pauses due to a system failure, arrived files may not transfer completely.

If the consumer can receive the same file again without causing problems, replay the arrived file. Mark the arrived file as reviewed and enter comments with the reason for the replay.

If the consumer cannot manage receiving a duplicate file, determine whether an arrived file was already delivered before performing the replay. See *Confirm File Delivery*.

Confirm File Delivery

To confirm delivery of a file that may have been affected by a system failure, you can call the consumer to verify that they received it.

Or, you can perform the following procedure:

1. On the Activity page, click on the Arrived File. The Route and Delivery tabs should display.
 - If no Delivery tab or there are no deliveries under the Delivery tab, deliveries were not attempted. Replay the Arrived File.
 - If there is a Delivery tab, there may have been delivery attempts. Continue with Step 2.
2. For each delivery, look for the following event codes:

Code	Name	Event Description
FG_0201	BusinessProcessStarting	The Business Process was started. The event contains a link to the workflow ID. In the case of FileGatewaySendMessage, this workflow ID is not the one that was started and instead you should look at FG_0203. For FileGatewaySendMessage, look for the FG/Protocol attribute. If there is one, it provides the protocol. If there is no Protocol attribute, the transfer is a mailbox-only delivery. Use this value to look for mailbox or protocol deliveries in the instructions below.

Code	Name	Event Description
FG_0202	BusinessProcessCompleted	Successful completion of the Business Process. This means the delivery was also successful, because the process completed without failures.
FG_0203	SendMessageBusinessProcessStarted	The Send Message process was started. This is unique because it is asynchronous to the route. The workflow ID link in this event is the correct process.
FG_0250	BusinessProcessFailed	The Business Process failed. You will not see FG_0250 on a successful process. Click through to the workflow ID on this event to view details about what happened.
FG_0701	DeliveryMailboxMessage	The Mailbox Message was delivered successfully.

- If all events exist, the delivery to protocol and mailbox succeeded. If some events are missing, the transfer may not have succeeded. Continue with step 4.
- Verify mailbox delivery by checking the results of the MailboxAddService in the FileGatewaySendMessage business process. A link to the FileGatewaySendMessage business process is in the event text for FG_0202 and FG_0203 under the Delivery tab. Click on the workflow ID link to go to the business process.

Based on the events listed, perform the following actions:

Problem	Solution
Only FG_0201 event exists	Click the workflow ID link for FG_0201 to go to the parent business process. Find the correct subprocess under the FileGatewayDeliveryService. If you only have one delivery there will only be one there. If that service did not run, no mailbox or protocol delivery occurred for that route. If you find some subprocesses, click each one to determine if it is the one you are interested in. Compare the DestinationMessageName in Process Data to the delivery that failed to find the matching process.
There are no FG_02xx events	It is possible the SendMessage process was not started, or there was data loss on the events. To verify, click the workflow ID link for FG_0425 under the Arrived File to go to the parent business process. Find the correct subprocess, if it exists. Use the table in Step 2 to find the correct subprocess. If no subprocesses were started, the delivery did not occur Continue to Step 5.

- When you are viewing the correct FileGatewaySendMessage subprocess, look for the MailboxAddService. If there is no MailboxAddService, the mailbox delivery did not occur. If there is a MailboxAddService, check if it failed or succeeded.

Perform the following actions:

Mailbox Delivery	Action
Succeeded for all deliveries	Mark items as Reviewed.
Succeeded for no deliveries	Replay Arrived Files, and mark as Reviewed.
Succeeded for some deliveries	Redeliver only the Failed deliveries, and mark as Reviewed.

6. Check for protocol delivery. Find the link to the FileGatewaySendMessage business process. A link to the FileGatewaySendMessage business process is in the event text for FG_0202 and FG_0203 under the Delivery tab. Click on the workflow ID link to go to the business process.

Protocol delivery is performed by a business process inside the FileGatewaySendMessage business process. There is no specific service that you can check. With custom protocols, there could be several services responsible for protocol delivery. In general, look for the Invoke Subprocess Service and the next services will be protocol specific. For FTP and SFTP protocols, look for services like FTTPut or SFTTPut. Follow the flow and determine if the protocol delivery reached and completed the service responsible for the actual delivery.

7. Check all the deliveries for the Arrived File against the following table. If they all have Yes for "Replay/Redeliver" then Replay the Arrived File. If some are Yes and some are No, then only redeliver the ones that have Yes and do not Replay the Arrived File (or risk duplicate deliveries.)

Protocol	Mailbox	Replay/Redeliver	Action
Succeeded	Succeeded	No	Delivery succeeded. Do not replay or redeliver.
Failed	Succeeded	Yes	Although the file succeeded to the mailbox, replay or redeliver so that it also succeeds to the protocol.
Succeeded	Failed	No	Because the protocol succeeded, do not replay or redeliver because it will cause a duplicate delivery. Ignore that the mailbox failed.
Failed	Failed	Yes	Replay or Redeliver

myFileGateway

Generate Reports in *myFileGateway*

To generate reports:

1. In *myFileGateway*, click on the **Reports** tab.
2. Select the information you would like the report to contain. Leave any field blank to select all possible values. Options are:

Field	Description
Producer	Indicate if you were the producer on activity to include in the report.
Consumer	Indicate if you were the consumer on activity to include in the report.
Status	Select from: <ul style="list-style-type: none">• Started - includes Determining Delivery and Delivering• Succeeded - includes Complete• Failed - includes Failed
Date (From)	Click on the calendar icon to select a starting date.
Date (To)	Click on the calendar icon to select an ending date.
Time (From)	Specify a time in the format hh:mm:ss. <hr/> Note: Query in server time. Report results will be in server time, regardless of the header label.
Time (To)	Specify a time in the format hh:mm:ss. <hr/> Note: Query in server time. Report results will be in server time, regardless of the header label.
Group By	Select from: <ul style="list-style-type: none">• Producer• Consumer

Field	Description
Format	Select from: <ul style="list-style-type: none"> • HTML • PDF • XLS
Report Type	Select from: <ul style="list-style-type: none"> • Detailed - includes a Producer ID (assigned by the system), Consumer, Discovery Time, Completion Time, Status, Original File Name, and File Size • Summary - includes Total File Size and Total Count by Success, Error, In Progress, and Failure Reviewed <hr/> Note: Error count is the number in Failed status that have not been reviewed.
Sort By	Select from: <ul style="list-style-type: none"> • Status • File Name • File Size

3. Select Generate Report.

Depending on your selections, the report has the following contents:

Field	Definition
Created On	Date and time report was requested
Created By	User ID that requested the report
Group By	How the data is grouped
Report Config	Selections made for report
Filters	How the data is ordered
Producer ID	User ID that created and sent the file
Consumer	Partner that received the file
Discovery Time	Time file first entered system, in the server time zone, regardless of the header label
Completion Time	Time file transfer was completed, in the server time zone, regardless of the header label
Status	Status when report was generated
Original File Name	Name given to the file by the producer
File Size	Size of the transferred file
Summary <ul style="list-style-type: none"> • Producer • Total File Size • Total Count • Success • Error • In Progress 	For each producer, the total file size transferred in the report period, total count of files transferred in the report period, and a count for each status category. <hr/> Note: Error count is the number in Failed status that have not been reviewed.

Field	Definition
• Failure Reviewed	

Note: By default, reports only include the first 1000 activity records that match the specified criteria. Your System Administrator may set another value for the number of records to be included in reports.
