

INSIGHTIQ DOES NOT DISPLAY DATA CORRECTLY IN THE FILE SYSTEM REPORTING PAGE

Abstract

This guide helps you troubleshoot problems with displaying reports on the InsightIQ File System Reporting page.

December 28, 2015

Contents and overview

Note

Follow all of these steps, in order, until you reach a resolution.

1. Follow these steps.

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Before you begin



CAUTION!

If the node, subnet, or pool you are working on goes down during the course of troubleshooting and you do not have any other way to connect to the cluster, you could experience data unavailability.

Therefore, make sure you have more than one way to connect to the cluster before you start this troubleshooting process. The best method is to have a serial cable available. That way, if you are unable to connect through the network, you will still be able to connect to the cluster physically.

For specific requirements and instructions for making a physical connection to the cluster, see [article 16744](#) on the EMC Online Support site.

Before you begin troubleshooting, confirm that you can either connect through another subnet or pool, or that you have physical access to the cluster.

Configure logging through SSH

We recommend configuring screen logging to log all session input and output on both the Isilon cluster and the InsightIQ server instance during your troubleshooting session. These log files can be shared with EMC Isilon Technical Support if you require assistance at any point during troubleshooting.

Configure logging on the Isilon cluster

Note: The screen session capability does not work in OneFS 7.1.0.6 and 7.1.1.2. If you are running either of these versions, please configure logging using your local SSH client's logging feature.

1. Open an SSH connection to the cluster and log in using the root account. Note: If the cluster is in compliance mode, use the compadmin account to log in. All compadmin commands must be preceded by the `sudo` prefix.

2. Change the directory to `/ifs/data/Isilon_Support` by running:

```
cd /ifs/data/Isilon_Support
```

3. Run the following command to capture all input and output of the session:

```
screen -L
```

This will create a file called `screenlog.0` that will be appended to during your session.

4. Perform troubleshooting.

Configure logging on the InsightIQ server instance

1. Open an SSH connection to the InsightIQ server instance and log in by using the administrator account.

2. Run the following command to capture all input and output of the session:

```
screen -L
```

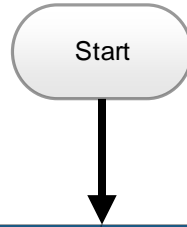
This will create a file called `screenlog.0` that will be appended to during your session.

3. Perform troubleshooting.

Start troubleshooting - initial diagnosis

Introduction

Start troubleshooting here. If you need help understanding the flow chart conventions used in this guide, see [How to use this flow chart](#).



If this is your issue...	Do this...
<p>InsightIQ 3.2 only: No File System Analytics (FSA) reports are visible after upgrading or installing the InsightIQ 3.2 server. Reports that existed prior to the upgrade are visible.</p>	<p>This is a known issue. Go to: <i>InsightIQ 3.2 server cannot view FSA reports generated on the clusters</i>, article 206108.</p>
<p>You cannot view Quota Reports because you do not have permission.</p>	<p>Go to: <i>The InsightIQ user on the cluster does not have permission to view quota reports</i>, article 194112.</p>
<p>All reports are blank. You see the report date listed, but when you run the report, no data displays.</p>	<p>Go to Page 5.</p>
<p>Server Error page appears. A Server Error page (orange and black screen) appears when you attempt to view data.</p>	<p>Go to Page 9.</p>
<p>Missing report dates, or no reports at all.</p>	<p>Go to Page 11.</p>
<p>Any other issue, including specific problems with the Capacity, Deduplication, or Quota Reports.</p>	<p>Note the page number that you are currently on. Upload log files and contact Isilon Technical Support, as instructed in Appendix A.</p>

All reports are blank



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If you have not done so already, configure logging through SSH, as described on [Page 3](#).

Open an SSH connection to the InsightIQ virtual machine and log on by using the administrator account.

Check whether the `/ifs/.ifsvar/modules/fsa` export is mounted. Run the following command:

```
mount -v
```

The output displays all of the mounted file systems.

InsightIQ 3.1 and later

If the `/ifs/.ifsvar/modules/fsa` export is mounted, InsightIQ can access the `fsa` directory, and the output looks similar to the following:

```
<cluster_IP_address>:/ifs/.ifsvar/modules/fsa on /mnt/<cluster_IP_address>/ifs/.ifsvar/modules/fsa type nfs (rw,nosuid,nodev,intr,sloppy,addr=<cluster_IP_address>)
```

InsightIQ 3.0 and earlier

If the `/ifs/.ifsvar/modules/fsa` export is mounted, InsightIQ can access the `fsa` directory, and the output looks similar to the following:

```
<cluster_IP_address>:/ifs/.ifsvar/modules/fsa on /net/<cluster_IP_address>/ifs/.ifsvar/modules/fsa type nfs (rw,nosuid,nodev,intr,sloppy,addr=<cluster_IP_address>)
```

Is the export mounted?

Yes

No

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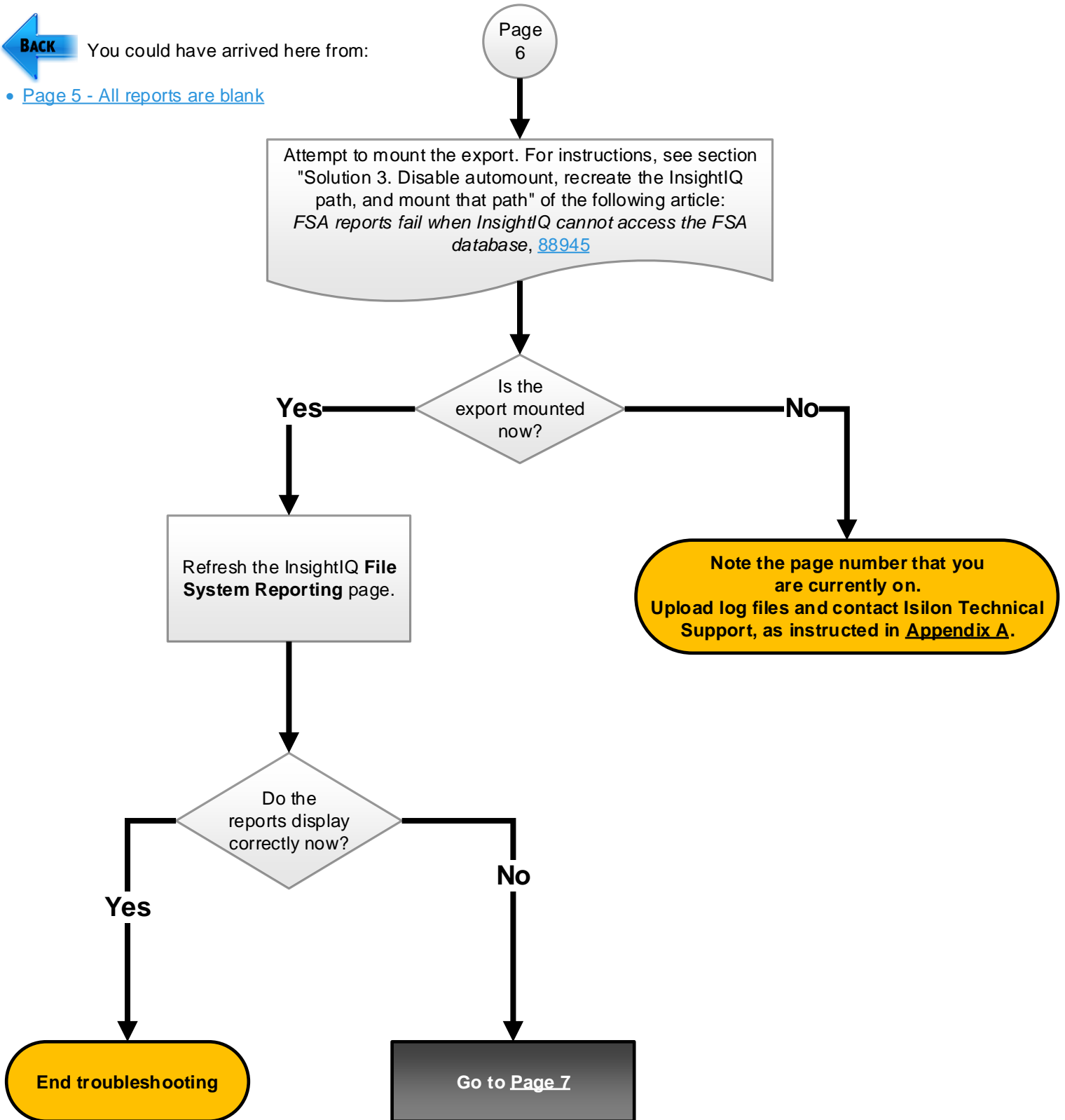
All reports are blank, continued

The export is not mounted



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All reports are blank, continued

Export is mounted



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CHECK FOR A CLUSTER PERMISSIONS ISSUE

The InsightIQ user might not have permission to access files all the way through the path.

Copy and paste the following command into the InsightIQ command-line interface to see the permissions on all of the clusters that InsightIQ is monitoring.

Note: When you copy and paste the command into the command-line interface, the command will appear on multiple lines (exactly as it appears here), but when you press **Enter**, the command will run as it should.

InsightIQ 3.1 and later

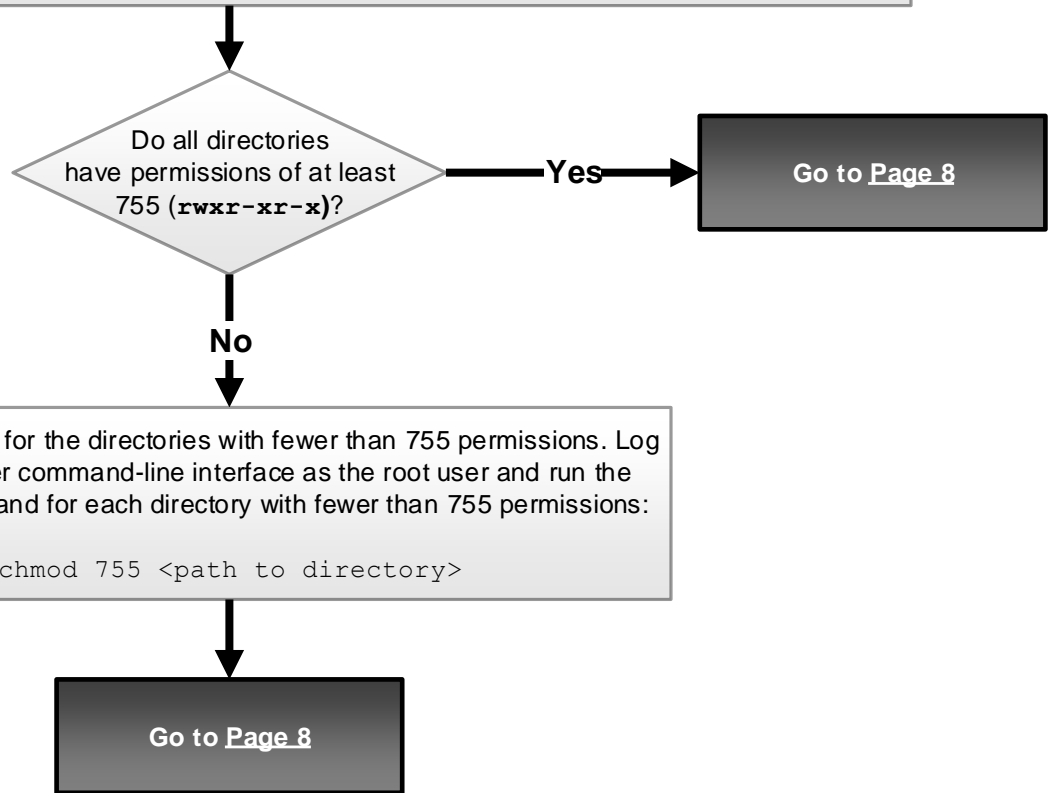
```
for i in $(ls -ld /mnt/*); do ls -ld $i; ls -ld $i/ifs; ls -ld $i/ifs/.ifsvar; \
ls -ld $i/ifs/.ifsvar/modules; ls -ld $i/ifs/.ifsvar/modules/fsa; done
```

InsightIQ 3.0 and earlier

```
for i in $(ls -ld /net/*); do ls -ld $i; ls -ld $i/ifs; ls -ld $i/ifs/.ifsvar; \
ls -ld $i/ifs/.ifsvar/modules; ls -ld $i/ifs/.ifsvar/modules/fsa; done
```

Example output (note that for InsightIQ 3.0 and earlier, the output file path will be /net* instead of /mnt*):

```
drwxr-xr-x 3 root root 0 Feb 10 20:42 /mnt/cluster
drwxr-xr-x 5 root root 0 Feb 10 20:42 /mnt/cluster/ifs
drwxr-xr-x 3 root root 0 Feb 10 20:42 /mnt/cluster/ifs/.ifsvar
drwxr-xr-x 3 root root 0 Feb 10 20:42 /mnt/cluster/ifs/.ifsvar/modules
drwxr-xr-x 4 root root 97 Feb 11 07:30 /mnt/cluster/ifs/.ifsvar/modules/fsa
```



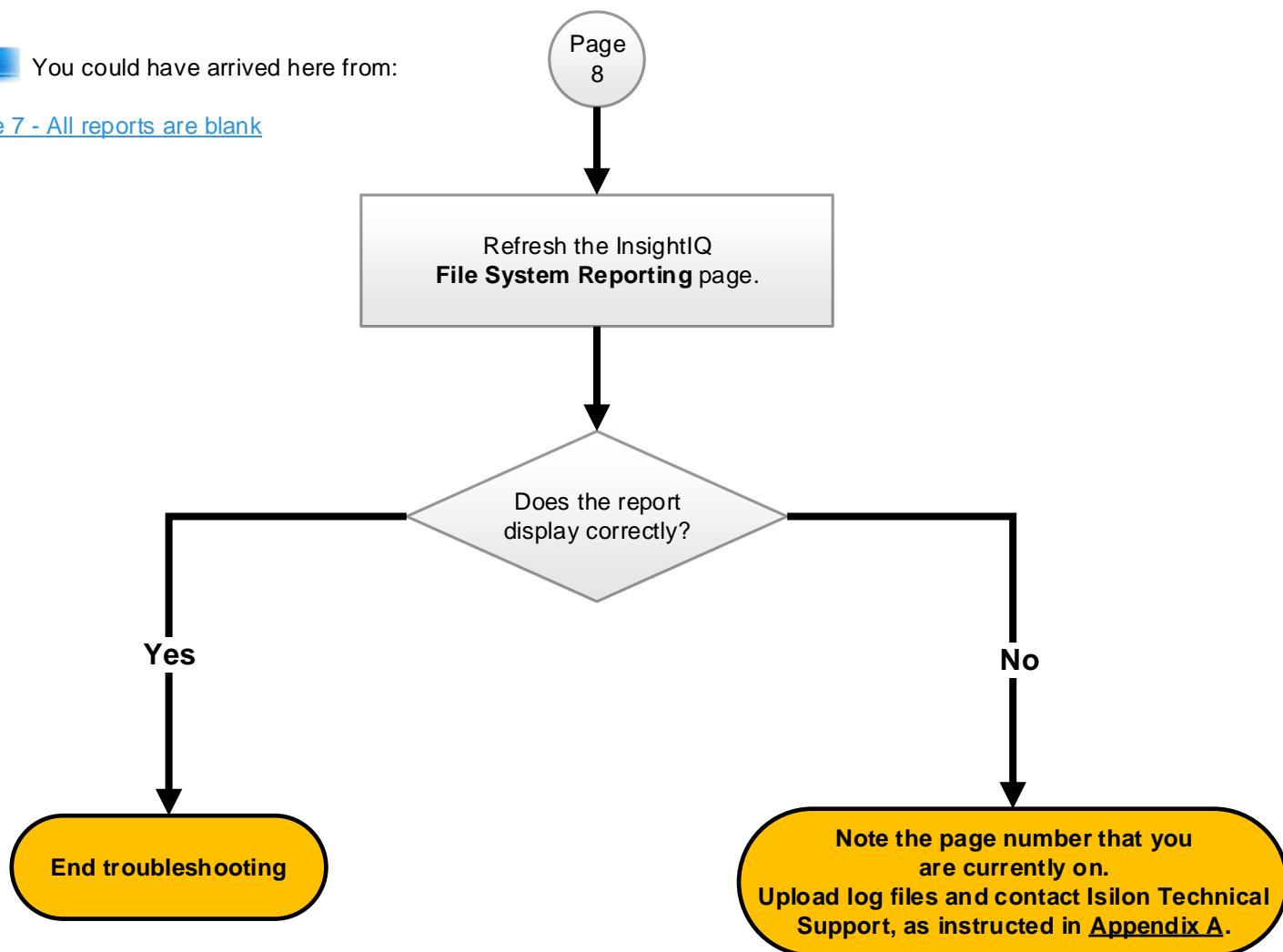
All reports are blank, continued

The export is mounted



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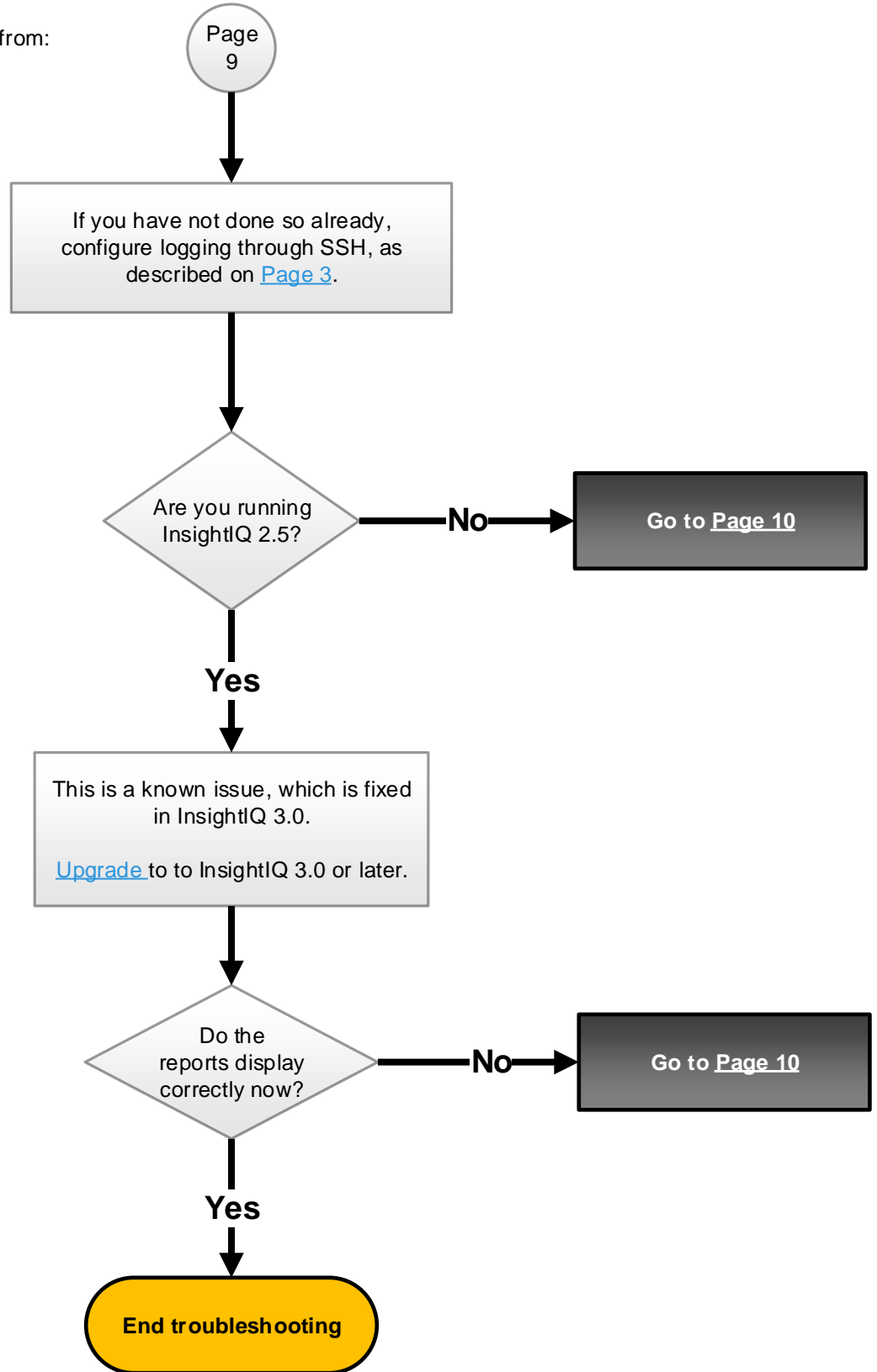


Server Error page is displayed



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File System Reporting page, continued

Gather InsightIQ logs and debug information



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Contact [Isilon Technical Support](#) to open a Service Request (SR). Make note of your SR number. You will need it to perform the following steps.

On the InsightIQ command-line interface, perform the following steps to collect debug information for Isilon Technical Support to use for further troubleshooting:

1. Open `/etc/isilon/insightiq.ini` in a text editor.
2. Edit the line under `[DEFAULT]` so that `debug = true`:

```
[DEFAULT]
debug = true
```

3. Restart InsightIQ:

```
iiq_restart
```

4. Refresh the error page. The server error and the debug information will appear.
5. Copy any information displayed on the screen into your Service Request.
6. Open `/etc/isilon/insightiq.ini` in a text editor.

7. Edit the line under `[DEFAULT]` so that `debug = false`:

```
[DEFAULT]
debug = false
```

8. Restart InsightIQ:

```
iiq_restart
```

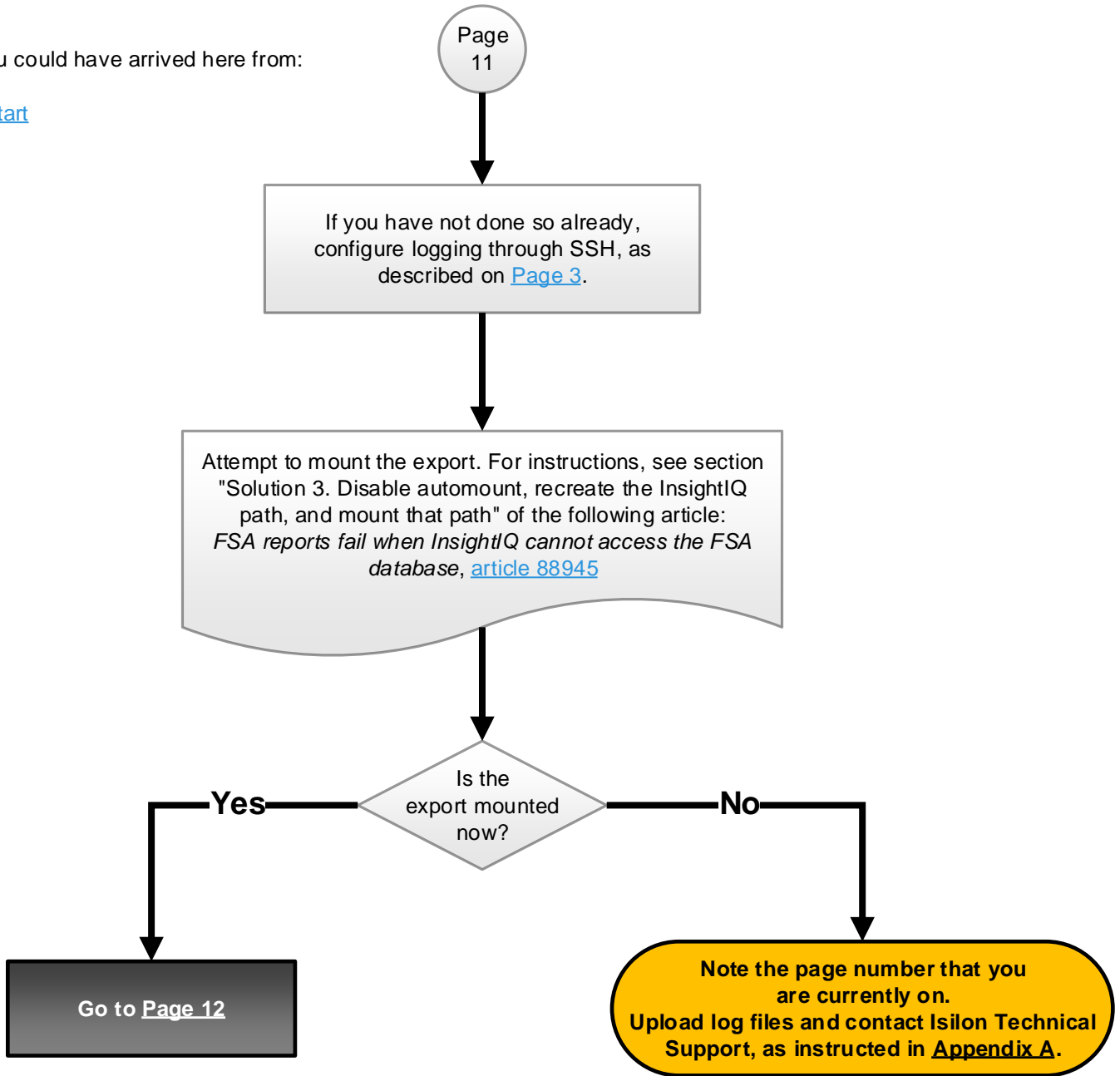
**Note the page number that you are currently on.
Upload log files and contact Isilon Technical Support, as instructed in [Appendix A](#).**

Missing report dates, or no reports at all



You could have arrived here from:

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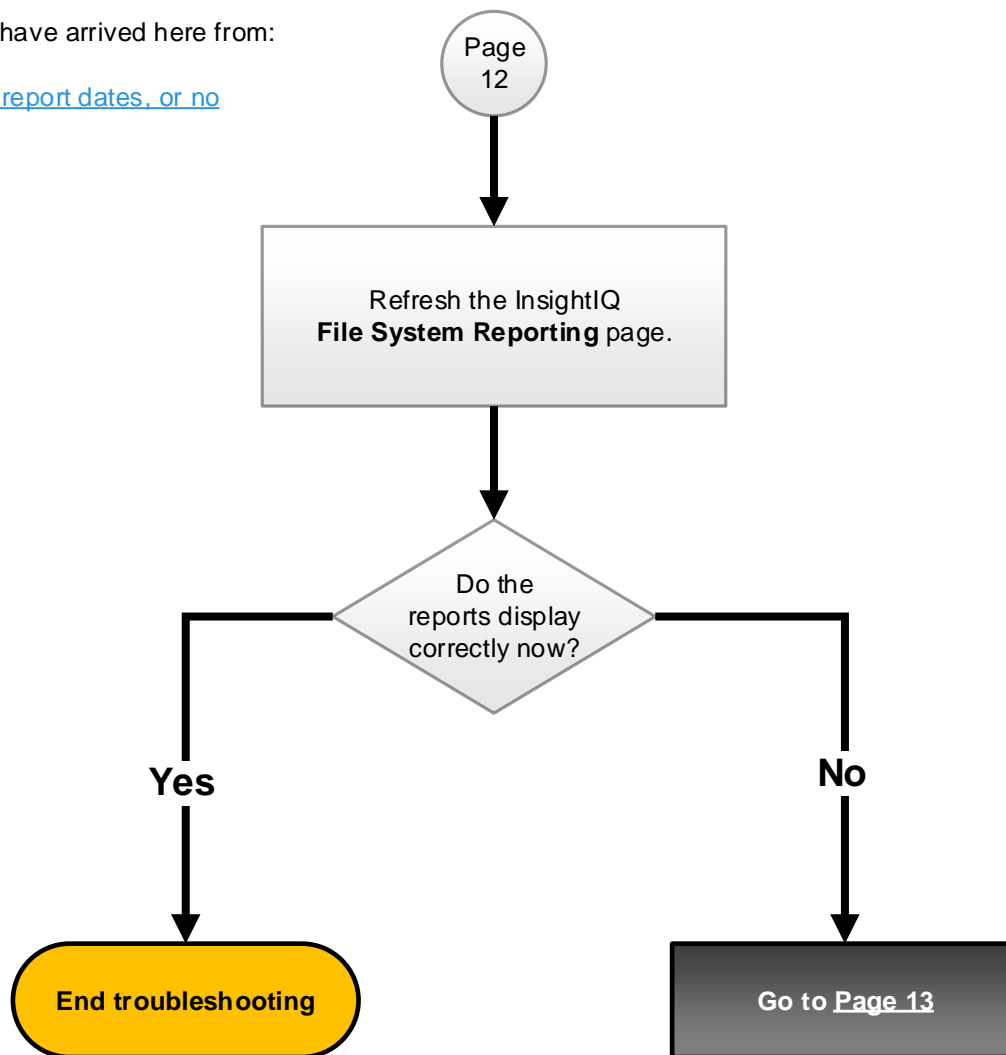


Missing report dates, or no reports at all, continued



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Missing report dates, or no reports at all, continued



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From the OneFS command-line interface, run the following command for your version of OneFS:

OneFS 7.1 and later

```
isi job events list --job-type=fsanalyze
```

OneFS 6.5 and 7.0:

```
isi job history -j fsanalyze
```

Note

The report date listed in InsightIQ report selection drop-down menu is the date that the FSAnalyze job started.

If there are missing reports, does the output from the previous step show that an FSAnalyze job completed successfully on the dates for which there are missing reports?

If there are no reports, does the output show that an FSAnalyze job has ever completed?

Yes

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No

Note the page number that you are currently on. Upload log files and contact Isilon Technical Support, as instructed in [Appendix A](#).

Missing report dates, or no reports at all, continued



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- [Page 16 - Missing report dates, or no report at all](#)

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On the InsightIQ command-line interface, check whether the FSA reports exist. Run the following command, where `<cluster>` is the name configured as the OneFS host in the InsightIQ web interface.

(To find the name configured as the **OneFS host**: From the InsightIQ web interface, click **Settings > Monitored Clusters**. For the cluster you want, in the **Actions** column, click **Configure**. In the **Cluster Credentials** tab, see the **OneFS host** field.)

InsightIQ 3.1 and later:

```
[root@iiq ~]# find /mnt/<cluster>/ifs/.ifsvar/modules/fsa/pub/ -name "*.db" -exec ls -la {} \;
```

InsightIQ 3.0 and earlier:

```
[root@iiq ~]# find /net/<cluster>/ifs/.ifsvar/modules/fsa/pub/ -name "*.db" -exec ls -la {} \;
```

The output lists the permissions and size of each report for a year (default). Make sure the command returns at least one `results.db` result. If reports are missing only for certain dates, look through the list and see if there is a `results.db` result for those dates.

Example output:

```
-rw-r--r-- 1 root root 5898240 Feb 8 06:12 /net/cluster/ifs/.ifsvar/modules/fsa/pub/job.221/results.db  
-rw-r--r-- 1 root root 5898240 Feb 7 06:14 /net/cluster/ifs/.ifsvar/modules/fsa/pub/job.219/results.db  
-rw-r--r-- 1 root root 5898240 Feb 6 06:15 /net/cluster/ifs/.ifsvar/modules/fsa/pub/job.217/results.db
```

Is at least one
`results.db` result
returned?

Yes

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No

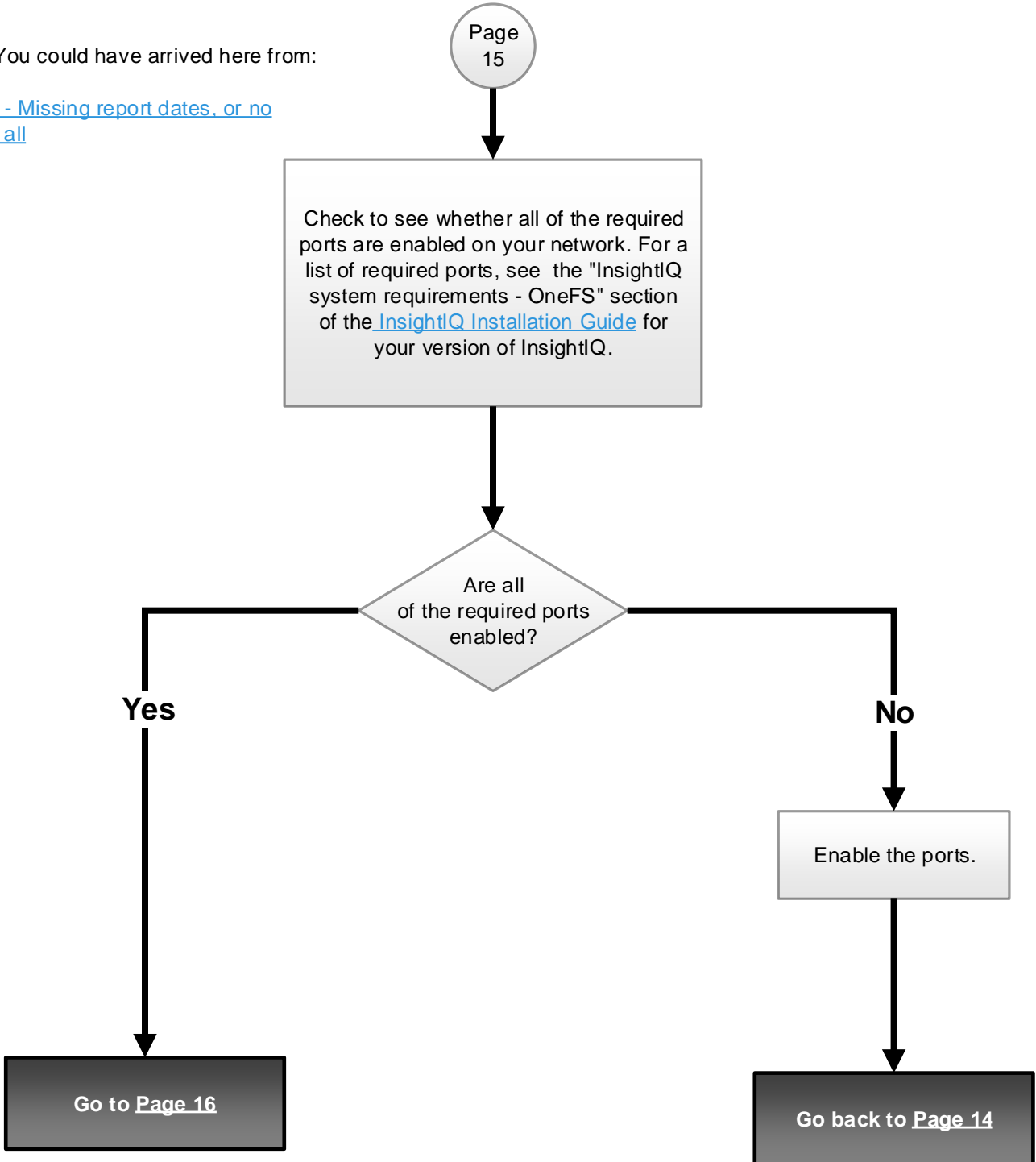
Note the page number that you are currently on.
Upload log files and contact Isilon Technical Support, as instructed in [Appendix A](#).

Missing report dates, or no reports at all, continued



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- [Page 14 - Missing report dates, or no report at all](#)

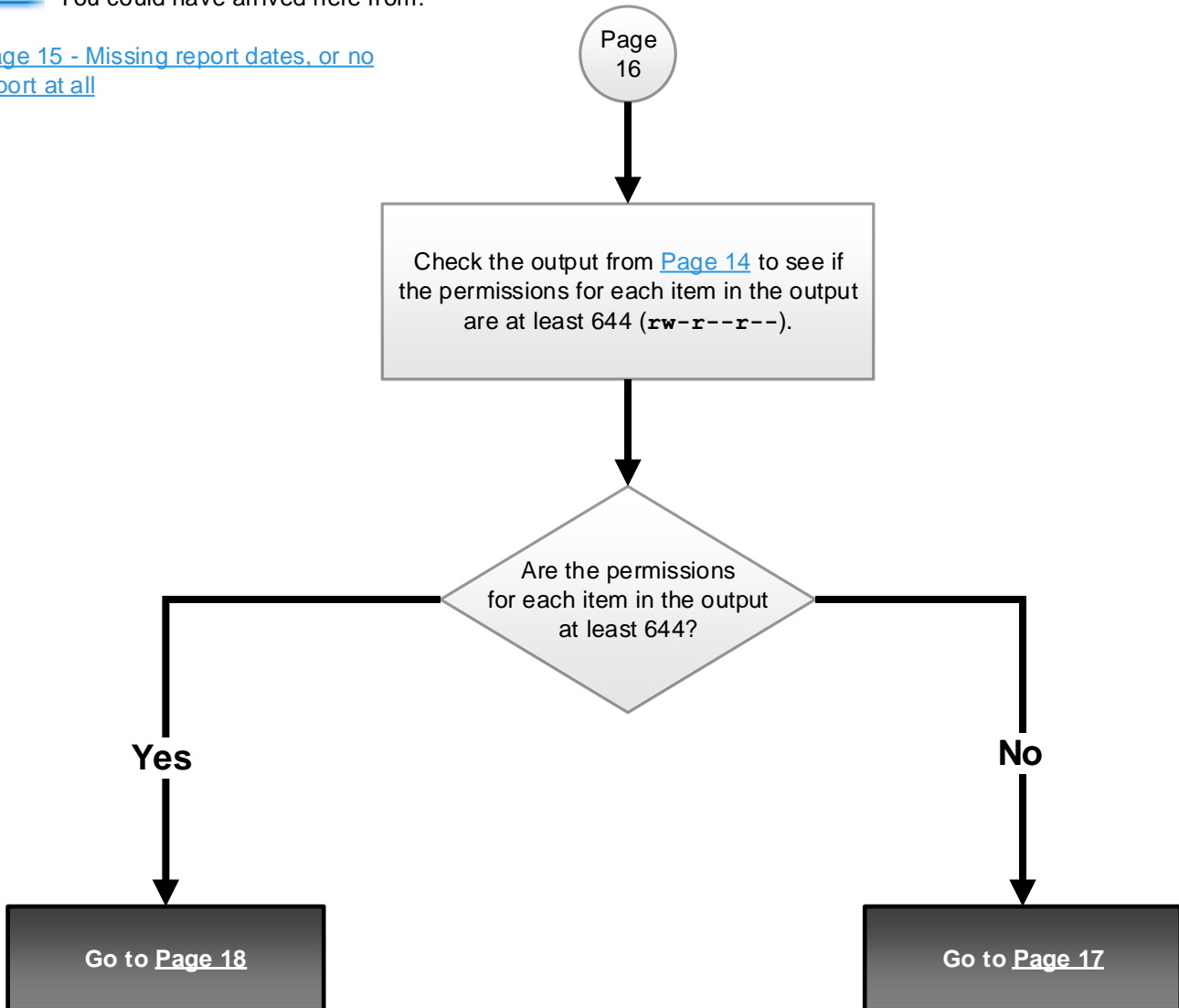


Missing report dates, or no reports at all, continued



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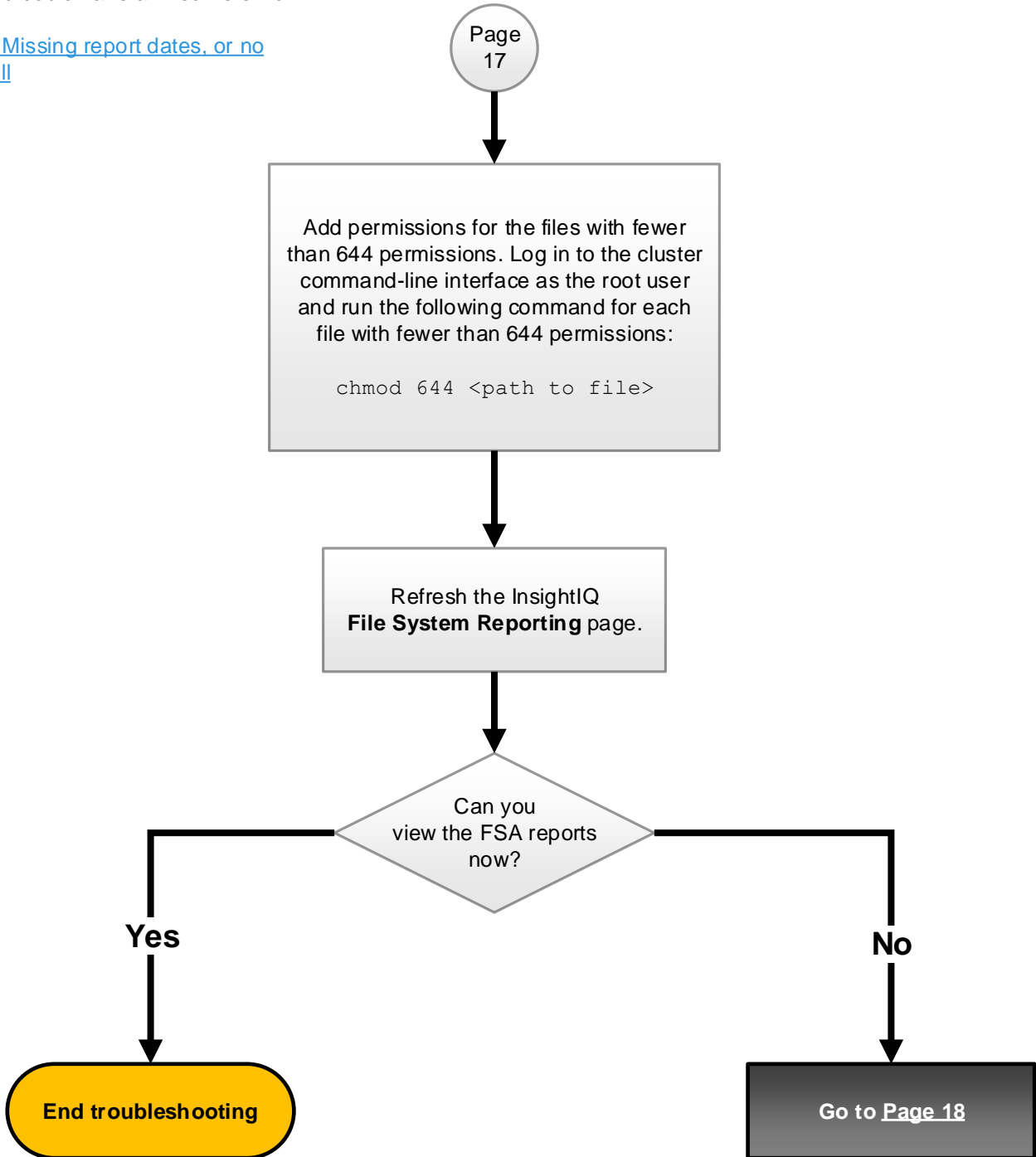


Missing report dates, or no reports at all, continued



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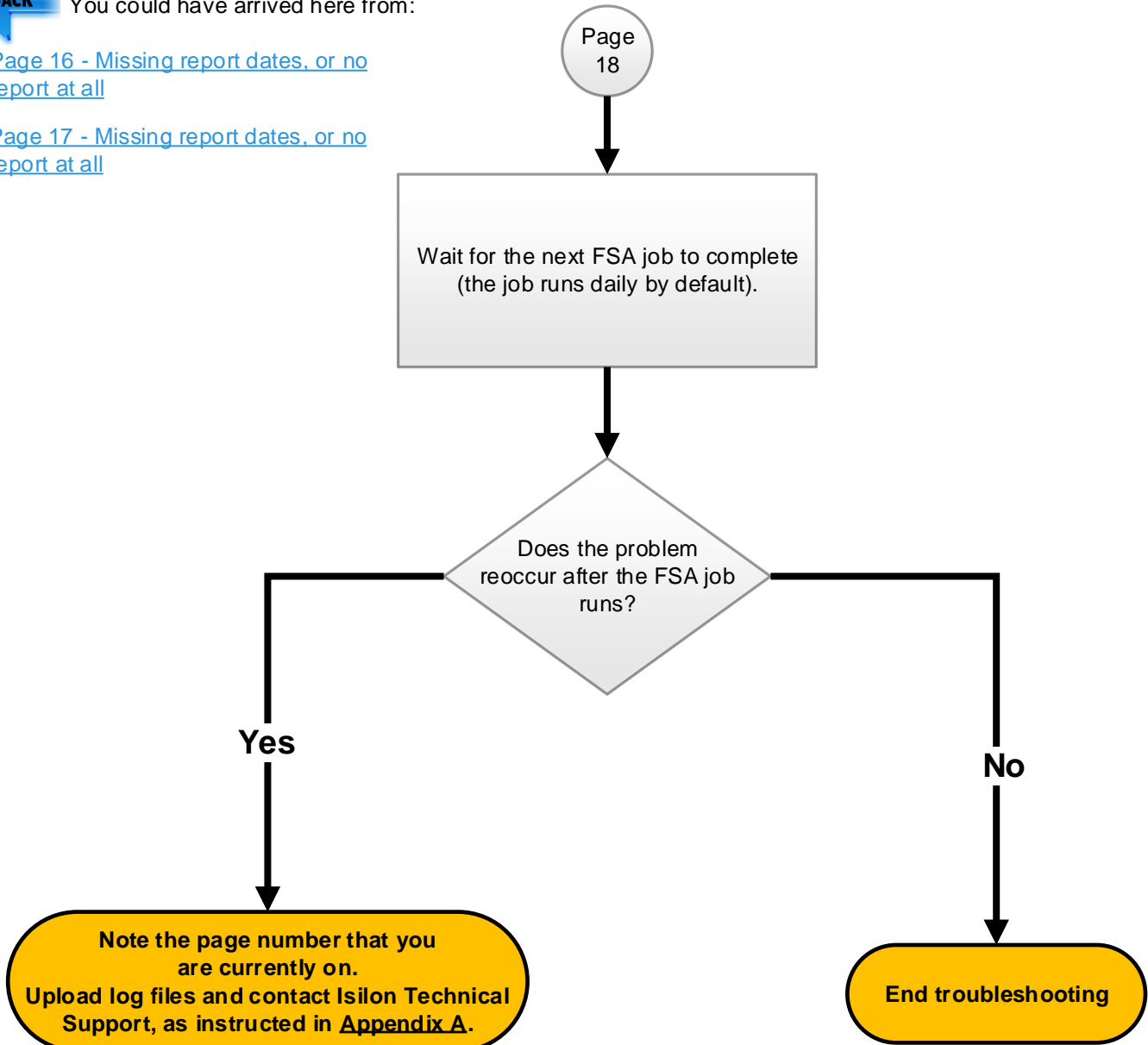


Missing report dates, or no reports at all, continued



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Appendix A: If you need further assistance

Contact EMC Isilon Technical Support

If you need to contact [Isilon Technical Support](#) during troubleshooting, reference the page or step that you need help with. This information and the log file will help Isilon Technical Support staff resolve your case more quickly.

Gather and upload InsightIQ and OneFS log files and screen sessions

Follow the steps in the flow chart below.

Step 1: Open a Service Request (SR)

Contact [Isilon Technical Support](#) to open a service request. Make note of your SR number. You will need it in the next step.

Step 2: Copy InsightIQ logs and screen log file to the Isilon cluster

1. **In the InsightIQ screen session:** When troubleshooting is complete, type `exit` to end your screen session.
2. Transfer the screen session to the cluster by running the following command, where `<node_ip>` is the IP address of the node you want to upload the logs to:

```
scp screenlog.0 root@<node_ip>:/ifs/data/Isilon_Support/screenlog.iiq.txt
```
3. **On the InsightIQ VM instance:** Run the following commands to gather InsightIQ configuration information:

```
cat /etc/isilon/insightiq.ini |grep api_username > ~/local_config.txt
cat /var/cache/insightiq/datastore.pickle >> ~/local_config.txt
ifconfig > ~/ifconfig.txt
mount > ~/mount.txt
rpm -q isilon-insightiq.x86_64 > ~/iiqversion.txt
```
4. Run the following command to compress the files generated by the previous commands, as well as the contents of the `/var/log` directory, where `<SR>` is your Isilon Technical Support service request number:

```
sudo tar -czvf ~/<SR>.tgz /var/log local_config.txt ifconfig.txt mount.txt
iiqversion.txt
```
5. Copy the compressed file to the `/ifs/data/Isilon_Support` directory on the monitored cluster by using the `scp` (secure copy) command, where `<SR>` is the service request number, and `<node_ip>` is the node IP address used above:

```
scp ~/<SR>.tgz root@<node_ip>:/ifs/data/Isilon_Support
```

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Appendix A: If you need further assistance, continued

Gather and upload InsightIQ and OneFS log files and screen sessions, continued



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Step 3: Upload the Isilon node logs, screen log files, and InsightIQ logs to Isilon Technical Support

1. **In the OneFS screen session:** When troubleshooting is complete, type `exit` to end your screen session.
2. **On the Isilon cluster:** Open an SSH connection to the same node IP address where you copied files in the previous steps.
3. Gather and upload the node and InsightIQ logs, and include the SSH screen log files, by using the command appropriate for your method of uploading files. Replace `<SR>` in the command with your service request number. If you are not sure which method to use, use FTP. **Note:** For each method, there is one long command. When you copy and paste the command into the command-line interface, it will appear on multiple lines (as shown here), but when you press **Enter**, the command will run properly.

ESRS:

```
isi_gather_info --esrs --local-only -f /ifs/data/Isilon_Support/screenlog.0 \  
-f /ifs/data/Isilon_Support/screenlog.iiq.txt \  
-f /ifs/data/Isilon_Support/<SR>.tgz
```

FTP:

```
isi_gather_info --ftp --local-only -f /ifs/data/Isilon_Support/screenlog.0 \  
-f /ifs/data/Isilon_Support/screenlog.iiq.txt \  
-f /ifs/data/Isilon_Support/<SR>.tgz
```

HTTP:

```
isi_gather_info --http --local-only -f /ifs/data/Isilon_Support/screenlog.0 \  
-f /ifs/data/Isilon_Support/screenlog.iiq.txt \  
-f /ifs/data/Isilon_Support/<SR>.tgz
```

SMTP:

```
isi_gather_info --email --local-only -f /ifs/data/Isilon_Support/screenlog.0 \  
-f /ifs/data/Isilon_Support/screenlog.iiq.txt \  
-f /ifs/data/Isilon_Support/<SR>.tgz
```

SupportIQ:

```
isi_gather_info --local-only -f /ifs/data/Isilon_Support/screenlog.0 \  
-f /ifs/data/Isilon_Support/screenlog.iiq.txt \  
-f /ifs/data/Isilon_Support/<SR>.tgz \  
--noupload --symlink /var/crash/SupportIQ/upload/ftp
```

3. If you receive a message that the upload was unsuccessful, refer to [article 16759](#) on the EMC Online Support site for directions for uploading files over FTP.

Continue to troubleshoot your issue with Isilon Technical Support.

Appendix B: How to use this flow chart

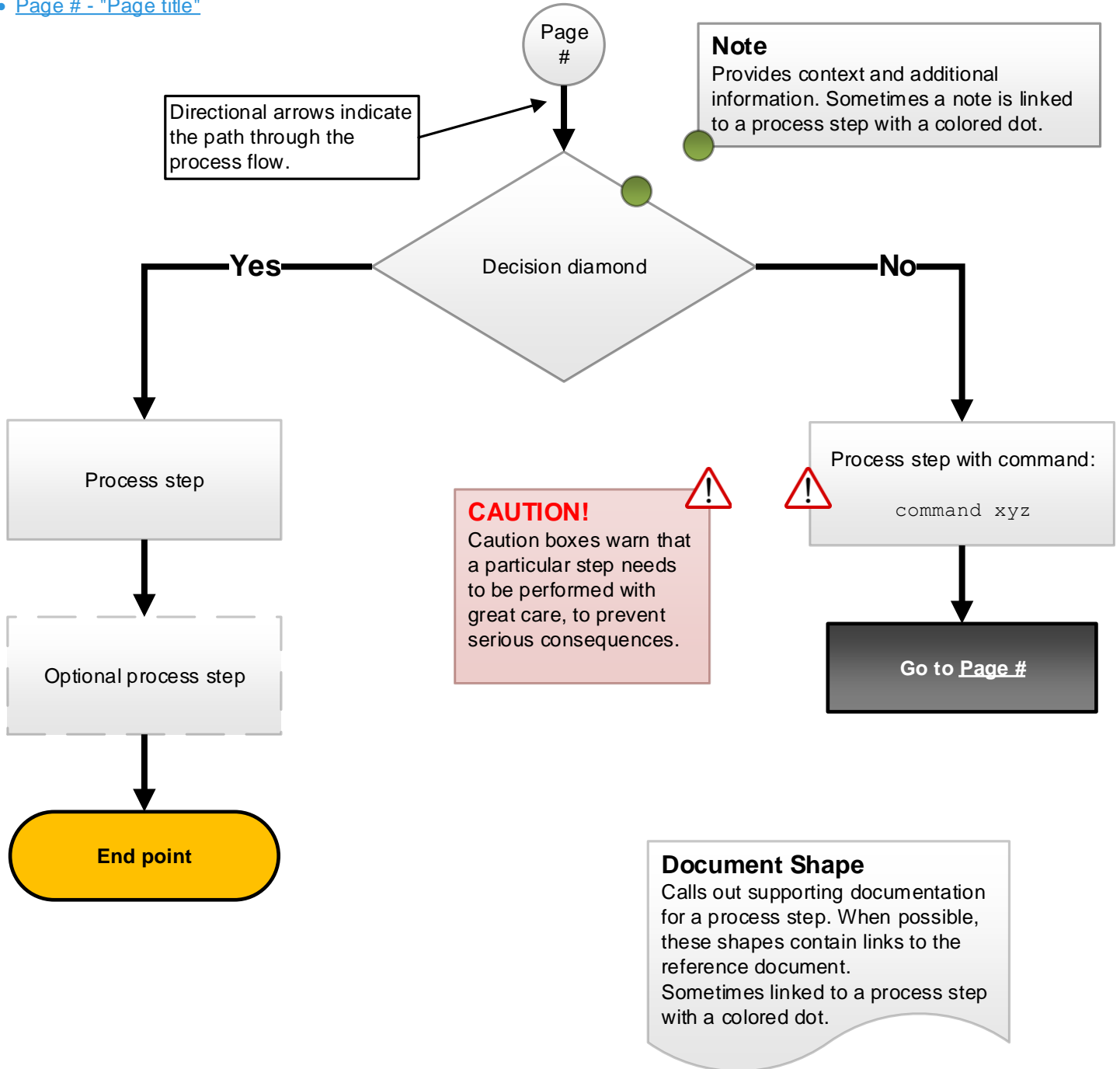
Introduction

Describes what the section helps you to accomplish.



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