Flume11 负载均衡和故障转移

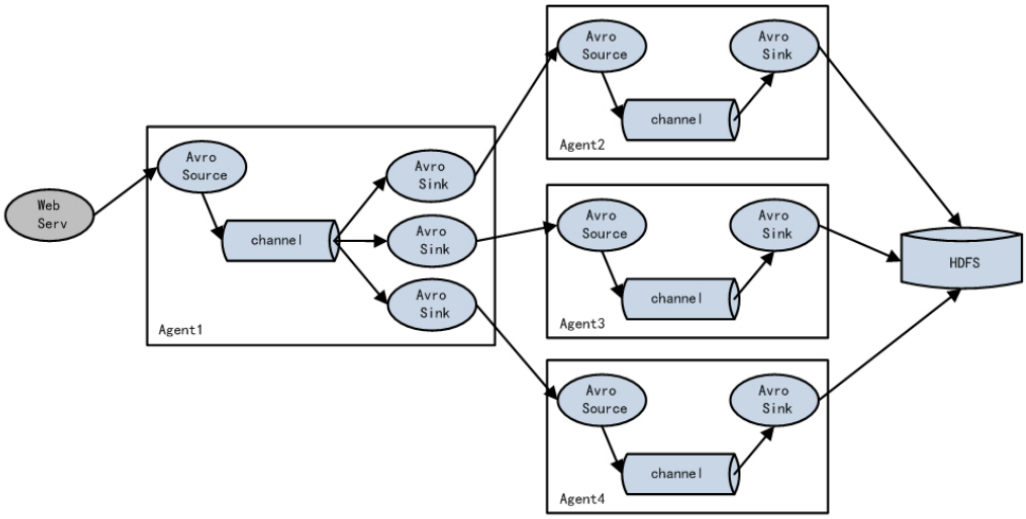
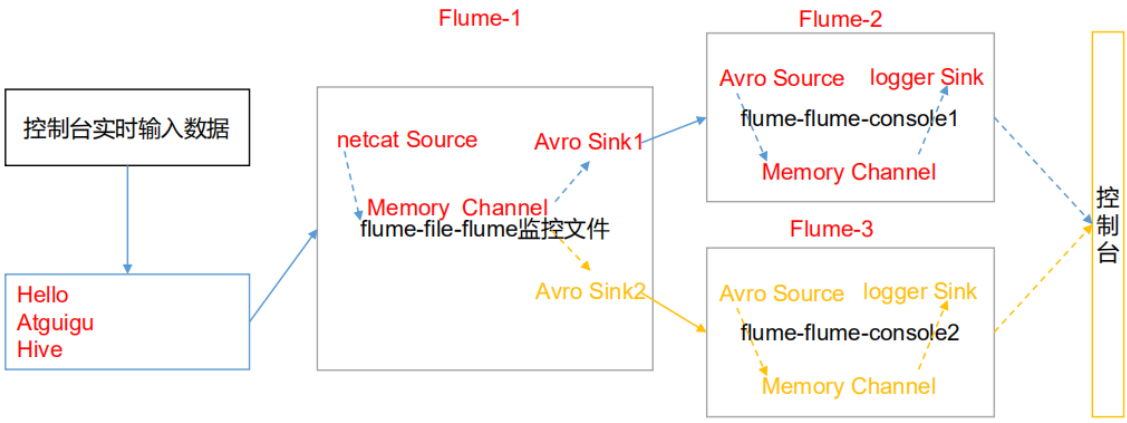


图 7-3 单 Source、Channel 多 Sink

案例需求

使用Flume监控一个端口，其sink组中的sink分别对接Flume2 和 Flume3，采用FailoverSinkProcessor，实现故障转移的功能。

需求分析



实现步骤

- 准备工作

  在/opt/module/flume/job 目录下创建 group2 文件夹

  ```
  [atguigu@hadoop102 job]$ cd group2/
  ```

- 创建 flume-netcat-flume.conf

配置 1 个接收日志文件的 source 和 1 个 channel、两个 sink，分别输送给flume-flume-console1 和 flume-flume-console2。

创建配置文件并打开：

```
[atguigu@hadoop102 group2]$ touch flume-netcat-flume.conf
[atguigu@hadoop102 group2]$ vim flume-netcat-flume.conf
```

添加如下内容：

```
# Name the components on this agent
a1.sources = r1
a1.channels = c1
a1.sinkgroups = g1
a1.sinks = k1 k2

# Describe/configure the source
a1.sources.r1.type = netcat
a1.sources.r1.bind = localhost
a1.sources.r1.port = 44444

## Sink Group

a1.sinkgroups.g1.processor.type = failover
a1.sinkgroups.g1.processor.priority.k1 = 5
a1.sinkgroups.g1.processor.priority.k2 = 10
a1.sinkgroups.g1.processor.maxpenalty = 10000

# Describe the sink
a1.sinks.k1.type = avro
a1.sinks.k1.hostname = hadoop102
a1.sinks.k1.port = 4141
a1.sinks.k2.type = avro
a1.sinks.k2.hostname = hadoop102
a1.sinks.k2.port = 4142

# Describe the channel
a1.channels.c1.type = memory
a1.channels.c1.capacity = 1000
a1.channels.c1.transactionCapacity = 100

# Bind the source and sink to the channel
a1.sources.r1.channels = c1
a1.sinkgroups.g1.sinks = k1 k2
a1.sinks.k1.channel = c1
a1.sinks.k2.channel = c1
```

- 创建 flume-flume-console1.conf

  配置上级 Flume 输出的 Source，输出是到本地控制台。

  创建配置文件并打开：

```
[atguigu@hadoop102 group2]$ touch flume-flume-console1.conf
[atguigu@hadoop102 group2]$ vim flume-flume-console1.conf
```

添加如下内容：

```
# Name the components on this agent
a2.sources = r1
a2.sinks = k1
a2.channels = c1

# Describe/configure the source
a2.sources.r1.type = avro
a2.sources.r1.bind = hadoop102
a2.sources.r1.port = 4141

# Describe the sink
a2.sinks.k1.type = logger

# Describe the channel
a2.channels.c1.type = memory
a2.channels.c1.capacity = 1000
a2.channels.c1.transactionCapacity = 100

# Bind the source and sink to the channel
a2.sources.r1.channels = c1
a2.sinks.k1.channel = c1
```

- 创建 flume-flume-console2.conf

  配置上级 Flume 输出的 Source，输出是到本地控制台。

  创建配置文件并打开：

```
[atguigu@hadoop102 group2]$ touch flume-flume-console2.conf
[atguigu@hadoop102 group2]$ vim flume-flume-console2.conf
```

  添加如下内容：

```
# Name the components on this agent
a3.sources = r1
a3.sinks = k1
a3.channels = c2

# Describe/configure the source
a3.sources.r1.type = avro
a3.sources.r1.bind = hadoop102
a3.sources.r1.port = 4142

# Describe the sink
a3.sinks.k1.type = logger

# Describe the channel
a3.channels.c2.type = memory
a3.channels.c2.capacity = 1000
a3.channels.c2.transactionCapacity = 100

# Bind the source and sink to the channel
a3.sources.r1.channels = c2
a3.sinks.k1.channel = c2
```

- 执行配置文件

  分别开启对应配置文件：flume-flume-console2，flume-flume-console1，flume-netcat-flume。

  ```
  [atguigu@hadoop102 flume]$ bin/flume-ng agent --conf conf/ --name
  a3 --conf-file job/group2/flume-flume-console2.conf
  -Dflume.root.logger=INFO,console
  [atguigu@hadoop102 flume]$ bin/flume-ng agent --conf conf/ --name
  a2 --conf-file job/group2/flume-flume-console1.conf
  -Dflume.root.logger=INFO,console
  [atguigu@hadoop102 flume]$ bin/flume-ng agent --conf conf/ --name
  a1 --conf-file job/group2/flume-netcat-flume.conf
  ```

- 使用 telnet 工具向本机的 44444 端口发送内容

  ```
  telnet localhost 44444
  ```

- 查看 Flume2 及 Flume3 的控制台打印日志
- 然后把 Flume3挂掉，再发送。