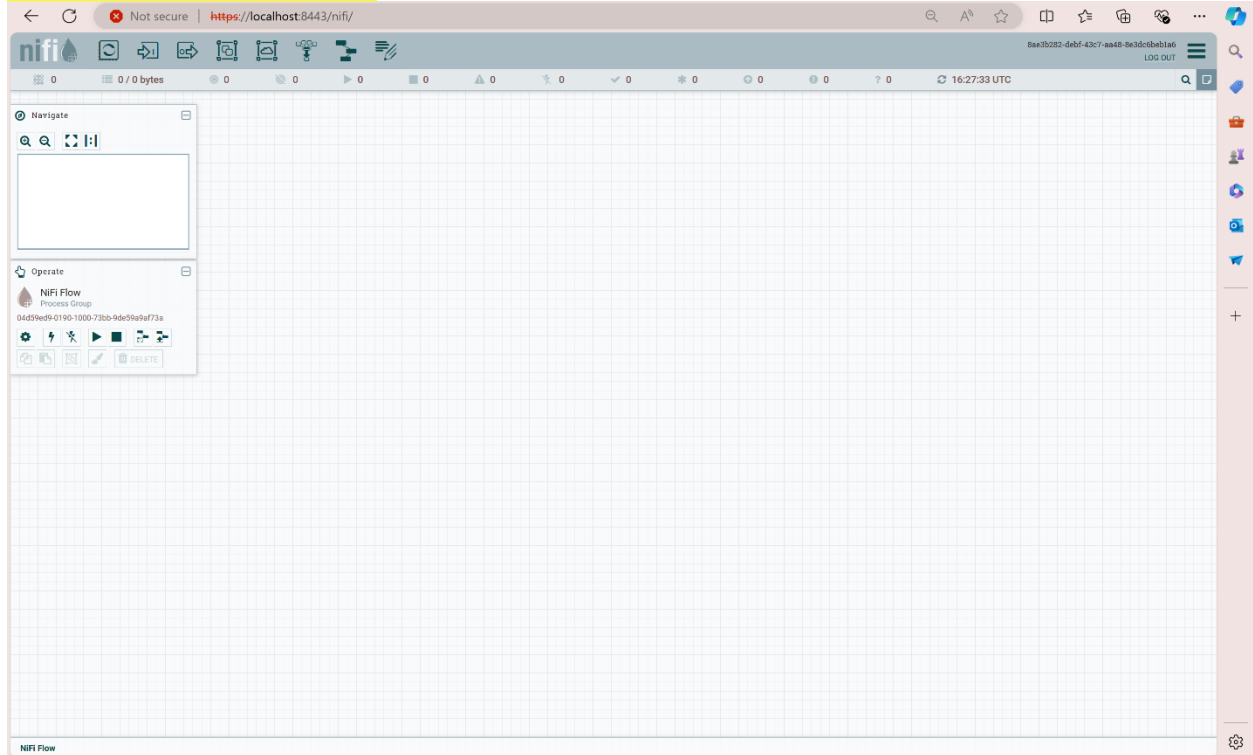
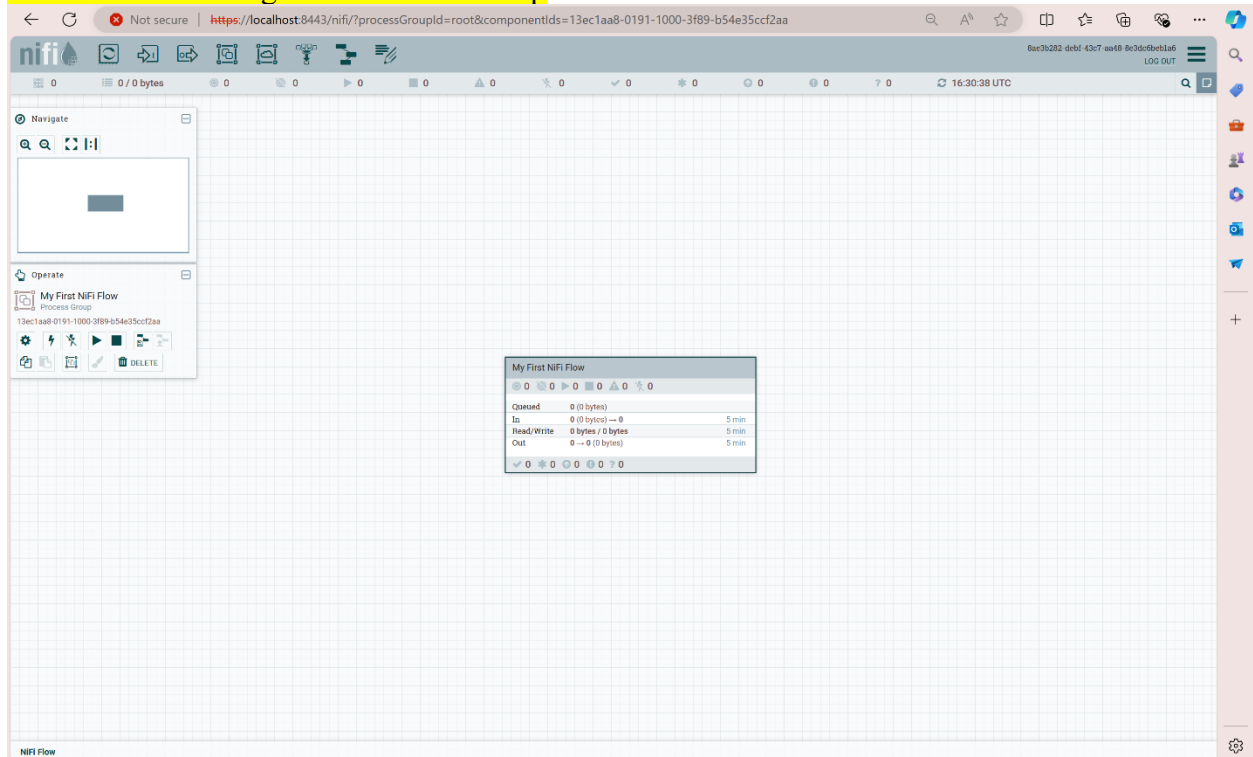


## Monica Santana – Exercise 9

### Successful access to NiFi UI



### NiFi canvas showing the Processor Group



## Defined parameter within the Parameter Context

The screenshot shows the Apache NiFi web console interface. A modal dialog titled "Update Parameter Context" is open, displaying the "PARAMETERS" tab. The dialog contains a table with the following data:

Name	Value
File_Size	1 KB

Below the table, there are sections for "Referencing Components", "Referencing Processors", "Referencing Controller Services", and "Unauthorized Referencing Components". The "Referencing Components" section shows "My First NiFi Flow (1)" and "GenerateFlowFile". The "Referencing Processors" section shows "GenerateFlowFile". The "Referencing Controller Services" and "Unauthorized Referencing Components" sections are both empty.

The background shows the NiFi dashboard with a "My First NiFi Flow" process group. The status bar at the bottom indicates "NiFi Flow" and "My First NiFi Flow".

## Simple flow (GenerateFlowFile to LogAttribute)

The screenshot shows the Apache NiFi web console interface with a simple flow diagram. The flow consists of two processors connected by a data link:

- GenerateFlowFile** (org.apache.nifi-standard-nar):
  - In: 0 (0 bytes)
  - Read/Write: 0 bytes / 3 KB
  - Out: 4 (3 KB)
  - Tasks/Time: 4 / 00:00:00.021
- LogAttribute** (org.apache.nifi-standard-nar):
  - In: 5 (2 KB)
  - Read/Write: 2 KB / 0 bytes
  - Out: 0 (0 bytes)
  - Tasks/Time: 5 / 00:00:00.094

The flow is labeled "Name: success" and "Occurred: 1 (1,024 bytes)". The background shows the NiFi dashboard with a "My First NiFi Flow" process group. The status bar at the bottom indicates "NiFi Flow" and "My First NiFi Flow".

## Successful creation of the syslog collection

The screenshot shows the Solr core overview page for the 'syslog' collection. The left sidebar contains navigation links: Dashboard, Logging, Security, Core Admin, Java Properties, Thread Dump, Overview (selected), Analysis, Documents, Params, Files, Ping, Plugins / Stats, Query, Replication, Schema, and Segments info. The main content area is divided into three sections: Statistics, Instance, and Replication (Leader). The Statistics section shows: Last Modified: -, Num Docs: 0, Max Doc: 0, Deleted Docs: 0, Version: 2, Segment Count: 0, and Current: 0. The Instance section shows: CWD: /opt/solr-9.6.1/server, Instance: /var/solr/data/syslog, Data: /var/solr/data/syslog/data, Index: /var/solr/data/syslog/data/index, and Impl: org.apache.solr.core.NRTCachingDirectoryFactory. The Replication (Leader) section shows a table with columns: Version, Gen, and Size. The table has two rows: Leader (Searching) with values 0, 1, and 69 bytes, and Leader (Replicable) with values -, -, and -. The Healthcheck section shows: Ping request handler is not configured with a healthcheck file. At the bottom, there are links for Documentation, Solr Query Syntax, Community, Issue Tracker, Slack, and IRC.

## Advanced NiFi flow processing and sending data to Solr

The screenshot shows the NiFi flow processing interface. The top bar displays the URL: https://localhost:8443/nifi/?processGroupId=1f4e6032-0191-1000-f16b-e3dc61cc52ca&componentId=, and the time: 21:50:43 UTC. The left sidebar contains navigation links: Navigate (selected), Operate, and a search bar. The main content area shows a flow diagram with three processors: Generate Syslog RFC5424, Filter Events, and PutSolrRecord. The Generate Syslog RFC5424 processor has a status of 'Queued 2 (3.11 KB)' and a 'Name success\_Generate-FilterE...'. The Filter Events processor has a status of 'Queued 0 (0 bytes)' and a 'Name filtered\_events'. The PutSolrRecord processor has a status of 'Queued 0 (0 bytes)' and a 'Name connection\_failure, failure'. The flow is connected by arrows indicating the data flow from Generate Syslog RFC5424 to Filter Events, and then to PutSolrRecord. The bottom bar shows the current flow: NiFi Flow > Syslog\_Processing.

## Solr query results

First query is selecting the groups with priority up to 40, which was 2, priority:[13] and [38]

The screenshot shows the Solr Admin UI with the following configuration:

- Request-Handler (qt): /select
- q: \*
- fq: priority:[\* TO 40]
- sort: (empty)
- start, rows: 0, 10
- df: (empty)
- paramset(s): (empty)
- wt: (empty)
- indent on: ☒
- debugQuery: ☐
- defType: (empty)
- hl: ☐
- facet: ☐
- spatial: ☐
- spellcheck: ☐
- Raw Query Parameters: (empty)
- JSON Query: (empty)

The executed query is: `http://localhost:8983/solr/#/syslog/select?q=*fq=priority:[* TO 40]&indent=true&q.op=OR&q=*%3A*&useParams=`

The response is a JSON document with two entries:

```
{
  "responseHeader": {
    "status": 0,
    "time": 13,
    "params": {
      "q": "*",
      "indent": "true",
      "q.op": "OR",
      "fq": "priority:[* TO 40]",
      "useParams": ""
    }
  },
  "response": {
    "numFound": 2,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": 13,
        "severity": 0,
        "facility": 1,
        "version": 1,
        "timestamp": "1722807805193",
        "hostname": "host1.example.com",
        "body": "application2 has stopped unexpectedly",
        "appName": "application2",
        "procid": 1000,
        "messageid": "1000",
        "structuredData_SDI2_eventId": 100,
        "structuredData_SDI2_eventSource": "application",
        "structuredData_SDI2_int": 1,
        "id": "9d71a8a-837-479-8d79-9d5aa7a3f00",
        "_version_": "1886495256218864928"
      },
      {
        "priority": 38,
        "severity": 0,
        "facility": 1,
        "version": 1,
        "timestamp": "172280780525",
        "hostname": "host1.example.com",
        "body": "application2 has stopped unexpectedly",
        "appName": "application2",
        "procid": 1000,
        "messageid": "1000",
        "structuredData_SDI2_eventId": 100,
        "structuredData_SDI2_eventSource": "application",
        "structuredData_SDI2_int": 1,
        "id": "9d71a8a-837-479-8d79-9d5aa7a3f00",
        "_version_": "1886495256218864928"
      }
    ]
  }
}
```

Second query is selecting the groups with severity:[0] which would be 4 in the json file

The screenshot shows the Solr Admin UI with the following configuration:

- Request-Handler (qt): /select
- q: severity:0
- fq: (empty)
- sort: (empty)
- start, rows: 0, 10
- df: (empty)
- paramset(s): (empty)
- wt: (empty)
- indent on: ☒
- debugQuery: ☐
- defType: (empty)
- hl: ☐
- facet: ☐
- spatial: ☐
- spellcheck: ☐
- Raw Query Parameters: (empty)
- JSON Query: (empty)

The executed query is: `http://localhost:8983/solr/#/syslog/select?indent=true&q.op=OR&q=severity:0&q=*%3A*&useParams=`

The response is a JSON document with four entries:

```
{
  "responseHeader": {
    "status": 0,
    "time": 13,
    "params": {
      "q": "severity:0",
      "indent": "true",
      "q.op": "OR",
      "useParams": ""
    }
  },
  "response": {
    "numFound": 4,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": 13,
        "severity": 0,
        "facility": 1,
        "version": 1,
        "timestamp": "1722807805193",
        "hostname": "host1.example.com",
        "body": "application2 has stopped unexpectedly",
        "appName": "application2",
        "procid": 1000,
        "messageid": "1000",
        "structuredData_SDI2_eventId": 100,
        "structuredData_SDI2_eventSource": "application",
        "structuredData_SDI2_int": 1,
        "id": "9d71a8a-837-479-8d79-9d5aa7a3f00",
        "_version_": "1886495256218864928"
      },
      {
        "priority": 38,
        "severity": 0,
        "facility": 1,
        "version": 1,
        "timestamp": "172280780525",
        "hostname": "host1.example.com",
        "body": "application2 has stopped unexpectedly",
        "appName": "application2",
        "procid": 1000,
        "messageid": "1000",
        "structuredData_SDI2_eventId": 100,
        "structuredData_SDI2_eventSource": "application",
        "structuredData_SDI2_int": 1,
        "id": "9d71a8a-837-479-8d79-9d5aa7a3f00",
        "_version_": "1886495256218864928"
      },
      {
        "priority": 100,
        "severity": 0,
        "facility": 1,
        "version": 1,
        "timestamp": "1722807805193",
        "hostname": "host1.example.com",
        "body": "application2 has started successfully",
        "appName": "application2",
        "procid": 1000,
        "messageid": "1000",
        "structuredData_SDI2_eventId": 100,
        "structuredData_SDI2_eventSource": "application",
        "structuredData_SDI2_int": 1,
        "id": "9d71a8a-837-479-8d79-9d5aa7a3f00",
        "_version_": "1886495256218864928"
      },
      {
        "priority": 100,
        "severity": 0,
        "facility": 1,
        "version": 1,
        "timestamp": "1722807805193",
        "hostname": "host1.example.com",
        "body": "application2 has started successfully",
        "appName": "application2",
        "procid": 1000,
        "messageid": "1000",
        "structuredData_SDI2_eventId": 100,
        "structuredData_SDI2_eventSource": "application",
        "structuredData_SDI2_int": 1,
        "id": "9d71a8a-837-479-8d79-9d5aa7a3f00",
        "_version_": "1886495256218864928"
      }
    ]
  }
}
```

Third query is selecting the groups with severity:[0] with the priority group over 100 (which is 1)

The screenshot displays the Solr Admin web interface. On the left sidebar, navigation links include Dashboard, Logging, Security, Core Admin, Java Properties, Thread Dump, syslog (selected), Overview, Analysis, Documents, Paramssets, Files, Ping, Plugins / Stats, Query (selected), Replication, Schema, and Segments info.

The main panel shows the configuration for a query on the 'syslog' core:

- Request-Handler:** set
- q:** severity:0
- q.op:** OR
- fq:** priority:[100 TO \*]
- sort:**
- start, rows:** 0, 10
- s:**
- df:**
- paramset(s):** Select paramset(s)...
- wt:** json
- indent on:** checked
- debugQuery:** unchecked
- defType:** default
- facet:** unchecked
- spatial:** unchecked
- spellcheck:** unchecked
- Raw Query Parameters:**
- JSON Query:**
- Execute Query:** button

The top status bar indicates the URL: http://localhost:8983/solr/syslog/select?q=severity%3A0&op=OR&fq=priority%3A%5B100%20TO%20%5D&indent=true&q.op=OR&q.severity%3AD%useParams=

The response body shows a JSON object indicating a successful search operation with one document found.

```
{
  "responseHeader": {
    "status": 0,
    "time": 123,
    "params": {
      "q": "severity:0",
      "indent": "true",
      "q.op": "OR",
      "fq": "priority:[100 TO *]",
      "useParams": "",
      "_": "1722806939639"
    }
  },
  "response": {
    "numFound": 1,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": 100,
        "severity": 0,
        "facility": 0,
        "version": 1,
        "timestamp": "1777807040928",
        "hostname": "host4.example.com",
        "body": "[\"application has started successfully\", \"appName\":[\"application2\"]\", \"projectId\":100]\", \"messageId\":\"1045\", \"structureData_SQID_eventId\":1, \"structureData_SQID_eventSource\":\"application\", \"structureData_SQID_sut\":0], \"id\":\"5b9ab3b-dc97-4b75-ab29-4bbbedd6e0e5\", \"_version_\":1886495254238891528"
      }
    ]
  }
}
```

Fourth query is selecting only the groups facility and priority in the json file

The screenshot displays the Solr Admin interface. On the left sidebar, the 'Query' tab is selected. The main panel shows the configuration for a request handler named '/select'. The following parameters are visible:

- q**: \*:\*
- q.op**: OR
- fq**
- sort**
- start, rows**: 0, 10
- n**
- facility, priority**
- df**
- paramset(s)**: Select paramset(s)...
- wt**: -----
- indent on**: ☒
- debugQuery**: ☐
- defType**: -----
- hl**: ☐
- facet**: ☐
- spatial**: ☐
- spellcheck**: ☐
- Raw Query Parameters**
- JSON Query**

Below the configuration, there is a button labeled 'Execute Query'. To the right of the configuration, the resulting JSON response is displayed:

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 13,
    "params": {
      "q": "*:*",
      "indent": "true",
      "fq": "[facility, priority]",
      "q.op": "OR",
      "useParams": "",
      "_": "1722006930619"
    }
  },
  "response": {
    "numFound": 10,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": [19],
        "facility": [6]
      },
      {
        "priority": [7],
        "facility": [4]
      },
      {
        "priority": [14],
        "facility": [1]
      },
      {
        "priority": [21],
        "facility": [16]
      },
      {
        "priority": [10],
        "facility": [22]
      },
      {
        "priority": [28],
        "facility": [4]
      },
      {
        "priority": [120],
        "facility": [16]
      },
      {
        "priority": [80],
        "facility": [10]
      },
      {
        "priority": [48],
        "facility": [8]
      },
      {
        "priority": [107],
        "facility": [23]
      }
    ]
  }
}
```