

DSC 650

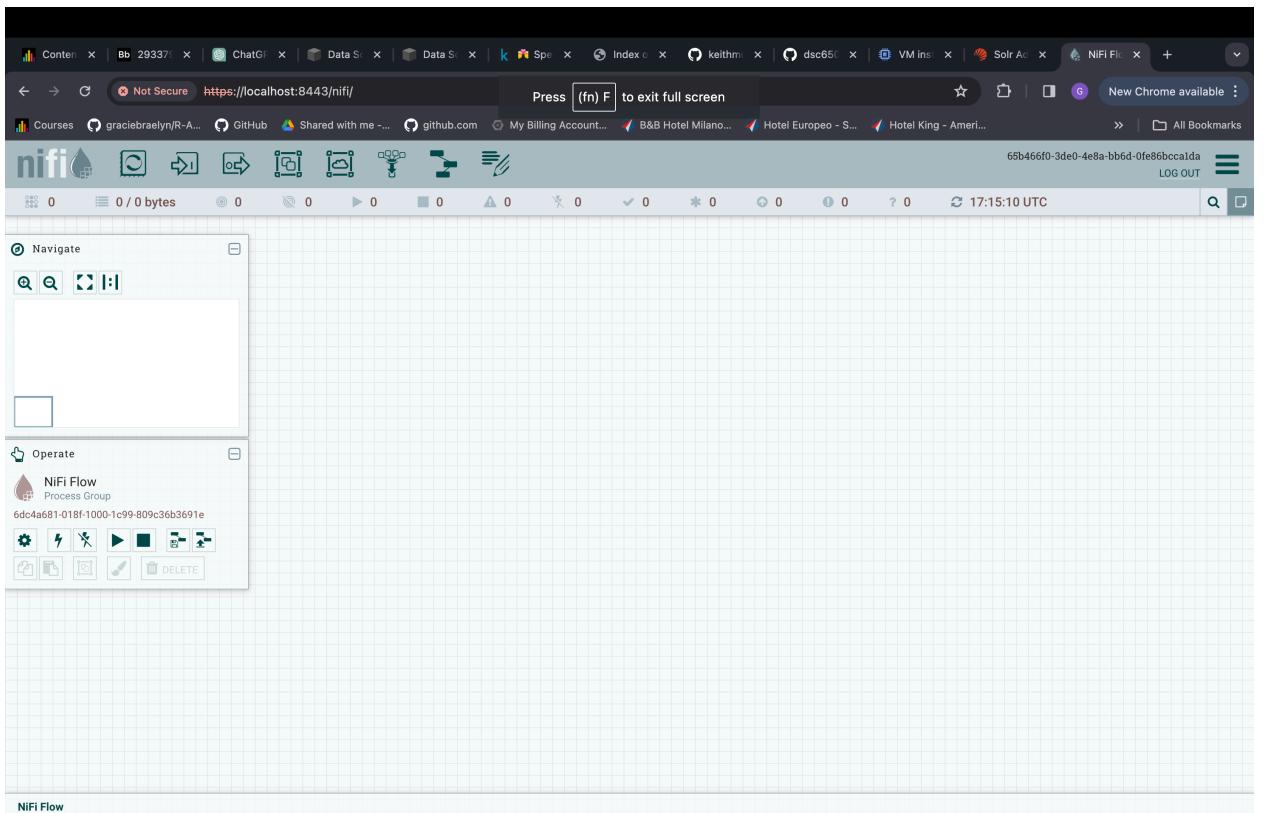
Inman, Gracie

Week 9

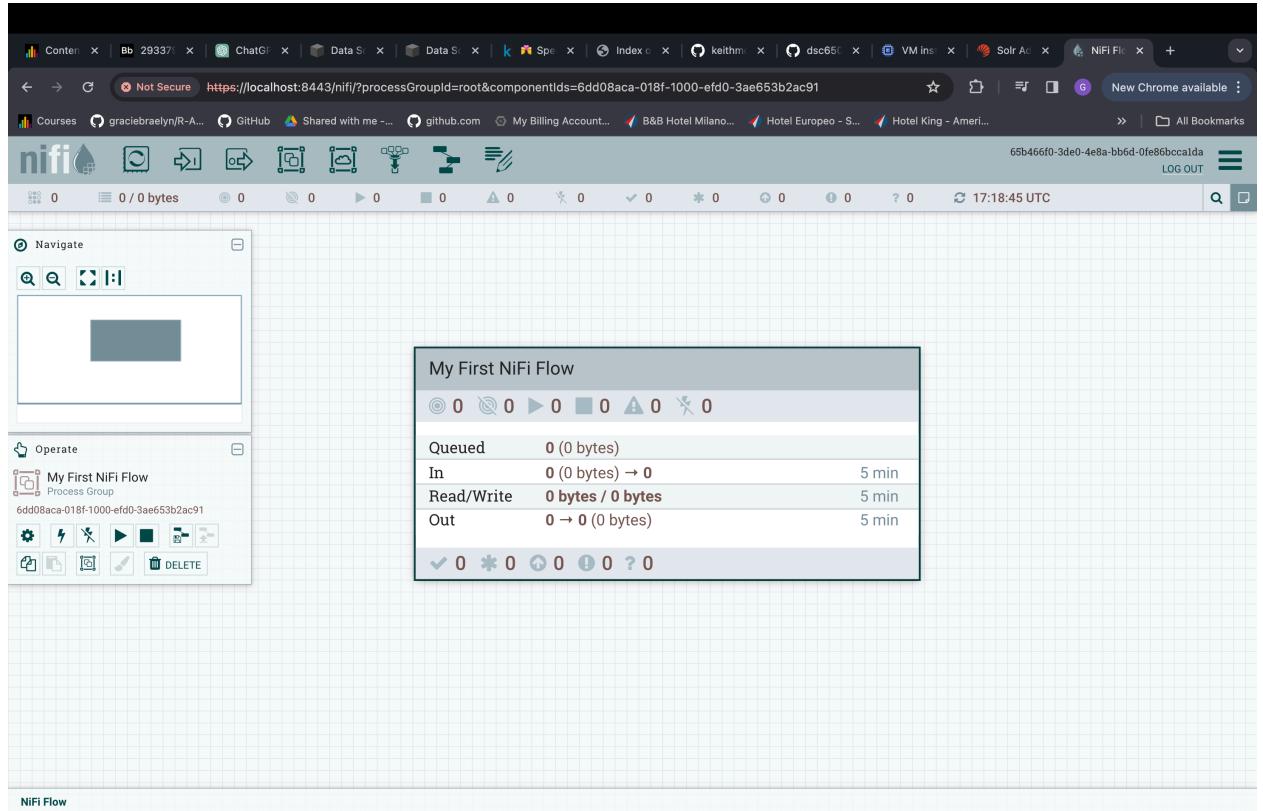
05/12/2024

NiFi Assignment

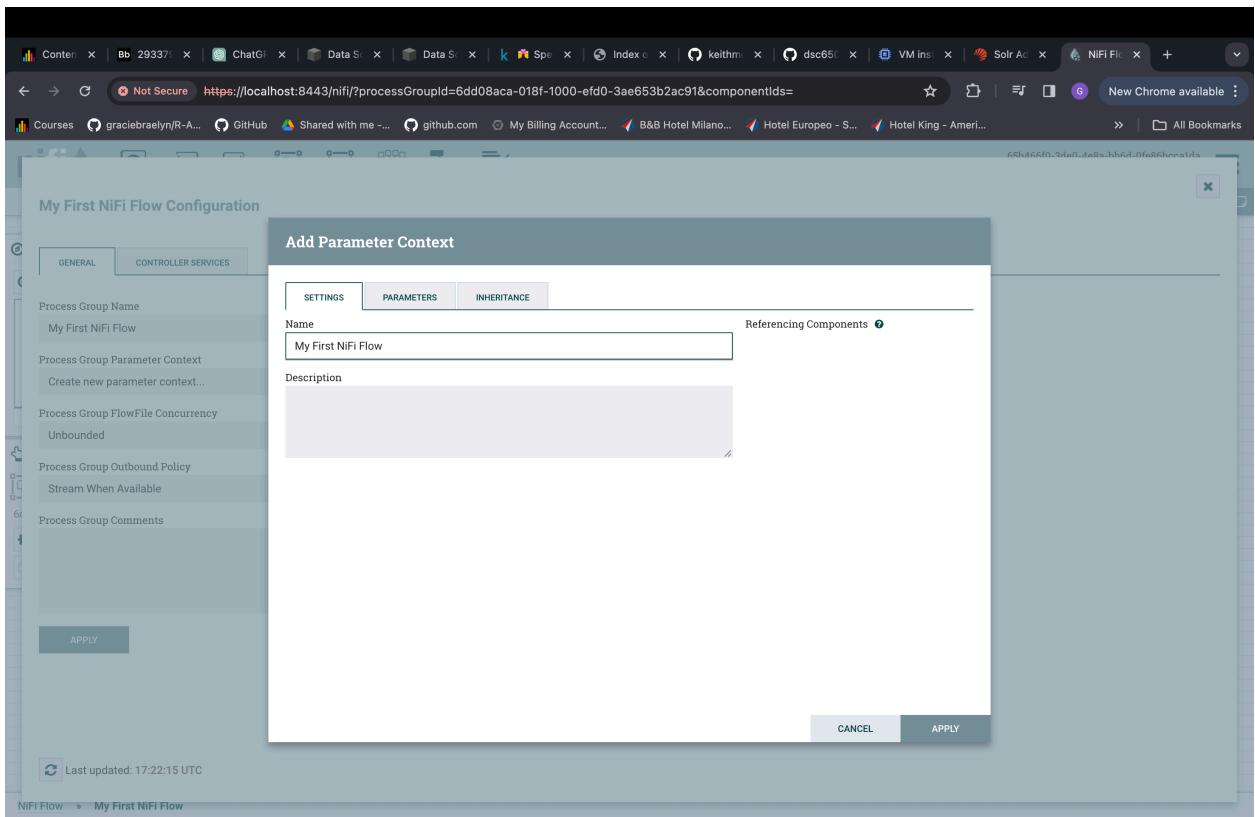
- NiFi UI access

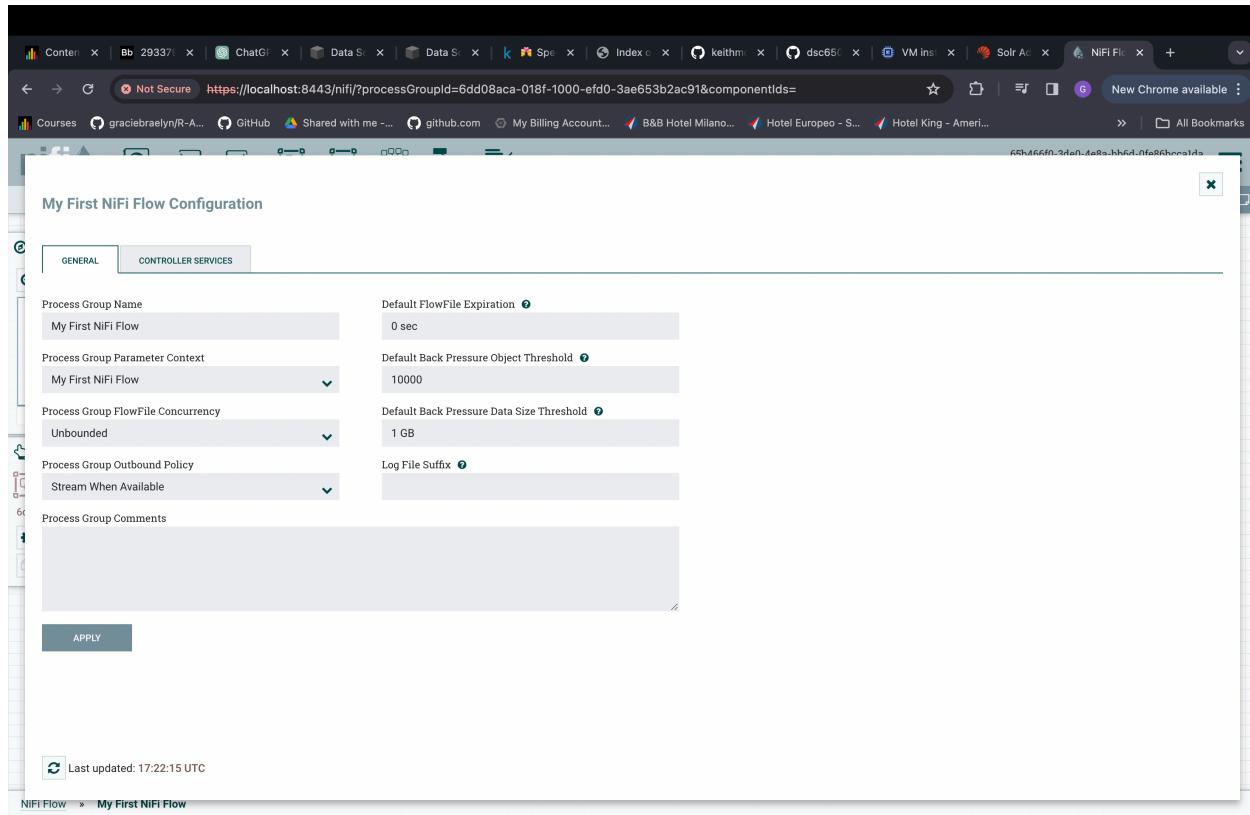


- Processor Group

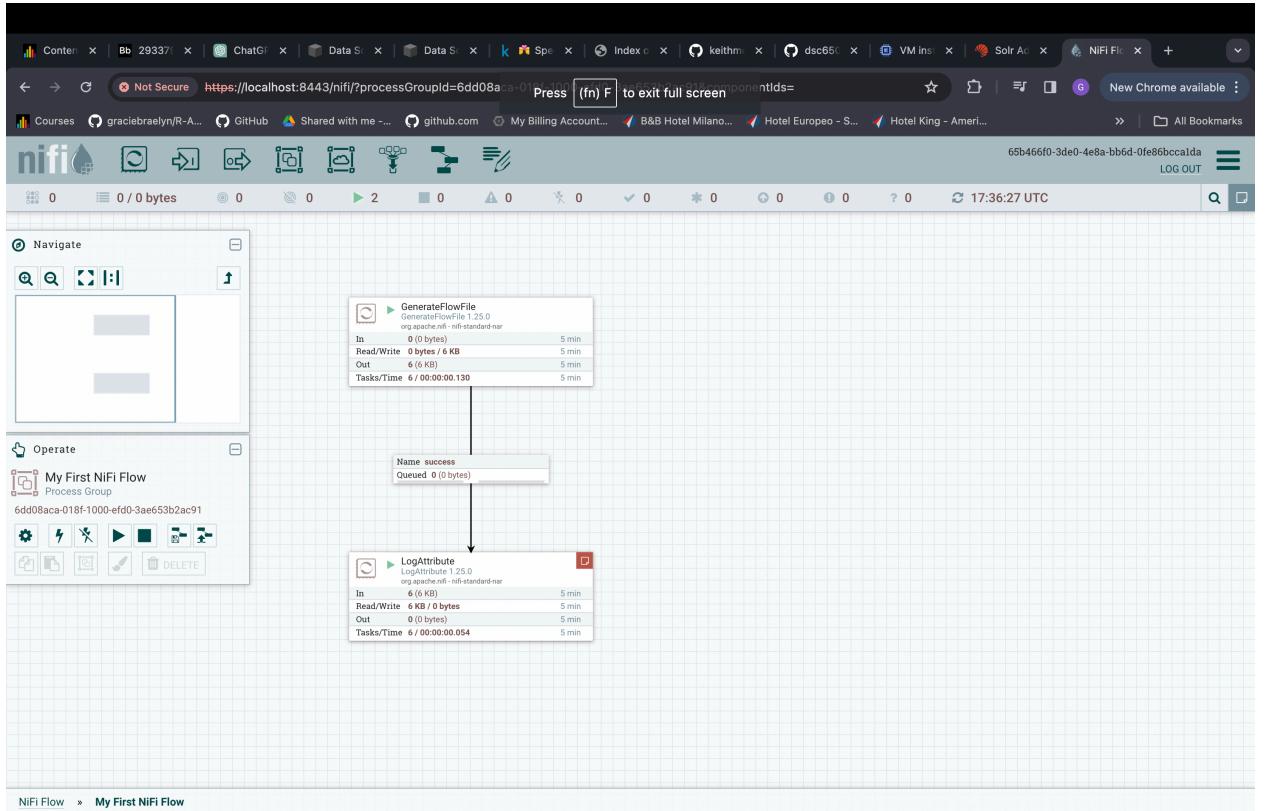


- Parameter Context





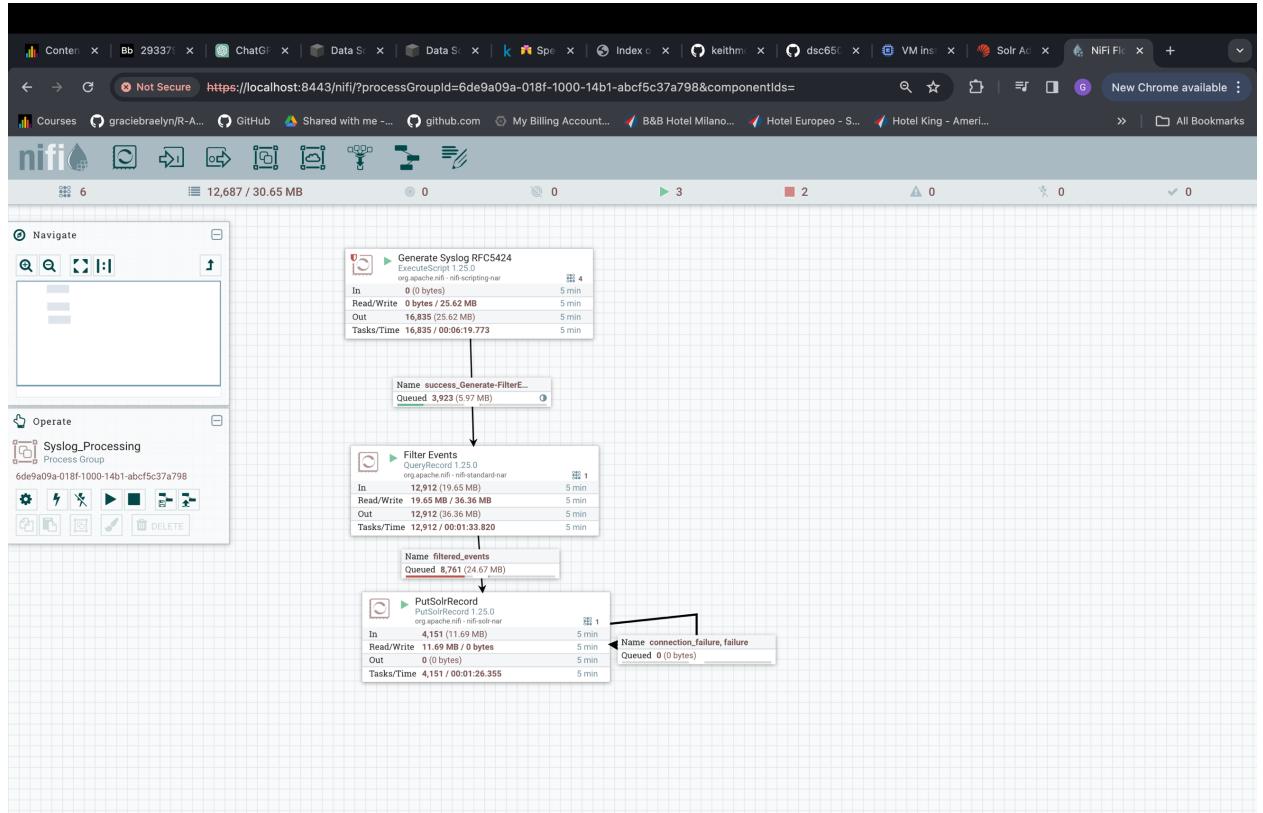
- Simple Flow



- Create Syslog collection

```
gracieinman@big-data-week1-instance:~/dsc650-infra-main/bellevue-bigdata$ cd solr
gracieinman@big-data-week1-instance:~/dsc650-infra-main/bellevue-bigdata/solr$ docker compose up -d
[+] Running 1/0
[✓] Container solr-solr-1  Running
gracieinman@big-data-week1-instance:~/dsc650-infra-main/bellevue-bigdata/solr$ docker exec -it solr_solr_1 bash
0.0s
[Errno 2] No such file or directory: '/etc/solr/conf'
gracieinman@big-data-week1-instance:~/dsc650-infra-main/bellevue-bigdata/solr$ docker exec -it solr-solr-1 bash
solr@1648d7cc24f7:/opt/solr-9.5.0$ /opt/solr/bin/solr create -c syslog
WARNING: Using _default configset with data driven schema functionality. NOT RECOMMENDED for production use.
To turn off: bin/solr config -c syslog -p 8983 -action set-user-property -property update.autoCreateFields -value false
Created new core 'syslog'
solr@1648d7cc24f7:/opt/solr-9.5.0$
```

- Advanced NiFi flow



- Solr query

The screenshot shows the Solr web interface at <http://localhost:8983/solr/#/syslog/query>. The query parameters are set to `q=*.*&q.op=OR&indent=true`. The results are displayed as a JSON object:

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 1,
    "params": {
      "q": "*.*",
      "q.op": "OR",
      "indent": "true"
    },
    "useParams": {
      "q": "*.*",
      "q.op": "OR",
      "indent": "true"
    }
  },
  "response": {
    "numFound": 57455,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": 134,
        "severity": 0,
        "facility": 16,
        "version": 1,
        "inexact": "[17]5536374986",
        "hostname": "[host1.example.com]",
        "body": "[application started successfully]",
        "appname": "[application1]",
        "procid": "[803]",
        "msgid": "[ID33]",
        "structuredData": {
          "SODI_eventType": "[46]",
          "structuredData_SODI_eventSource": "[Kernel]"
        },
        "structuredData_SODI_int_id": "[1]",
        "id": "d5d44d6b-e4d8-4416-8d8a-3e9cf49e9e80",
        "version": "1798878298215317544
      },
      {
        "priority": 124,
        "severity": 0,
        "facility": 16,
        "version": 1,
        "inexact": "[17]5536374986",
        "hostname": "[host1.example.com]",
        "body": "[application0 has completed gracefully]",
        "appname": "[application0]",
        "procid": "[802]",
        "msgid": "[ID32]",
        "structuredData": {
          "SODI_eventType": "[16]",
          "structuredData_SODI_eventSource": "[python]"
        },
        "structuredData_SODI_int_id": "[1]",
        "id": "8c39e16c-46f7-408f-9585-2745fb1c34f3",
        "version": "1798878298229997568
      },
      {
        "priority": 127,
        "severity": 0,
        "facility": 15,
        "version": 1,
        "inexact": "[17]5536374987",
        "hostname": "[host1.example.com]",
        "body": "[application0 has exited cleanly]",
        "appname": "[application0]",
        "procid": "[2083]",
        "msgid": "[ID33]"
      }
    ]
  }
}
```

```
localhost:8983/solr/#/syslog/query?q=*&q.op=OR&indent=true&useParams=
```

```
[{"priority":127}, {"severity":1}, {"facility":155}, {"version":1}, {"@timestamp": "1715536374987"}, {"@source": "host18.example.com"}, {"body": "application6 has exited cleanly"}, {"opname": "application6"}, {"precid": 12093}, {"version": 1}, {"structuredData_SODD_eventId": 34}, {"structuredData_SODD_eventSource": "kernel"}, {"structuredData_SODD_int": 5}, {"@id": "8322501-f81-403-b1bd-44ea4a601092", "version": "17988792983290024}, {"@version": 17988792983290024}, {"priority": 151}, {"severity": 10}, {"facility": 18}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host18.example.com"}, {"body": "application7 has exited cleanly"}, {"opname": "application7"}, {"precid": 17154}, {"version": 1}, {"structuredData_SODD_eventId": 26}, {"structuredData_SODD_eventSource": "application"}, {"structuredData_SODD_int": 3}, {"@id": "8322501-f81-403-b1bd-44ea4a601092", "version": "179887929833886176}, {"version": 179887929833886176}, {"priority": 186}, {"severity": 10}, {"facility": 15}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host18.example.com"}, {"body": "application has started successfully"}, {"opname": "application4"}, {"precid": 6309}, {"version": 1}, {"structuredData_SODD_eventId": 46}, {"structuredData_SODD_eventSource": "application"}, {"structuredData_SODD_int": 5}, {"@id": "a82cc708-32a-4476-aedf-3784fb773052", "version": "179887929833943472}, {"version": 179887929833943472}, {"priority": 176}, {"severity": 10}, {"facility": 22}, {"version": 1}, {"@timestamp": 1715536374988}, {"@source": "host14.example.com"}, {"body": "application1 has exited cleanly"}, {"opname": "application1"}, {"precid": 1859}, {"version": 1}, {"structuredData_SODD_eventId": 47}, {"structuredData_SODD_eventSource": "application"}, {"structuredData_SODD_int": 5}, {"@id": "c2c8dca8-6d5f-4873-a20c-2cb38cf53a6d", "version": "1798879298413194}, {"version": 1798879298413194}, {"priority": 181}, {"severity": 10}, {"facility": 15}, {"version": 1}, {"@timestamp": 1715536374989}, {"@source": "host18.example.com"}, {"body": "application stopped unexpectedly"}, {"opname": "application4"}, {"precid": 17153}, {"version": 1}, {"structuredData_SODD_eventId": 58}, {"structuredData_SODD_eventSource": "python"}, {"structuredData_SODD_int": 9}, {"@id": "a6d66139-c5f-4827-b0eb-f988677fc5x8", "version": "179887929842508400}, {"version": 179887929842508400}, {"priority": 131}, {"severity": 10}, {"facility": 155}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host12.example.com"}, {"body": "application7 has stopped unexpectedly"}, {"opname": "application7"}, {"precid": 13091}, {"version": 1}, {"structuredData_SODD_eventId": 59}, {"structuredData_SODD_eventSource": "kernel"}, {"structuredData_SODD_int": 13}, {"@id": "a6d66139-c5f-4827-b0eb-f988677fc5x8", "version": "17988792984344677632}, {"version": 17988792984344677632}, {"priority": 131}, {"severity": 10}, {"facility": 155}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host12.example.com"}, {"body": "application7 has stopped unexpectedly"}, {"opname": "application7"}, {"precid": 13091}, {"version": 1}, {"structuredData_SODD_eventId": 2}, {"structuredData_SODD_eventSource": "application"}, {"structuredData_SODD_int": 12}, {"@id": "a3290048-774-454-b3e-daa1dc0cbb02", "version": "1798879298479308"}, {"version": 1798879298479308}, {"priority": 181}, {"severity": 10}, {"facility": 18}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host18.example.com"}, {"body": "application8 has started successfully"}, {"opname": "application8"}, {"precid": 5276}, {"version": 1}, {"structuredData_SODD_eventId": 6}, {"structuredData_SODD_eventSource": "kernel"}, {"structuredData_SODD_int": 8}, {"@id": "a441c105-115b-464b-b2cd-d743bf73ca49", "version": "179887929848071936}, {"version": 179887929848071936}, {"version": 179887929848071936}], [{"x": 810, "y": 820}]]
```

```
localhost:8983/solr/#/syslog/query?q=*&q.op=OR&indent=true&useParams=
```

```
[{"priority":1165}, {"severity":1}, {"facility":128}, {"version":1}, {"@timestamp": "1715536374988"}, {"@source": "host1.example.com"}, {"body": "application1 has exited cleanly"}, {"opname": "application1"}, {"precid": 17153}, {"version": 1}, {"structuredData_SODD_eventId": 78}, {"structuredData_SODD_eventSource": "python"}, {"structuredData_SODD_int": 9}, {"@id": "a6d66139-c5f-4827-b0eb-f988677fc5x8", "version": "179887929842508400}, {"version": 179887929842508400}, {"priority": 131}, {"severity": 10}, {"facility": 155}, {"version": 1}, {"@timestamp": 1715536374989}, {"@source": "host18.example.com"}, {"body": "application stopped unexpectedly"}, {"opname": "application4"}, {"precid": 17153}, {"version": 1}, {"structuredData_SODD_eventId": 58}, {"structuredData_SODD_eventSource": "kernel"}, {"structuredData_SODD_int": 13}, {"@id": "a6d66139-c5f-4827-b0eb-f988677fc5x8", "version": "17988792984344677632}, {"version": 17988792984344677632}, {"priority": 131}, {"severity": 10}, {"facility": 155}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host12.example.com"}, {"body": "application7 has stopped unexpectedly"}, {"opname": "application7"}, {"precid": 13091}, {"version": 1}, {"structuredData_SODD_eventId": 2}, {"structuredData_SODD_eventSource": "application"}, {"structuredData_SODD_int": 12}, {"@id": "a3290048-774-454-b3e-daa1dc0cbb02", "version": "1798879298479308"}, {"version": 1798879298479308}, {"priority": 181}, {"severity": 10}, {"facility": 18}, {"version": 1}, {"@timestamp": 1715536374987}, {"@source": "host18.example.com"}, {"body": "application8 has started successfully"}, {"opname": "application8"}, {"precid": 5276}, {"version": 1}, {"structuredData_SODD_eventId": 6}, {"structuredData_SODD_eventSource": "kernel"}, {"structuredData_SODD_int": 8}, {"@id": "a441c105-115b-464b-b2cd-d743bf73ca49", "version": "179887929848071936}, {"version": 179887929848071936}, {"version": 179887929848071936}], [{"x": 810, "y": 820}]]
```

