

Screenshot of the defined parameter within the Parameter Context

Add Parameter Context

SETTINGS

PARAMETERS

INHERITANCE

Name

My First NiFi Flow

Description

Referencing Components

CANCEL

APPLY

My First NiFi Flow Configuration

GENERAL

CONTROLLER SERVICES

Process Group Name

My First NiFi Flow

Process Group Parameter Context

Create new parameter context...

Process Group FlowFile Concurrency

Unbounded

Process Group Outbound Policy

Stream When Available

Process Group Comments

Default FlowFile Expiration

0 sec

Default Back Pressure Object Threshold

10000

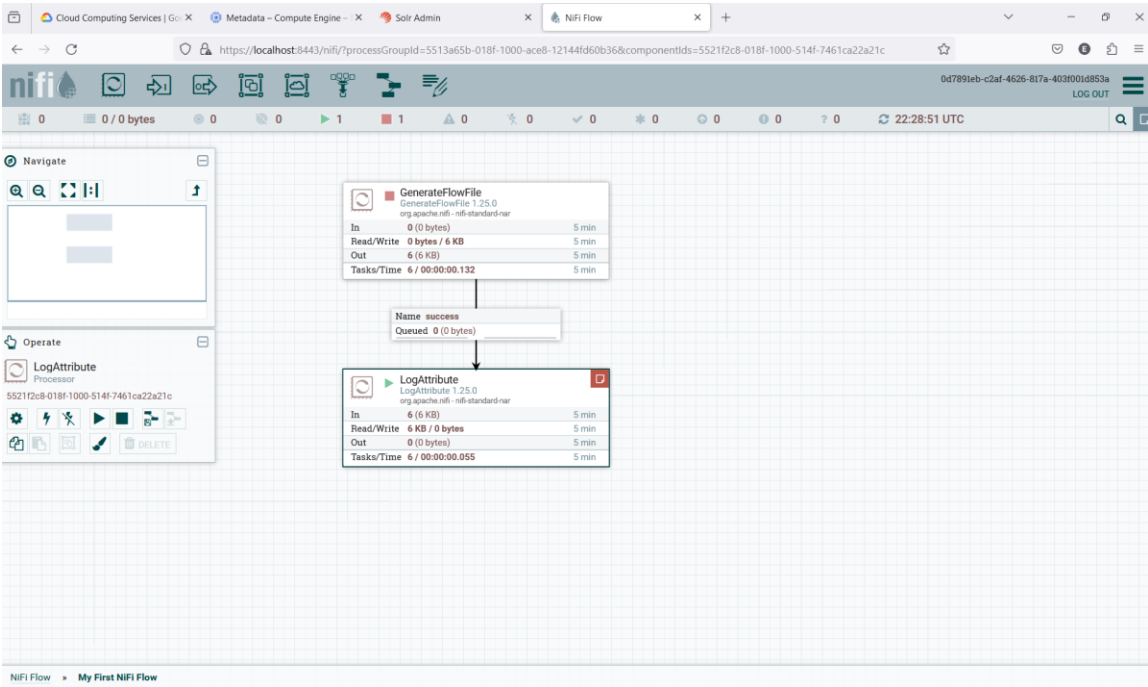
Default Back Pressure Data Size Threshold

1 GB

Log File Suffix

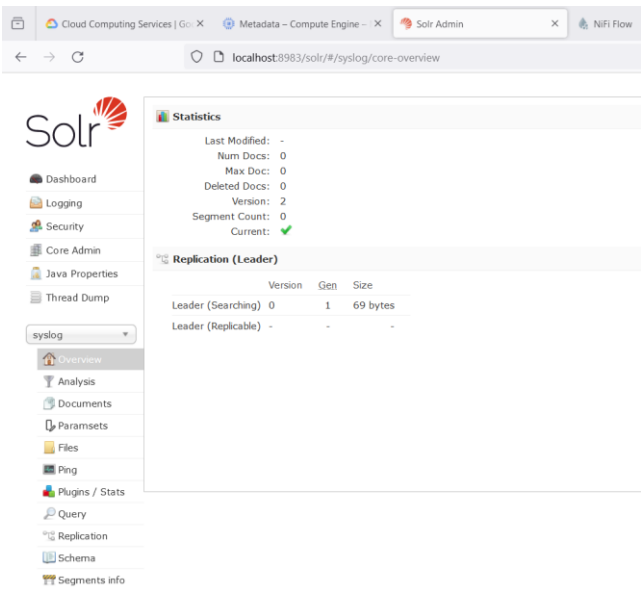
APPLY

Screenshot of the simple flow (GenerateFlowFile to LogAttribute).

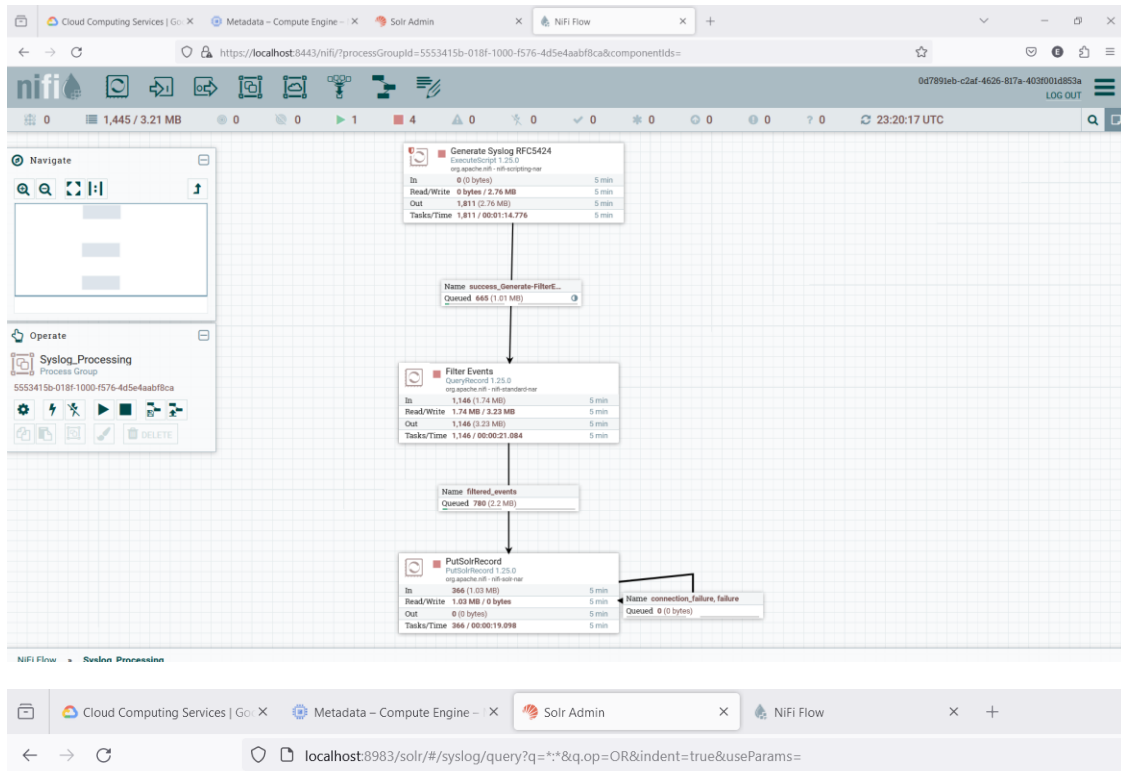


Screenshot confirming the successful creation of the syslog collection

```
rsa-key-20240315@dsc650-kueviakoe: ~/dsc650-infra/bellevue-bigdata/solr
solr@8d1fd8703ca1:/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@8d1fd8703ca1:/opt/solr-9.5.0$
```



Screenshot of the advanced NiFi flow processing and sending data to Solr



The screenshot displays the Solr Admin interface with a browser window showing the URL: `localhost:8983/solr/#/syslog/query?q=*&q.op=OR&indent=true&useParams=`. The interface includes a top navigation bar with tabs for Cloud Computing Services, Metadata - Compute Engine, Solr Admin, and NiFi Flow. The main area shows a query result for the "syslog" collection.

Request-Handler (qt)

`/select`

common

`q: *`

`q.op: OR`

`fq:`

`sort:`

`start, rows: 0, 10`

`fl:`

`df:`

`paramset(s):`

`wt: -----`

☒ `indent on`

☐ `debugQuery`

`defType: -----`

☐ `hl`

☐ `facet`

☐ `spatial`

☐ `spellcheck`

Response

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 2,
    "params": {
      "q": "*",
      "indent": "true",
      "q.op": "OR",
      "useParams": "",
      "_": "1715123398224"
    }
  },
  "response": {
    "numFound": 3660,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": [169],
        "severity": [1],
        "facility": [21],
        "version": [1],
        "timestamp": [1715123771572],
        "hostname": ["host5.example.com"],
        "body": ["application3 has exited cleanly"],
        "appName": ["application3"],
        "procid": [6355],
        "messageid": ["ID41"],
        "structuredData_SDID_eventId": [38],
        "structuredData_SDID_eventSource": ["application"],
        "structuredData_SDID_iut": [1],
        "id": ["db0540db-83c6-4279-a26d-0b4bfd3e9769"],
        "_version_": 1798437803698159616
      }
    ]
  }
}
```

Screenshot of the Solr query results

Hostname = host4.example.com

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

- Request-Handler (qt): /select
- q: hostname:host4.example.com
- q.op: OR
- fq:
- sort:
- start, rows: 0, 10
- df:
- paramset(s): Select paramset(s)
- wt: json
- indent on: ☒
- debugQuery: ☐
- defType:
- hl: ☐
- facet: ☐
- spatial: ☐
- spellcheck: ☐

The response is as follows:

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 46,
    "params": {
      "q": "hostname:host4.example.com",
      "indent": "true",
      "q.op": "OR",
      "useParams": "",
      "_": "1715123398224"
    }
  },
  "response": {
    "numFound": 3660,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": [116],
        "severity": [4],
        "facility": [14],
        "version": [1],
        "timestamp": [1715123771613],
        "hostname": ["host4.example.com"],
        "body": ["application0 has completed gracefully"],
        "appName": ["application0"],
        "procid": [3336],
        "messageid": ["ID43"],
        "structuredData_S0ID_eventId": [47],
        "structuredData_S0ID_eventSource": ["python"],
        "structuredData_S0ID_sut": [8],
        "id": ["db0a4b0b-1833-4dfe-bc89-6b52502fe48d"],
        "_version_": 1798437803840765952
      }
    ]
  }
}
```

Severity is lower than 2

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

- Request-Handler (qt): /select
- q: severity:[* TO 2]
- q.op: OR
- fq:
- sort:
- start, rows: 0, 10
- df:
- paramset(s): Select paramset(s)
- wt: json
- indent on: ☒
- debugQuery: ☐
- defType:
- hl: ☐
- facet: ☐
- spatial: ☐
- spellcheck: ☐

The response is as follows:

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 3,
    "params": {
      "q": "severity:[* TO 2]",
      "indent": "true",
      "q.op": "OR",
      "useParams": "",
      "_": "1715123398224"
    }
  },
  "response": {
    "numFound": 1434,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": [169],
        "severity": [1],
        "facility": [21],
        "version": [1],
        "timestamp": [1715123771572],
        "hostname": ["host5.example.com"],
        "body": ["application3 has exited cleanly"],
        "appName": ["application3"],
        "procid": [6355],
        "messageid": ["ID41"],
        "structuredData_S0ID_eventId": [38],
        "structuredData_S0ID_eventSource": ["application"],
        "structuredData_S0ID_sut": [1],
        "id": ["db0540db-83c6-4279-a26d-8b4b3e9769"],
        "_version_": 1798437803698159616
      }
    ]
  }
}
```

Count number of applications by applicationID

Cloud Computing Services | Go | Metadata - Compute Engine - Solr Admin | Nifi Flow

localhost:8983/solr/#/syslog/query?q=*:*&q.op=OR&indent=true&facet=true&facet.field=appName&facet.sort=count&useParams=

Solr

- Dashboard
- Logging
- Security
- Core Admin
- Java Properties
- Thread Dump
- syslog
 - Overview
 - Analysis
 - Documents
 - Params
 - Files
 - Ping
 - Plugins / Stats
 - Query
 - Replication
 - Schema
 - Segments info

Request-Handler (qt)

/select

common

q

:

q.op

OR

fq

sort

start, rows

0 10

fl

df

paramset(s)

Select paramset(s)...

wt

☒ indent on

☐ debugQuery

defType

☐ hl

☒ facet

facet.query

http://localhost:8983/solr/syslog/select?facet.field=appName&facet.sort=count&facet=true&indent=true&q.op=OR&q=*:*&useParams=

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 36,
    "params": {
      "q": "*:*",
      "facet.field": "appName",
      "indent": "true",
      "q.op": "OR",
      "facet": "true",
      "facet.sort": "count",
      "useParams": "",
      "_": "1715123398224"
    }
  },
  "response": {
    "numFound": 3666,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": [369],
        "severity": [1],
        "facility": [2],
        "version": [1],
        "timestamp": [1715123771572],
        "hostname": ["host5.example.com"],
        "body": ["application3 has exited cleanly"],
        "appName": ["application3"],
        "procid": [6355],
        "messageid": ["ID41"],
        "structuredData_S0ID_eventId": [38],
        "structuredData_S0ID_eventSource": ["application"],
        "structuredData_S0ID_iut": [1],
        "id": ["db8548b-83c6-4279-a26d-8b0bdf3e9769"],
        "_version_": 1798437803698159616
      }
    ],
    "facet_counts": {
      "facet_queries": {
        "priority": [6],
        "severity": [6]
      }
    }
  }
}
```

Cloud Computing Services | Go | Metadata - Compute Engine - Solr Admin | Nifi Flow

localhost:8983/solr/#/syslog/query?q=*:*&q.op=OR&indent=true&facet=true&facet.field=appName&facet.sort=count&useParams=

Solr

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- Logging
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- syslog
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 - Documents
 - Params
 - Files
 - Ping
 - Plugins / Stats
 - Query
 - Replication
 - Schema
 - Segments info

```
{
  "responseHeader": {
    "status": 0,
    "QTime": 122,
    "params": {
      "q": "*:*",
      "facet.field": "appName",
      "indent": "true",
      "q.op": "OR",
      "facet": "true",
      "facet.sort": "count",
      "useParams": "",
      "_": "1715123771623"
    }
  },
  "response": {
    "numFound": 3666,
    "start": 0,
    "numFoundExact": true,
    "docs": [
      {
        "priority": [151],
        "severity": [7],
        "facility": [18],
        "version": [1],
        "timestamp": [1715123771623],
        "hostname": ["host9.example.com"],
        "body": ["application6 has stopped unexpectedly"],
        "appName": ["application6"],
        "procid": [8151],
        "messageid": ["ID48"],
        "structuredData_S0ID_eventId": [83],
        "structuredData_S0ID_eventSource": ["python"],
        "structuredData_S0ID_iut": [5],
        "id": ["f3fd933-6e53-43ab-8d0f-7a81b70b1de8"],
        "_version_": 1798437803869877504
      },
      {
        "priority": [151],
        "severity": [7],
        "facility": [18],
        "version": [1],
        "timestamp": [1715123771627],
        "hostname": ["host1.example.com"],
        "body": ["application9 has started successfully"],
        "appName": ["application9"],
        "procid": [7126],
        "messageid": ["ID32"],
        "structuredData_S0ID_eventId": [97],
        "structuredData_S0ID_eventSource": ["application"],
        "structuredData_S0ID_iut": [7],
        "id": ["7864e15f-d855-41a7-9169-b4d482a4d76a"],
        "_version_": 1798437803877466112
      }
    ],
    "facet_counts": {
      "facet_queries": {
        "priority": {
          "application3": 386, "application5": 383, "application1": 375, "application7": 374, "application2": 373, "application18": 366, "application9": 364, "appli
        }
      },
      "facet_fields": {
        "appName": {
          "application3": 386, "application5": 383, "application1": 375, "application7": 374, "application2": 373, "application18": 366, "application9": 364, "appli
        }
      },
      "facet_ranges": {
      },
      "facet_intervals": {
      },
      "facet_heatmaps": {
      }
    }
  }
}
```