

PGR Services v2.0

Overview

Public Grievances & Redressal (PGR) is a system that enables citizens to raise a complaint with the ULB's. Citizen can track the complaint, upload image related to the complaint, re-open the complaint if he/she is not satisfied and rate the service. This document contains the details about how to setup pgr-service and describes the functionalities it provides.

Pre-requisites

Before you proceed with the configuration, make sure the following pre-requisites are met -

- *Java 8*
- Kafka server is up and running
- egov-persister service is running and has pgr-services persister config path added in it
- PSQL server is running and database is created to store complaint data
- *(Optional)* Indexer config for pgr-services is added in egov-indexer yaml paths to index the generated data. Index are required for data visualisation in kibana or in DSS.
- *(Optional)* Report config for pgr-services is added in Report service config paths. Required if reports are to be provided to the user.
- Following services should be up and running:
 - egov-user
 - egov-workflow-v2
 - egov-persister
 - egov-localization
 - egov-notification-sms
 - egov-mdms
 - egov-idgen
 - egov-url-shortening
 - egov-hrms

Key Functionalities

- Citizen can file, track and rate the complaint
- Citizen can add image and comments related to the complaint
- Citizen can re-open the complaint in certain given period of time after resolution
- ULB can setup the complaint workflow according to their requirements and staff capacity

- ULB can track the SLA for resolving each complaint and can use it as a metric to streamline the process for resolving complaints
- Department wise assignment of the complaint to the LME

Deployment Details

1. Deploy the latest version of pgr-services
2. Add pgr-service-persister.yml file in config folder in git and add that path in persister .
(The file path is to be added in environment yaml file in param called persist-yml-path)
3. If any Report Config is created, the config should be added to config folder in git and that path should be added in Report service. (The file path is to be added in file called "reportFileLocationsv1.txt" in Config folder)
4. If index are to be created add the indexer config path in indexer service. (The file path is to be added in environment yaml file in param called egov-indexer-yaml-repo-path)

Configuration Details

- Add master data in MDMS service with module name as RAINMAKER-PGR. Following is some sample master data for the service:

```
{
  "tenantId": "pb",
  "moduleName": "RAINMAKER-PGR",
  "ServiceDefs": [
    {
      "serviceCode": "NoStreetlight",
      "keywords": "streetlight, light, repair, work, pole, electric, power, repair, damage, fix",
      "department": "Streetlights",
      "slaHours": 336,
      "menuPath": "StreetLights",
      "active": false,
      "order": 1
    },
    {
      "serviceCode": "StreetLightNotWorking",
      "keywords": "streetlight, light, repair, work, pole, electric, power, repair, fix",
      "department": "DEPT_1",
      "slaHours": 336,
      "menuPath": "StreetLights",
      "active": true,
      "order": 2
    },
    {
      "serviceCode": "GarbageNeedsTobeCleared",
```

```

    "keywords": "garbage, collect, litter, clean, door, waste, remove, sweeper, sanitation,
dump, health, debris, throw",
    "department": "DEPT_25",
    "slaHours": 336,
    "menuPath": "Garbage",
    "active": true,
    "order": 3
  }
]
}

```

- Create businessService (workflow configuration) using the `/businessservice/_create`. Following is the product configuration for PGR:

```

{
  "RequestInfo": {
    "apild": "Rainmaker",
    "action": "",
    "did": 1,
    "key": "",
    "msgId": "20170310130900|en_IN",
    "requesterId": "",
    "ts": 1513579888683,
    "ver": ".01",
    "authToken": "{{devAuth}}",
    "userInfo": {
      "id": 73,
      "userName": null,
      "name": null,
      "type": "EMPLOYEE",
      "mobileNumber": null,
      "emailId": null,
      "roles": [
        {
          "id": 2,
          "name": "Customer Support Representative",
          "code": null,
          "tenantId": null
        }
      ],
      "tenantId": null,
      "uuid": "uuid"
    }
  },
}

```

```
"BusinessServices": [
  {
    "tenantId": "pb",
    "businessService": "PGR",
    "business": "pgr-services",
    "businessServiceSla": 432000000,
    "states": [
      {
        "sla": null,
        "state": null,
        "applicationStatus": null,
        "docUploadRequired": false,
        "isStartState": true,
        "isTerminateState": false,
        "isStateUpdatable": true,
        "actions": [
          {
            "action": "APPLY",
            "nextState": "PENDINGFORASSIGNMENT",
            "roles": [
              "CITIZEN",
              "CSR"
            ]
          }
        ]
      }
    ],
  },
  {
    "sla": null,
    "state": "PENDINGFORASSIGNMENT",
    "applicationStatus": "PENDINGFORASSIGNMENT",
    "docUploadRequired": false,
    "isStartState": false,
    "isTerminateState": false,
    "isStateUpdatable": false,
    "actions": [
      {
        "action": "COMMENT",
        "nextState": "PENDINGFORASSIGNMENT",
        "roles": [
          "CITIZEN"
        ]
      }
    ],
  },
  {
    "action": "ASSIGN",
```

```
    "nextState": "PENDINGATLME",
    "roles": [
      "GRO",
      "DGRO"
    ]
  },
  {
    "action": "REJECT",
    "nextState": "REJECTED",
    "roles": [
      "GRO",
      "DGRO"
    ]
  }
],
},
{
  "sla": null,
  "state": "PENDINGFORREASSIGNMENT",
  "applicationStatus": "PENDINGFORREASSIGNMENT",
  "docUploadRequired": false,
  "isStartState": false,
  "isTerminateState": false,
  "isStateUpdatable": false,
  "actions": [
    {
      "action": "COMMENT",
      "nextState": "PENDINGFORREASSIGNMENT",
      "roles": [
        "CITIZEN"
      ]
    },
    {
      "action": "REASSIGN",
      "nextState": "PENDINGATLME",
      "roles": [
        "GRO",
        "DGRO"
      ]
    }
  ],
},
{
  "action": "REJECT",
  "nextState": "REJECTED",
  "roles": [
```

```
        "GRO",
        "DGRO"
    ]
}
]
},
{
    "sla": 259200000,
    "state": "PENDINGATLME",
    "applicationStatus": "PENDINGATLME",
    "docUploadRequired": false,
    "isStartState": false,
    "isTerminateState": false,
    "isStateUpdatable": false,
    "actions": [
        {
            "action": "COMMENT",
            "nextState": "PENDINGATLME",
            "roles": [
                "CITIZEN"
            ]
        },
        {
            "action": "RESOLVE",
            "nextState": "RESOLVED",
            "roles": [
                "PGR_LME"
            ]
        },
        {
            "action": "REASSIGN",
            "nextState": "PENDINGFORREASSIGNMENT",
            "roles": [
                "PGR_LME"
            ]
        }
    ]
},
{
    "sla": null,
    "state": "REJECTED",
    "applicationStatus": "REJECTED",
    "isStateUpdatable": false,
```

```
"docUploadRequired": false,
"isStartState": false,
"isTerminateState": true,
"actions": [
  {
    "action": "COMMENT",
    "nextState": "REJECTED",
    "roles": [
      "CITIZEN"
    ]
  },
  {
    "action": "REOPEN",
    "nextState": "PENDINGFORASSIGNMENT",
    "roles": [
      "CFC",
      "CSR",
      "CITIZEN"
    ]
  },
  {
    "action": "RATE",
    "nextState": "CLOSEDAFTERREJECTION",
    "roles": [
      "CFC",
      "CITIZEN"
    ]
  }
],
{
  "sla": null,
  "state": "RESOLVED",
  "applicationStatus": "RESOLVED",
  "isStateUpdatable": false,
  "docUploadRequired": false,
  "isStartState": false,
  "isTerminateState": true,
  "actions": [
    {
      "action": "COMMENT",
      "nextState": "RESOLVED",
      "roles": [
        "CITIZEN"
```

```
]
},
{
  "action": "REOPEN",
  "nextState": "PENDINGFORASSIGNMENT",
  "roles": [
    "CFC",
    "CSR",
    "CITIZEN"
  ]
},
{
  "action": "RATE",
  "nextState": "CLOSEDAFTERRESOLUTION",
  "roles": [
    "CFC",
    "CITIZEN"
  ]
}
],
},
{
  "sla": null,
  "state": "CLOSEDAFTERREJECTION",
  "applicationStatus": "CLOSEDAFTERREJECTION",
  "isStateUpdatable": false,
  "docUploadRequired": false,
  "isStartState": false,
  "isTerminateState": true
},
{
  "sla": null,
  "state": "CLOSEDAFTERRESOLUTION",
  "applicationStatus": "CLOSEDAFTERRESOLUTION",
  "isStateUpdatable": false,
  "docUploadRequired": false,
  "isStartState": false,
  "isTerminateState": true
}
]
}
]
```


- Using /localization/messages/v1/_upsert , add localisation (templates) for notification messages to be sent. Following are the product notification templates:

```
{
  "messages": [
    {
      "code": "PGR_APPLY_PENDINGFORASSIGNMENT_SMS_MESSAGE",
      "message": "Dear Citizen, Your complaint for <complaint_type> has been submitted with ID <id> on <date>. You can track your complaint status on the mSeva Punjab mobile App (download here - <download link>) or your local municipal web portal.",
      "module": "rainmaker-pgr",
      "locale": "en_IN"
    },
    {
      "code": "PGR_RESOLVE_RESOLVED_SMS_MESSAGE",
      "message": "Dear Citizen, Your complaint for <complaint_type> with ID <id> submitted on <date> has been resolved by <emp_name>. If you are not satisfied with service you can REOPEN complaint through mSeva Punjab mobile App (download here - <download_link>) or your local municipal web portal or by calling our CSR.",
      "module": "rainmaker-pgr",
      "locale": "en_IN"
    },
    {
      "code": "PGR_REOPEN_PENDINGFORASSIGNMENT_SMS_MESSAGE",
      "message": "Dear Citizen, Your complaint for <complaint_type> with ID <id> submitted on <date> has been RE-OPEN as per your request. You can track your complaint status and connect with our officials on the mSeva Punjab mobile App (download here - <download_link>) or your local municipal web portal.",
      "module": "rainmaker-pgr",
      "locale": "en_IN"
    },
    {
      "code": "PGR_REJECT_REJECTED_SMS_MESSAGE",
      "message": "Dear Citizen, Your complaint for <complaint_type> with ID <id> submitted on <date> has been rejected. Reason for Rejection: <reason>, Additional Comments: <additional_comments> If you wish to re-open the complaint, you can download the mSeva Punjab mobile app (download here - <download_link>) or visit your local municipal website.",
      "module": "rainmaker-pgr",
      "locale": "en_IN"
    },
    {
      "code": "PGR_REASSIGN_PENDINGATLME_SMS_MESSAGE",
```

```

    "message": "Dear Citizen, Your complaint for <complaint_type> with ID <id>
submitted on <date> has been re-assigned to <reassign_emp_name>,
<emp_designation>, <emp_department>. You can track your complaint status and
connect with our officials on the mSeva Punjab mobile App (download here -
<download_link>) or your local municipal web portal.",
    "module": "rainmaker-pgr",
    "locale": "en_IN"
  }
]
}

```

- Add Role-Action mapping for the API's in MDMS. Following are the required entries. They should be mapped to both CITIZEN and appropriate employee roles.

```

{
  {
    "id": {{ID_PLACEHOLDER}},
    "name": "Create PGR Request",
    "url": "/pgr-services/v2/request/_create",
    "parentModule": "",
    "displayName": "Create PGR Request",
    "orderNumber": 0,
    "enabled": false,
    "serviceCode": "pgr-services",
    "code": "null",
    "path": ""
  },
  {
    "id": {{ID_PLACEHOLDER}},
    "name": "Update PGR Request",
    "url": "/pgr-services/v2/request/_update",
    "parentModule": "",
    "displayName": "Update PGR Request",
    "orderNumber": 0,
    "enabled": false,
    "serviceCode": "pgr-services",
    "code": "null",
    "path": ""
  },
  {
    "id": {{ID_PLACEHOLDER}},
    "name": "Search PGR Request",
    "url": "/pgr-services/v2/request/_search",
    "parentModule": "",

```

```

    "displayName": "Search PGR Request",
    "orderNumber": 0,
    "enabled": false,
    "serviceCode": "pgr-services",
    "code": "null",
    "path": ""
  },
  {
    "id": {{ID_PLACEHOLDER}},
    "name": "Search PGR Request",
    "url": "/pgr-services/v2/request/_count",
    "parentModule": "",
    "displayName": "Count PGR Request",
    "orderNumber": 0,
    "enabled": false,
    "serviceCode": "pgr-services",
    "code": "null",
    "path": ""
  }
}

```

Integration

Integration Scope

PGR service can be integrated with any organization or system which wants to track customer queries or complaint. The organizations can customize the workflow depending on the product requirements

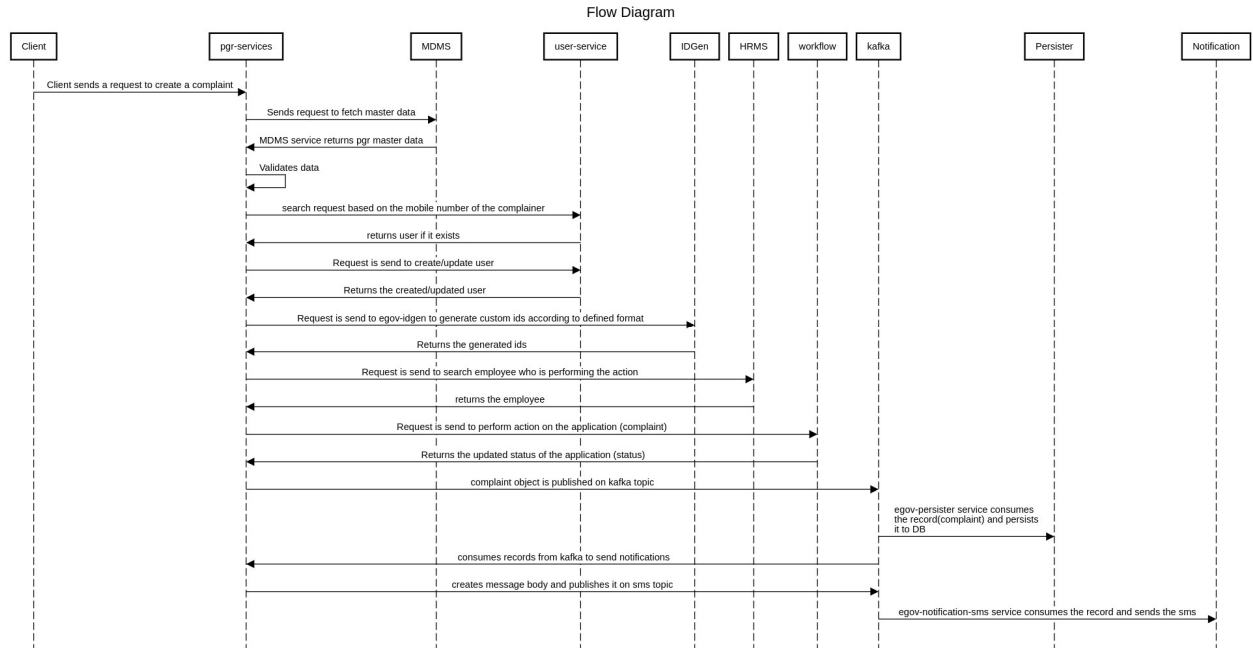
Integration Benefits

- Easy tracking and resolution of complaints
- Configurable workflow according to client requirement

Steps to Integration

1. Customer can raise a complaint using the /requests/_create
2. Organization or System can search the complaint using /requests/_searchendpoint
3. Once the complaint is raised the organization or system can call /requests/_update endpoint to move the application further in workflow until it get resolved

Interaction Diagram



Reference Docs

Doc Links

| Title | Link |
|-------------------------------------|----------------------------------|
| Workflow Technical Document | Workflow Service |
| User Technical Document | User Service |
| MDMS Technical Document | NEEDS TO BE UPDATED |
| IDGen Technical Document | NEEDS TO BE UPDATED |
| Localization Technical Document | NEEDS TO BE UPDATED |
| Persister Technical Document | NEEDS TO BE UPDATED |
| SMS Notification Technical Document | NEEDS TO BE UPDATED |
| HRMS Technical Document | NEEDS TO BE UPDATED |

API List

| Title | Link |
|------------------|---|
| /request/_create | https://www.getpostman.com/collections/09154f94d2c291a96777 |
| /request/_update | https://www.getpostman.com/collections/09154f94d2c291a96777 |

| | |
|------------------|---|
| /request/_search | https://www.getpostman.com/collections/09154f94d2c291a96777 |
| /request/_count | https://www.getpostman.com/collections/09154f94d2c291a96777 |