

NUS IT Database Admin Console Application Project

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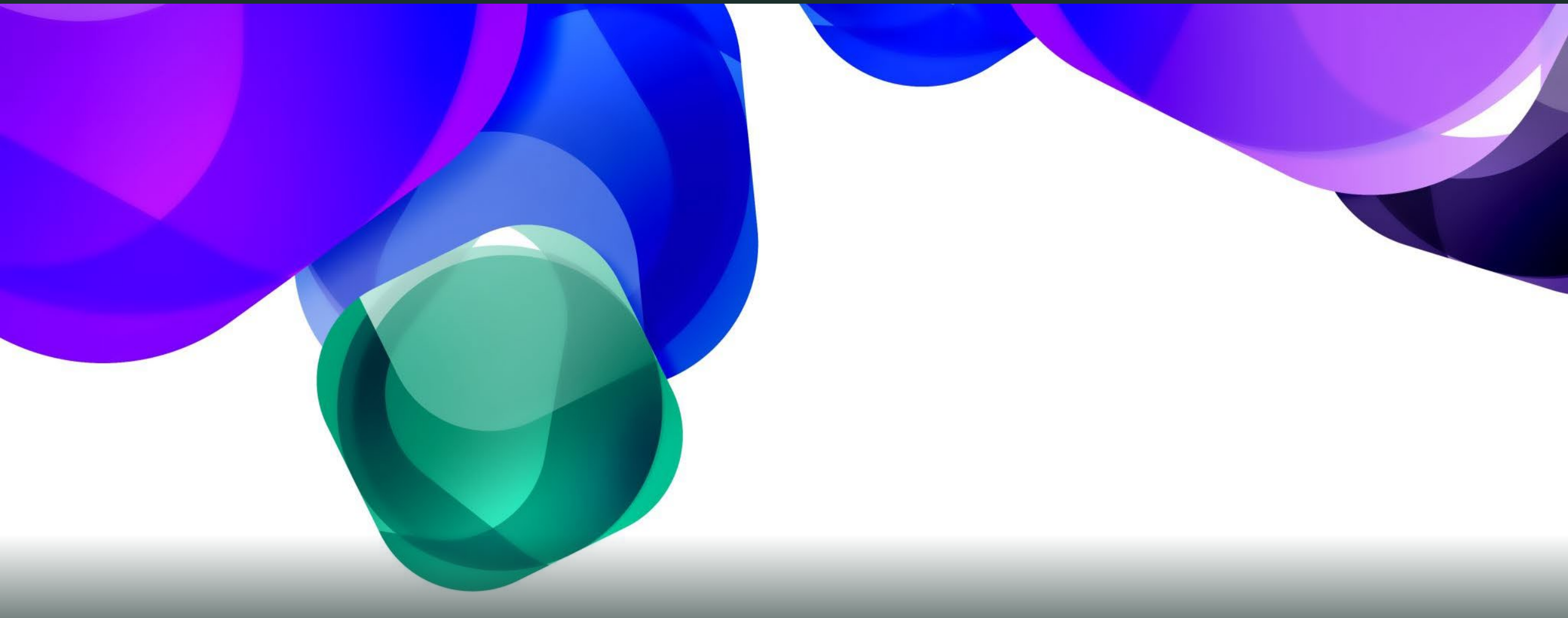


Table of content

1. Application Overview
2. Application Walkthrough
 1. SysJob Alerts Menu
 2. SysJobs/History Menu
 3. API(s)
3. Future Implementation(s)



1. Project Overview



WEB APPLICATION
(SPRING BOOT +
REACTJS)



PULLING JOB-ALERT
DATA FROM SQL-
SERVER (MULTIPLE)

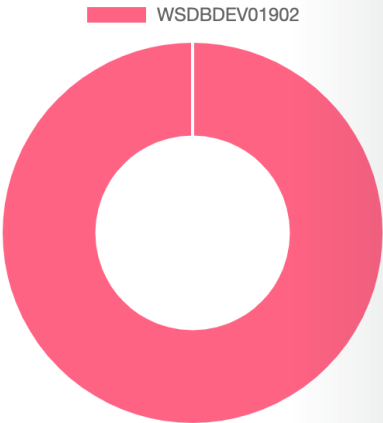


DEPLOYED IN
PRODUCTION SERVER
(JBOSS-EAP)

SysJob Alerts

System Job Alerts with Daily Failed Job Counts

Run Duration is in minutes



2.1 Application Walkthrough - SysJobs Alerts Menu

Show entries 10

Search

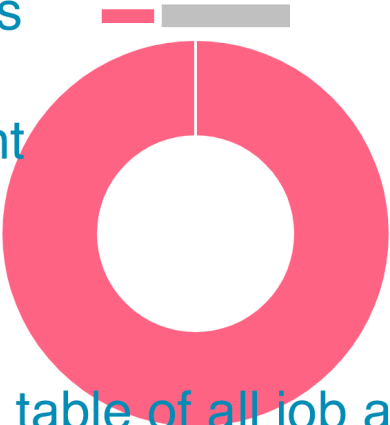
server	jobName	failedCount	run date	run duration	message	
	SafeTest1	1	2021-01-04T11:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T12:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T13:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T14:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T15:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T16:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T17:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T18:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T19:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-04T20:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
server	jobName	failedCount	run date	run duration	message	

SysJob Alerts

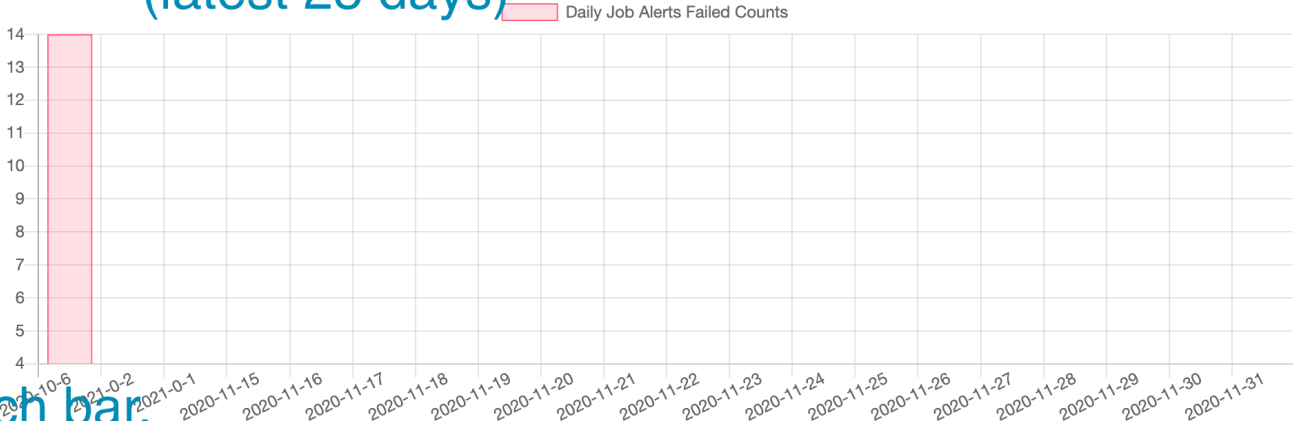
System Job Alerts with Daily Failed Job Counts

Run Duration is in minutes

Pi-Chart displays number of job alerts by different server



Daily Failed Job alerts count (latest 25 days)



Interactive data table of all job alerts (search bar, entries drop down list filter, page buttons)

Show entries 10

server	jobName	failedCount	run date	run duration	message	
	SafeTest1	1	2021-01-03T12:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T13:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T14:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T15:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T16:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T17:00:00	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T18:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T19:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T20:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
	SafeTest1	1	2021-01-03T21:00:01	0	Executed as user:	Invalid object name 'sysobjects11'. [SQLSTATE 42S02] (Error 208). The step failed.
server	jobName	failedCount	run date	run duration	message	

SysJob Data Table

This chart displays the number of job alert triggered on a daily basis.

Show entries 10

Search

jobId	name	enabled	description	dateCreated	dateModified	version
040ABA23-03A1-4981-9245-7582D11B7B54	sypolicy_purge_history	1	No description available.	2018-09-24T07:11:11.263+0000	2018-09-24T07:11:11.683+0000	5
C7103EFA-C4A1-4AD5-A958-CF42580E6C50	test	1	No description available.	2020-12-22T09:17:31.401+0000	2020-12-22T09:17:31.531+0000	5
275504B5-DC22-42DA-AEF2-446542D0F916	test	1	No description available.	2020-11-06T06:01:43.147+0000	2020-11-06T06:19:44.393+0000	4
5297A20B-A945-4F1A-9FB0-87F51F6DF3CE	sypolicy_purge_history	1	No description available.	2020-04-07T05:37:33.142+0000	2020-04-07T05:37:33.620+0000	5
615773AE-B8C2-4B26-B73F-B1867F5B8766	SafeTest2	1	No description available.	2020-12-08T09:17:32.340+0000	2020-12-08T09:17:32.340+0000	3
2B766339-76AD-473C-A7A4-DF750CB17BF1	SafeTest1	1	No description available.	2020-12-08T09:16:31.380+0000	2020-12-08T09:17:00.430+0000	4
jobId	name	enabled	description	dateCreated	dateModified	version

Showing 1 to 6 of 6 entries

Previous

1

Next

SysJob History Table

Displaying all rows from SysJob History Table.

Show entries 10

Search

instancelId	jobId	stepName	sqlMessageId	sqlSeverity	server
1849	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7416	16	
1850	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1851	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7416	16	
1852	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1853	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7416	16	
1854	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1855	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7421	16	
1856	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1857	275504B5-DC22-42DA-AEF2-446542D0F916	covid	207	16	
1858	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
instancelId	jobId	stepName	sqlMessageId	sqlSeverity	server

Showing 1 to 10 of 450 entries

Previous

1

2

3

4

5

6

7

8

Next

SQL Server ID:

All

Filter all data tables by specific SQL server/display from all servers

Click on the dropdown to change fetching data from different SQL Servers.

SysJob Data Table

Datatable of all data from SysJobs Table

This chart displays the number of job alert triggered on a daily basis.

Show entries

10

Search

jobId	name	enabled	description	dateCreated	dateModified	version
040ABA23-03A1-4981-9245-7582D11B7B54	syspolicy_purge_history	1	No description available.	2018-09-24T03:11:11.263+0000	2018-09-24T03:11:11.683+0000	5
C7103EFA-C4A1-4AD5-A958-CF42580E6C50	test	1	No description available.	2020-12-22T02:30:21.140+0000	2020-12-22T02:31:51.643+0000	5
275504B5-DC22-42DA-AEF2-446542D0F916	test	1	No description available.	2020-11-06T06:01:43.147+0000	2020-11-06T06:19:44.393+0000	4
5297A20B-A945-4F1A-9FB0-87F51F6DF3CE	syspolicy_purge_history	1	No description available.	2020-04-07T05:37:33.420+0000	2020-04-07T05:37:33.620+0000	5
615773AE-B8C2-4B26-B73F-B1867F5B8766	SafeTest2	1	No description available.	2020-12-08T09:17:32.573+0000	2020-12-08T09:17:32.640+0000	3
2B766339-76AD-473C-A7A4-DF750CB17BF1	SafeTest1	1	No description available.	2020-12-08T09:16:31.380+0000	2020-12-08T09:17:00.430+0000	4
jobId	name	enabled	description	dateCreated	dateModified	version

Showing 1 to 6 of 6 entries

Previous1Next

SysJob History Table

Datatable of all data from SysJobs History Table

Displaying all rows from SysJob History Table.

Show entries

10

Search

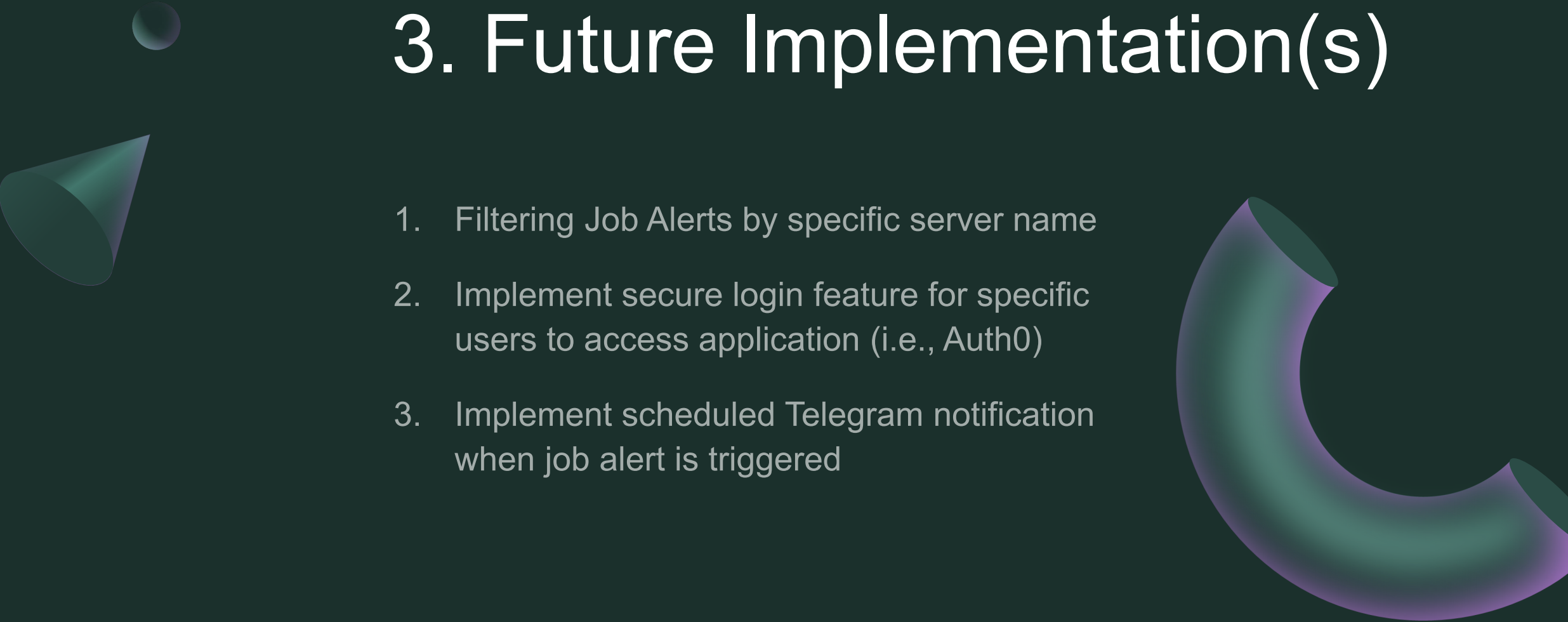
instanceId	jobId	stepName	sqlMessageId	sqlSeverity	server
1849	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7416	16	7
1850	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1851	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7416	16	
1852	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1853	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7416	16	
1854	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	
1855	275504B5-DC22-42DA-AEF2-446542D0F916	covid	7421	16	
1856	275504B5-DC22-42DA-AEF2-446542D0F916	(Job outcome)	0	0	

2.3 API(s)

API web context starts from "/api/"

1. "/sysjobs/all" : retrieves all sysjob data
2. "/sysjobs/[sql_server_name]": retrieves all sysjob data by specific SQL server
3. "/sysjobs/jobalerts": retrieves all sysjob alert data (only fetch all operation is available)
4. "/sysjobhistory/[all/sql_server_name]": retrieves all or specific sql server job history data





3. Future Implementation(s)

1. Filtering Job Alerts by specific server name
2. Implement secure login feature for specific users to access application (i.e., Auth0)
3. Implement scheduled Telegram notification when job alert is triggered