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"annotations": {
 "list": [
  {
    "builtIn": 1,
    "datasource": {
     "type": "grafana",
     "uid": "-- Grafana --"
   },
    "enable": true,
    "hide": true,
    "iconColor": "rgba(0, 211, 255, 1)",
    "name": "Annotations & Alerts",
    "target": {
     "limit": 100,
     "matchAny": false,
     "tags": [],
     "type": "dashboard"
   },
    "type": "dashboard"
  }
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},
"description": "Swarms Cloud Monitoring",
"editable": true,
"fiscalYearStartMonth": 0,
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"graphTooltip": 0,
"id": 29,
"links": [],
"liveNow": false,
"panels": [
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    "uid": "prometheus"
  },
  "description": "End to end request latency measured in seconds.",
  "fieldConfig": {
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     "color": {
      "mode": "palette-classic"
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     "custom": {
      "axisCenteredZero": false,
      "axisColorMode": "text",
      "axisLabel": "",
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  "viz": false
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 "lineWidth": 1,
 "pointSize": 5,
 "scaleDistribution": {
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 "showPoints": "auto",
 "spanNulls": false,
 "stacking": {
  "group": "A",
  "mode": "none"
 },
 "thresholdsStyle": {
  "mode": "off"
 }
},
"mappings": [],
"thresholds": {
 "mode": "absolute",
 "steps": [
  {
    "color": "green",
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```
"value": null
     },
     {
      "color": "red",
      "value": 80
     }
   ]
  },
  "unit": "s"
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 "overrides": []
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 "x": 0,
 "y": 0
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"id": 9,
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  "placement": "bottom",
  "showLegend": true
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        "mode": "single",
        "sort": "none"
      }
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     "targets": [
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         "uid": "prometheus"
       },
        "disableTextWrap": false,
        "editorMode": "builder",
                                               "expr":
                                                          "histogram_quantile(0.99,
                                                                                        sum
                                                                                                by(le)
(rate(vllm:e2e_request_latency_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])
))",
        "fullMetaSearch": false,
        "includeNullMetadata": false,
        "instant": false,
        "legendFormat": "P99",
        "range": true,
        "refld": "A",
        "useBackend": false
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      {
        "datasource": {
```

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"type": "prometheus",
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       "disableTextWrap": false,
       "editorMode": "builder",
                                              "expr":
                                                         "histogram_quantile(0.95,
                                                                                      sum
                                                                                              by(le)
(rate(vllm:e2e_request_latency_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])
))",
       "fullMetaSearch": false,
       "hide": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P95",
       "range": true,
       "refld": "B",
       "useBackend": false
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         "uid": "prometheus"
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       "editorMode": "builder",
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                                               "expr":
                                                                                      sum
                                                                                              by(le)
(rate(vllm:e2e_request_latency_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])
```

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"fullMetaSearch": false,
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        "includeNullMetadata": false,
        "instant": false,
       "legendFormat": "P90",
       "range": true,
       "refld": "C",
       "useBackend": false
      },
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       "datasource": {
         "type": "prometheus",
         "uid": "prometheus"
       },
       "disableTextWrap": false,
       "editorMode": "builder",
                                                           "histogram_quantile(0.5,
                                                "expr":
                                                                                                by(le)
                                                                                        sum
(rate(vllm:e2e_request_latency_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])
))",
       "fullMetaSearch": false,
        "hide": false,
       "includeNullMetadata": false,
        "instant": false,
       "legendFormat": "P50",
       "range": true,
```

))",

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"refld": "D",
       "useBackend": false
      },
      {
       "datasource": {
        "type": "prometheus",
        "uid": "prometheus"
       },
       "editorMode": "code",
                                                                                             "expr":
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\nrate(vllm:e2e_request_latency_seconds_count{model_name=\"$model_name\"}[$__rate_interval])
       "hide": false,
       "instant": false,
       "legendFormat": "Average",
       "range": true,
       "refld": "E"
      }
    ],
     "title": "E2E Request Latency",
     "type": "timeseries"
   },
   {
     "datasource": {
      "type": "prometheus",
```

```
"uid": "prometheus"
},
"description": "Number of tokens processed per second",
"fieldConfig": {
 "defaults": {
  "color": {
    "mode": "palette-classic"
  },
  "custom": {
    "axisCenteredZero": false,
    "axisColorMode": "text",
    "axisLabel": "",
    "axisPlacement": "auto",
    "barAlignment": 0,
    "drawStyle": "line",
    "fillOpacity": 0,
    "gradientMode": "none",
    "hideFrom": {
     "legend": false,
     "tooltip": false,
     "viz": false
    },
    "lineInterpolation": "linear",
    "lineWidth": 1,
    "pointSize": 5,
    "scaleDistribution": {
```

```
"type": "linear"
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 "showPoints": "auto",
 "spanNulls": false,
 "stacking": {
  "group": "A",
  "mode": "none"
 },
 "thresholdsStyle": {
  "mode": "off"
 }
},
"mappings": [],
"thresholds": {
 "mode": "absolute",
 "steps": [
  {
    "color": "green",
    "value": null
  },
  {
    "color": "red",
    "value": 80
  }
}
```

```
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 "overrides": []
},
"gridPos": {
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 "w": 12,
 "x": 12,
 "y": 0
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"id": 8,
"options": {
 "legend": {
  "calcs": [],
   "displayMode": "list",
  "placement": "bottom",
  "showLegend": true
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 "tooltip": {
  "mode": "single",
  "sort": "none"
 }
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"targets": [
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   "datasource": {
    "type": "prometheus",
```

```
},
       "disableTextWrap": false,
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       "expr": "rate(vllm:prompt_tokens_total{model_name=\"$model_name\"}[$__rate_interval])",
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       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "Prompt Tokens/Sec",
       "range": true,
       "refld": "A",
       "useBackend": false
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      {
       "datasource": {
        "type": "prometheus",
        "uid": "prometheus"
       },
       "disableTextWrap": false,
       "editorMode": "builder",
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       "fullMetaSearch": false,
       "hide": false,
       "includeNullMetadata": false,
       "instant": false,
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"uid": "prometheus"

```
"legendFormat": "Generation Tokens/Sec",
    "range": true,
    "refld": "B",
    "useBackend": false
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 "title": "Token Throughput",
 "type": "timeseries"
},
{
 "datasource": {
  "type": "prometheus",
  "uid": "prometheus"
 },
 "description": "Inter token latency in seconds.",
 "fieldConfig": {
  "defaults": {
    "color": {
     "mode": "palette-classic"
   },
    "custom": {
     "axisCenteredZero": false,
     "axisColorMode": "text",
     "axisLabel": "",
     "axisPlacement": "auto",
     "barAlignment": 0,
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 "gradientMode": "none",
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  "tooltip": false,
  "viz": false
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 "lineInterpolation": "linear",
 "lineWidth": 1,
 "pointSize": 5,
 "scaleDistribution": {
  "type": "linear"
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 "showPoints": "auto",
 "spanNulls": false,
 "stacking": {
  "group": "A",
  "mode": "none"
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 "thresholdsStyle": {
  "mode": "off"
 }
},
"mappings": [],
"thresholds": {
```

```
"mode": "absolute",
    "steps": [
     {
      "color": "green",
      "value": null
     },
     {
      "color": "red",
      "value": 80
     }
   ]
  },
  "unit": "s"
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"id": 10,
"options": {
 "legend": {
  "calcs": [],
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```
"placement": "bottom",
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      "tooltip": {
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       "sort": "none"
      }
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         "uid": "prometheus"
       },
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       "editorMode": "builder",
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                                               "expr":
                                                                                                by(le)
                                                                                       sum
(rate(vllm:time_per_output_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interva
l])))",
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        "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P99",
       "range": true,
       "refld": "A",
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"displayMode": "list",

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"useBackend": false
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      {
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        "type": "prometheus",
        "uid": "prometheus"
       },
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       "editorMode": "builder",
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                                               "expr":
                                                                                               by(le)
                                                                                       sum
(rate(vllm:time_per_output_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interva
l])))",
       "fullMetaSearch": false,
       "hide": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P95",
       "range": true,
       "refld": "B",
       "useBackend": false
      },
      {
       "datasource": {
        "type": "prometheus",
        "uid": "prometheus"
       },
```

```
"disableTextWrap": false,
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                                                                                               by(le)
                                                                                       sum
(rate(vllm:time_per_output_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interva
l])))",
       "fullMetaSearch": false,
       "hide": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P90",
       "range": true,
       "refld": "C",
       "useBackend": false
      },
      {
       "datasource": {
         "type": "prometheus",
         "uid": "prometheus"
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       "editorMode": "builder",
                                                          "histogram_quantile(0.5,
                                                "expr":
                                                                                       sum
                                                                                               by(le)
(rate(vllm:time_per_output_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interva
l])))",
       "fullMetaSearch": false,
       "hide": false,
```

```
"instant": false,
       "legendFormat": "P50",
       "range": true,
       "refld": "D",
       "useBackend": false
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      {
       "datasource": {
         "type": "prometheus",
        "uid": "prometheus"
       },
       "editorMode": "code",
                                                                                              "expr":
"rate(vllm:time_per_output_token_seconds_sum{model_name=\"$model_name\"}[$__rate_interval])\
n/\nrate(vllm:time_per_output_token_seconds_count{model_name=\"$model_name\"}[$__rate_inter
val])",
       "hide": false,
       "instant": false,
       "legendFormat": "Mean",
       "range": true,
       "refld": "E"
      }
     ],
     "title": "Time Per Output Token Latency",
     "type": "timeseries"
```

"includeNullMetadata": false,

```
},
{
 "datasource": {
  "type": "prometheus",
  "uid": "prometheus"
 },
 "description": "Number of requests in RUNNING, WAITING, and SWAPPED state",
 "fieldConfig": {
  "defaults": {
    "color": {
     "mode": "palette-classic"
   },
    "custom": {
     "axisCenteredZero": false,
     "axisColorMode": "text",
     "axisLabel": "",
     "axisPlacement": "auto",
     "barAlignment": 0,
     "drawStyle": "line",
     "fillOpacity": 0,
     "gradientMode": "none",
     "hideFrom": {
      "legend": false,
      "tooltip": false,
      "viz": false
     },
```

```
"lineInterpolation": "linear",
 "lineWidth": 1,
 "pointSize": 5,
 "scaleDistribution": {
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 "showPoints": "auto",
 "spanNulls": false,
 "stacking": {
  "group": "A",
  "mode": "none"
 },
 "thresholdsStyle": {
  "mode": "off"
 }
},
"mappings": [],
"thresholds": {
 "mode": "absolute",
 "steps": [
  {
    "color": "green",
    "value": null
  },
  {
    "color": "red",
```

```
"value": 80
     }
   ]
  },
  "unit": "none"
 },
 "overrides": []
},
"gridPos": {
 "h": 8,
 "w": 12,
 "x": 12,
 "y": 8
},
"id": 3,
"options": {
 "legend": {
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  "displayMode": "list",
  "placement": "bottom",
  "showLegend": true
 },
 "tooltip": {
  "mode": "single",
  "sort": "none"
 }
```

```
},
"targets": [
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  "datasource": {
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   "uid": "prometheus"
  },
  "disableTextWrap": false,
  "editorMode": "builder",
  "expr": "vllm:num_requests_running{model_name=\"$model_name\"}",
  "fullMetaSearch": false,
  "includeNullMetadata": true,
  "instant": false,
  "legendFormat": "Num Running",
  "range": true,
  "refld": "A",
  "useBackend": false
 },
 {
  "datasource": {
   "type": "prometheus",
   "uid": "prometheus"
  },
  "disableTextWrap": false,
  "editorMode": "builder",
  "expr": "vllm:num_requests_swapped{model_name=\"$model_name\"}",
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```
"fullMetaSearch": false,
 "hide": false,
 "includeNullMetadata": true,
 "instant": false,
 "legendFormat": "Num Swapped",
 "range": true,
 "refld": "B",
 "useBackend": false
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{
 "datasource": {
  "type": "prometheus",
  "uid": "prometheus"
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 "disableTextWrap": false,
 "editorMode": "builder",
 "expr": "vllm:num_requests_waiting{model_name=\"$model_name\"}",
 "fullMetaSearch": false,
 "hide": false,
 "includeNullMetadata": true,
 "instant": false,
 "legendFormat": "Num Waiting",
 "range": true,
 "refld": "C",
 "useBackend": false
}
```

```
],
 "title": "Scheduler State",
 "type": "timeseries"
},
{
 "datasource": {
  "type": "prometheus",
  "uid": "prometheus"
 },
 "description": "P50, P90, P95, and P99 TTFT latency in seconds.",
 "fieldConfig": {
  "defaults": {
    "color": {
     "mode": "palette-classic"
   },
    "custom": {
     "axisCenteredZero": false,
     "axisColorMode": "text",
     "axisLabel": "",
     "axisPlacement": "auto",
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     "drawStyle": "line",
     "fillOpacity": 0,
     "gradientMode": "none",
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      "legend": false,
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```
"tooltip": false,
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 "pointSize": 5,
 "scaleDistribution": {
  "type": "linear"
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 "showPoints": "auto",
 "spanNulls": false,
 "stacking": {
  "group": "A",
  "mode": "none"
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 "thresholdsStyle": {
  "mode": "off"
 }
},
"mappings": [],
"thresholds": {
 "mode": "absolute",
 "steps": [
  {
    "color": "green",
    "value": null
```

```
},
     {
      "color": "red",
      "value": 80
     }
   ]
  },
  "unit": "s"
 },
 "overrides": []
},
"gridPos": {
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 "w": 12,
 "x": 0,
 "y": 16
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"id": 5,
"options": {
 "legend": {
  "calcs": [],
  "displayMode": "list",
  "placement": "bottom",
  "showLegend": true
 },
 "tooltip": {
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```
"mode": "single",
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      }
     },
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        "type": "prometheus",
        "uid": "prometheus"
       },
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       "editorMode": "builder",
                                                         "histogram_quantile(0.99,
                                               "expr":
                                                                                        sum
                                                                                                by(le)
(rate(vllm:time_to_first_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])))"
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       "hide": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P99",
       "range": true,
       "refld": "A",
       "useBackend": false
      },
      {
       "datasource": {
```

```
"type": "prometheus",
        "uid": "prometheus"
       },
       "disableTextWrap": false,
       "editorMode": "builder",
                                                         "histogram_quantile(0.95,
                                              "expr":
                                                                                       sum
                                                                                               by(le)
(rate(vllm:time_to_first_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])))"
       "fullMetaSearch": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P95",
       "range": true,
       "refld": "B",
       "useBackend": false
      },
      {
       "datasource": {
        "type": "prometheus",
        "uid": "prometheus"
       },
       "disableTextWrap": false,
       "editorMode": "builder",
                                                "expr":
                                                          "histogram_quantile(0.9,
                                                                                       sum
                                                                                               by(le)
(rate(vllm:time_to_first_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])))"
```

```
"hide": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P90",
       "range": true,
       "refld": "C",
       "useBackend": false
      },
      {
       "datasource": {
        "type": "prometheus",
        "uid": "prometheus"
       },
       "disableTextWrap": false,
       "editorMode": "builder",
                                                "expr":
                                                           "histogram_quantile(0.5,
                                                                                                 by(le)
                                                                                        sum
(rate(vllm:time_to_first_token_seconds_bucket{model_name=\"$model_name\"}[$__rate_interval])))"
       "fullMetaSearch": false,
       "hide": false,
       "includeNullMetadata": false,
       "instant": false,
       "legendFormat": "P50",
       "range": true,
       "refld": "D",
```

"fullMetaSearch": false,

```
},
      {
        "datasource": {
         "type": "prometheus",
         "uid": "prometheus"
        },
        "editorMode": "code",
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"rate(vllm:time\_to\_first\_token\_seconds\_sum\{model\_name=\"\$model\_name"\}[\$\_\_rate\_interval]) \label{lem:time_to_first_token_seconds_sum} \\
rate(vllm:time_to_first_token_seconds_count{model_name=\"$model_name\"}[$__rate_interval])",
        "hide": false,
        "instant": false,
        "legendFormat": "Average",
        "range": true,
        "refld": "E"
      }
     ],
     "title": "Time To First Token Latency",
     "type": "timeseries"
   },
    {
     "datasource": {
       "type": "prometheus",
       "uid": "prometheus"
     },
```

"useBackend": false

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"description": "Percentage of used cache blocks by vLLM.",
"fieldConfig": {
 "defaults": {
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   "mode": "palette-classic"
  },
  "custom": {
   "axisCenteredZero": false,
   "axisColorMode": "text",
   "axisLabel": "",
   "axisPlacement": "auto",
   "barAlignment": 0,
   "drawStyle": "line",
    "fillOpacity": 0,
   "gradientMode": "none",
   "hideFrom": {
     "legend": false,
     "tooltip": false,
     "viz": false
   },
   "lineInterpolation": "linear",
   "lineWidth": 1,
    "pointSize": 5,
    "scaleDistribution": {
     "type": "linear"
   },
```

```
"showPoints": "auto",
  "spanNulls": false,
  "stacking": {
    "group": "A",
    "mode": "none"
  },
  "thresholdsStyle": {
    "mode": "off"
  }
 },
 "mappings": [],
 "thresholds": {
  "mode": "absolute",
  "steps": [
   {
     "color": "green",
     "value": null
    },
    {
     "color": "red",
     "value": 80
    }
  ]
 },
 "unit": "percentunit"
},
```

```
"overrides": []
},
"gridPos": {
 "h": 8,
 "w": 12,
 "x": 12,
 "y": 16
},
"id": 4,
"options": {
 "legend": {
  "calcs": [],
  "displayMode": "list",
  "placement": "bottom",
  "showLegend": true
 },
 "tooltip": {
  "mode": "single",
  "sort": "none"
 }
},
"targets": [
 {
  "datasource": {
    "type": "prometheus",
    "uid": "prometheus"
```

```
},
  "editorMode": "code",
  "expr": "vllm:gpu_cache_usage_perc{model_name=\"$model_name\"}",
  "instant": false,
  "legendFormat": "GPU Cache Usage",
  "range": true,
  "refld": "A"
 },
 {
  "datasource": {
   "type": "prometheus",
   "uid": "prometheus"
  },
  "editorMode": "code",
  "expr": "vllm:cpu_cache_usage_perc{model_name=\"$model_name\"}",
  "hide": false,
  "instant": false,
  "legendFormat": "CPU Cache Usage",
  "range": true,
  "refld": "B"
 }
],
"title": "Cache Utilization",
"type": "timeseries"
```

}

],

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"refresh": "",
"schemaVersion": 37,
"style": "dark",
"tags": [],
"templating": {
 "list": [
  {
    "current": {
     "selected": false,
     "text": "vllm",
     "value": "vllm"
    },
    "datasource": {
     "type": "prometheus",
     "uid": "prometheus"
   },
    "definition": "label_values(model_name)",
    "hide": 0,
    "includeAll": false,
    "label": "model_name",
    "multi": false,
    "name": "model_name",
    "options": [],
    "query": {
     "query": "label_values(model_name)",
     "refld": "StandardVariableQuery"
```

```
},
     "refresh": 1,
     "regex": "",
     "skipUrlSync": false,
     "sort": 0,
     "type": "query"
   }
  ]
 },
 "time": {
  "from": "now-5m",
  "to": "now"
 },
 "timepicker": {},
 "timezone": "",
 "title": "vLLM",
 "uid": "b281712d-8bff-41ef-9f3f-71ad43c05e9b",
 "version": 2,
 "weekStart": ""
}
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