BIRT Reports Review for Jasper Reports

Last updated: 03/25/2018

Objective:

To determine the data sets used in BIRT reports for porting to Jaspersoft reports.

BIRT Projects:

Two BIRT projects in SVN apparently.

1. http://geneva/groundwork-professional/trunk/foundation/misc/web-application/reportserver/reports/

Latest SVN log r18669 | ashanmugam | 2011-11-28 16:29:17 -0800 (Mon, 28 Nov 2011)

 http://geneva/groundworkprofessional/branches/BIRT_2_5_UPGRADE/reportserver/reports/ Latest SVN log r15363 | hchanekar | 2010-03-19 05:11:19 -0700 (Fri, 19 Mar 2010)

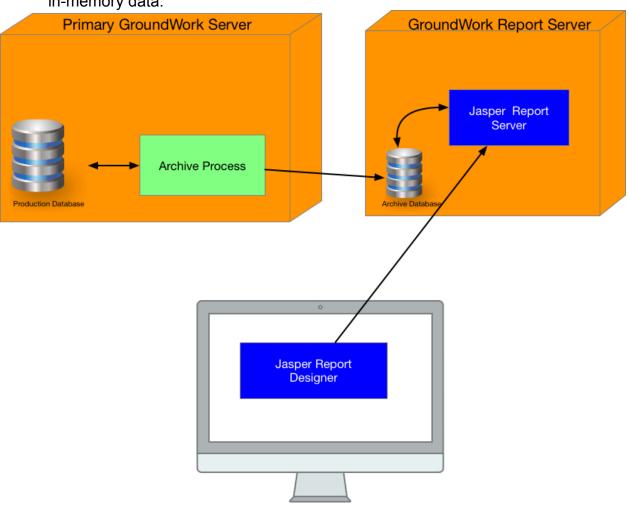
Note: apparently the second project is older based on the SVN log history. Besides, it is missing the Eclipse .project file and also pointing to MySQL database on some reports.

Requirements:

Based on the document provided from Tomas, the Jasper reports should just work with the *archive_gwcollagedb* database, which could probably guide to assess feasibility on porting BIRT to Jasper as well as checking if data in *archive_gwcollagedb* is sufficient to generate all reports delivered in BIRT currently.

Note:

- 1. dashboard database is used from BIRT?
- 2. Per David, some of the SOAP web service as data source is to get real-time and in-memory data.



DataSource and DataSet Definition per report:

- 1. Status (2 reports)
 - ❖ gw-host-status.rptdesign

DataSource:

- 1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1
- 2. http://localhost:8080/foundation-webapp/services/wshost?wsdl
- 3. http://localhost:8080/foundation-webapp/services/wsservice?wsdl
- 4. http://localhost:8080/foundation-webapp/services/wsstatistics?wsdl

DataSet: getSimpleHost

http://localhost:8080/foundation-webapp/services/wshost		
Parameter		
hostName	deep	

DataSet: getStatistics

Databet. getotatistics		
http://localhost:8080/foundation-webapp/services/wsstatistics		
Parameter		
statisticQueryType (TOTAL_FOR_SERVICE_BY_HOSTNAME)	value	applicationType

DataSet: getServicesForHost

http://localhost:8080/foundation-webapp/services/wsservice

Parameter
hostName

gw-hostgroup-status.rptdesign

DataSource:

- 1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1
- 2. http://localhost:8080/foundation-webapp/services/wsstatistics?wsdl

DataSet: getHostStatistics

applicationType

DataSet: getServiceStatistics

http://localhost:8080/foundation-webapp/services/wsstatistics		
Parameter		
statisticQueryType (TOTAL_FOR_SERVICE_BY_HOSTNAME)	value	applicationType

Note: both DataSet are the same web service call, not a typo. Looks like the Soap request def. are the same as well.

2. Availability (4 reports)

gw-host-availability.rptdesign

DataSource:

- 1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1
- 2. jdbc:postgresql://localhost:5432/dashboard

DataSet: host-service-chart

DataOct: 11031-3ct vice-chart		
SQL details under Availability of DataSet Definitions Details.		
Parameter		
HostName	HostName2	HostName3
FromDate	FromDate2	FromDate3
ToDate	ToDate2	ToDate3
HostName4	HostName5	HostName6
FromDate4	FromDate5	FromDate6
ToDate4	ToDate5	ToDate6

DataSet host-chart

Datagot. Moot	Butagot: noot onart			
SQL details under Availability of DataSet Definitions Details.				
Parameter				
HostName	HostName2	HostName3	HostName4	
FromDate	FromDate2	FromDate3	FromDate4	
ToDate	ToDate2	ToDate3	ToDate4	

DataSet: gw-service-availability

Bataoot. gir oci 1100 avai	Bataoot: gir oorrioc aranabinty		
SQL details under Availability of DataSet Definitions Details.			
Parameter			
HostName	FromDate	ToDate	

DataSet: qw-host-availability

SQL details under Availability of DataSet Definitions Details.		
Parameter		
HostName	FromDate	ToDate

❖ gw-host-state-transition.rptdesign

DataSource:

- 1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1
- 2. http://localhost:8080/foundation-webapp/services/wsevent
- 3. http://localhost:8080/foundation-webapp/services/wshost
- 4. http://localhost:8080/foundation-webapp/services/wsservice

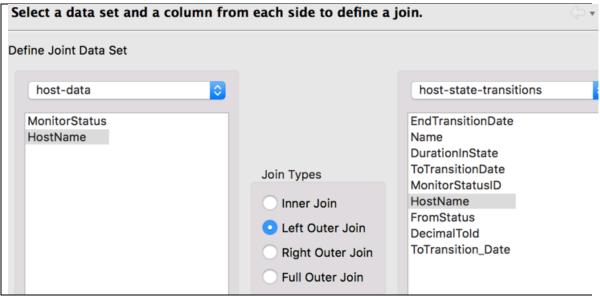
DataSet: host-state-transitions

http://localhost:8080/foundation-webapp/services/wsevent		
Parameter		
hostName	startDate	endDate

DataSet: service-state-transitions

http://localhost:8080/foundation-webapp/services/wsevent			
Parameter			
hostName	serviceName	startDate	
endDate			

DataSet: JoinedDataSet



DataSet: host-data

http://localhost:8080/foundation-webapp/services/wshost		
Parameter		
hostName	deep	

gw-hostgroup-availability.rptdesign

DataSource:

- 1. jdbc:postgresql://localhost:5432/dashboard
- 2. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1

DataSet: hostgroup-service-chart

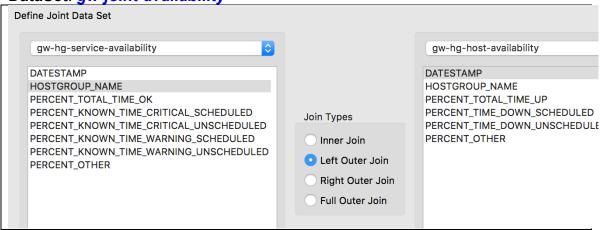
SQL details under Availability of DataSet Definitions Details.		
<u>Parameter</u>		
HostName	HostName2	HostName3

FromDate	FromDate2	FromDate3
ToDate	ToDate2	ToDate3
HostName4	HostName5	HostName6
FromDate4	FromDate5	FromDate6
ToDate4	ToDate5	ToDate6

DataSet: hostgroup-host-chart

Butagot. Moot	Bataoot: nootgroup noot onart			
SQL details under Availability of DataSet Definitions Details.				
<u>Parameter</u>				
HostName	HostName2	HostName3	HostName4	
FromDate	FromDate2	FromDate3	FromDate4	
ToDate	ToDate2	ToDate3	ToDate4	

DataSet: gw-joint-availability



DataSet: gw-hg-service-availability

Butabet. gw ng service	avanaonity		
SQL details under Availability of DataSet Definitions Details.			
Parameter			
HostGroup	FromDate	ToDate	

DataSet: gw-hg-host-availability

Datagot. gir ng noot ara	naomey	
SQL details under Availability of DataSet Definitions Details.		
Parameter		
HostGroup	FromDate	ToDate

gw-service-state-transitions.rptdesign

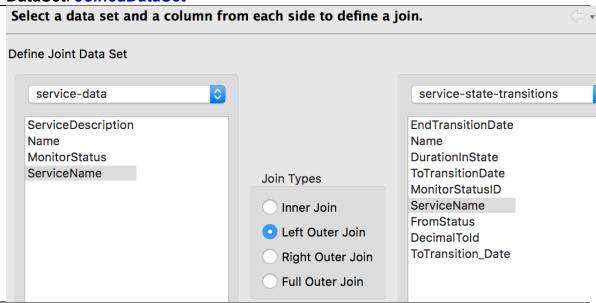
DataSource:

- 1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1
- 2. http://localhost:8080/foundation-webapp/services/wsevent
- 3. http://localhost:8080/foundation-webapp/services/wshost
- 4. http://localhost:8080/foundation-webapp/services/wsservice

DataSet: HostChooser

See General under DataSet Definitions Details.

DataSet: JoinedDataSet



DataSet: service-state-transitions

Dataoct. 301 Vice	-31410-1141131110113		
http://localhost:8080/foundation-webapp/services/wsevent			
Parameter			
hostName	serviceName	startDate	
endDate			

DataSet service data

Dalasel. Service-uala		
SQL details under Availability of DataSet Definitions Details.		
OQL dotallo diraci /tvallabilit	or Butacot Bommittono Botano.	
Parameter		
	Least Miles and	
serviceDescription	hostName	
•		

- 3. Events (2 reports)
- gw-event-history-overview.rptdesign

DataSource:

1. http://localhost:8080/foundation-webapp/services/wscommon?wsdl

DataSet: GWEventStatisticsMonitorStatus

```
http://localhost:8080/foundation-webapp/services/wscommon?wsdl
<?xml version="1.0"?>
<SOAP-ENV:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:SOAP-</p>
ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <m:performEntityQuery xmlns:m="urn:fws">
       <entityType xsi:type="xsd:string">LOG MESSAGE STATISTICS</entityType>
       <filter>
         <StringProperty>
           <name>StatisticType</name>
           <value>MonitorStatus</value>
         </StringProperty>
         <Operator>EQ</Operator>
       </filter>
       <sort></sort>
      <firstResult xsi:type="xsd:int">-1</firstResult>
       <maxResults xsi:type="xsd:int">-1</maxResults>
    </m:performEntitvQuerv>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

DataSet: GWEventStatisticsOperationStatus

```
http://localhost:8080/foundation-webapp/services/wscommon?wsdl
<?xml version="1.0"?>
<SOAP-ENV:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:SOAP-
ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <m:performEntityQuery xmlns:m="urn:fws">
       <entityType xsi:type="xsd:string">LOG MESSAGE STATISTICS</entityType>
       <filter>
         <StringProperty>
           <name>StatisticType</name>
           <value>OperationStatus</value>
         </StringProperty>
         <Operator>EQ</Operator>
       </filter>
       <sort></sort>
       <firstResult xsi:type="xsd:int">-1</firstResult>
       <maxResults xsi:type="xsd:int">-1</maxResults>
    </m:performEntityQuery>
```

```
</SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

DataSet: GWEventStatisticsSeverity

```
http://localhost:8080/foundation-webapp/services/wscommon?wsdl
<?xml version="1.0"?>
<SOAP-ENV:Envelope
       xmlns:xsd="http://www.w3.org/2001/XMLSchema"
       xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
       <SOAP-ENV:Body>
         <m:performEntityQuery xmlns:m="urn:fws">
               <entityType xsi:type="xsd:string">LOG MESSAGE STATISTICS</entityType>
                   <filter>
                      <StringProperty>
                             <name>StatisticType</name>
                             <value>Severity</value>
                      </StringProperty>
                      <Operator>EQ</Operator>
                   </filter>
              <sort></sort>
              <firstResult xsi:type="xsd:int">-1</firstResult>
              <maxResults xsi:type="xsd:int">-1</maxResults>
         </m:performEntityQuery>
       </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

gw-event-history.rptdesign

DataSource:

- 1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1
- 2. http://localhost:8080/foundation-webapp/services/wscommon?wsdl
- 3. http://localhost:8080/foundation-webapp/services/wsevent?wsdl
- 4. http://localhost:8080/foundation-webapp/services/wshost?wsdl
- 5. http://localhost:8080/foundation-webapp/services/wshostgroup?wsdl

DataSet: getApplicationTypes

DataSet: GWEventStatisticsMonitorStatus

http://localhost:8080/foundation-webapp/services/wscommon?wsdl			
Parameter			
entityType	StatisticType	Query	
(LOG_MESSAGE_STATICTICS)	(MonitorStatus)		
Value	ApplicationType	StartDate	
EndDate			

DataSet: GWEventStatisticsOperationStatus

Butagot. OTTETOTION	operation otatae	
http://localhost:8080/found	lation-webapp/services/w	scommon?wsdl
(Sam SOAP Request as abo	ive)	
Parameter	•	
entityType	StatisticType	Query
(LOG_MESSAGE_STATICTICS)	(MonitorStatus)	, ,
Value	ApplicationType	StartDate
EndDate		

DataSet: GWEventStatisticsSeverity

http://localhost:8080/found (Same SOAP request as abo		vscommon?wsdl
Parameter	,	
entityType	StatisticType	Query
(LOG_MESSAGE_STATICTICS)	(MonitorStatus)	,
Value	ApplicationType	StartDate
EndDate		

DataSet: getEventList

```
http://localhost:8080/foundation-webapp/services/wsevent?wsdl
<?xml version="1.0"?>
<SOAP-ENV:Envelope
xmlns:xsd="http://www.w3.org/2001/XMLSchema"
xmlns:SOAP-ENC="http://schemas.xmlsoap.org/soap/encoding/"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <m:getEventsByString xmlns:m="urn:fws">
              <type xsi:type="xsd:string">&?type?&</type>
              <value xsi:type="xsd:string">&?value?&</value>
              <appType xsi:type="xsd:string">&?appType?&</appType>
              <startRange xsi:type="xsd:string">&?startRange?&</startRange>
              <endRange xsi:type="xsd:string">&?endRange?&</endRange>
              <sortOrder xsi:type="xsd:string">&?sortOrder?&</sortOrder>
              <sortField xsi:type="xsd:string">&?sortField?&</sortField>
              <firstResult xsi:type="xsd:string">&?firstResult?&</firstResult>
              <maxResults xsi:type="xsd:string">&?maxResults?&</maxResults>
    </m:getEventsByString>
  </SOAP-ENV:Body>
</SOAP-ENV:Envelope>
```

4. Performance (5 reports)

gw-epr-host-multi-variable.rptreport

DataSource:

1. jdbc:postgresql://localhost:5432/gwcollagedb

DataSet: HostList

Refer to details under General of DataSet Defintions Details.

<u>DataSet: LogPerformanceData</u>

6 parameters are defined and bound to the SQL, refer the SQL under Performance of DataSet Definitions Details.

❖ gw-epr-host.rptdesign

DataSource:

1. jdbc:postgresql://localhost:5432/gwcollagedb

DataSet: HostChooser

Refer to details under General of DataSet Defintions Details.

DataSet: host-performance

SQL details under Availability of DataSet Definitions Details.				
Parameter				
PerformanceData	Host	DateStart		
DateEnd	DateEnd			

DataSet: host-service-performance

SQL details under Availability of DataSet Definitions Details.			
Parameter			
PerformanceData	Host	DateStart	
DateEnd			

❖ gw-epr-hostgroup-multi-variable.rptdesign

DataSource:

1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1

DataSet: HostGroupList

SELECT NAME FROM hostgroup [where Name IN (<list>)] ORDER BY NAME;

DataSet: HostGroupList Right

SELECT NAME FROM hostgroup

DataSet: LogPerformanceData

Define 6 parameters bound in SQL, see SQL under Performance of DataSet Definitions Details.

DataSet: PerformanceDataTable

Defined 6 parameters bound in SQL, see SQL under Performance of DataSet Definitions Details.

gw-epr-hostgroup-topfive.rptdesign

DataSource:

1. jdbc:postgresql://localhost:5432/gwcollagedb?prepareThreshold=1

DataSet: HostGroupChooser

SELECT NAME FROM hostgroup ORDER BY NAME

DataSet: misc-graph-labels

SQL details under Availability of DataSet Definitions Details.			
Parameter			
PerformanceName	HostGroup	DateStart	
DateEnd			

DataSet: host-counts

```
SELECT Count(h.hostid) AS numhosts, a numhostswithdata
FROM
         hostgroup ha
INNER JOIN hostgroupcollection hgc
       hg.hostgroupid = hgc.hostgroupid
ON
INNER JOIN host h
       hac.hostid = h.hostid
INNER JOIN
       SELECT 1 AS recid, Count(DISTINCT h.hostid) AS numhostswithdata
                 performancedatalabel pdl
       FROM
       INNER JOIN logperformancedata lpd
               lpd performancedatalabelid = pdl performancedatalabelid
       INNER JOIN servicestatus ss
               lpd servicestatusid = ss servicestatusid
       INNER JOIN host h
               ss.hostid = h.hostid
       ON
       INNER JOIN hostgroupcollection hgc
       ON h.hostid = hgc.hostid
       INNER JOIN hostgroup hg
               hgc.hostgroupid = hg.hostgroupid
       ON
                  hg.NAME = ?
       WHERE
       AND
                pdl.performancename = ? ) AS a
WHERE hg.NAME = ?
GROUP BY a numhostswithdata
```

DataSet: hostgroup-host-info-limit-5

?

DataSet: hostgroup-host-info

```
SELECT
    Avg(lpd.average) AS Average,
    Max(lpd maximum) AS Maximum,
    Min(Ipd.minimum) AS Minimum.
    h hostname
FROM performancedatalabel pdl
    INNER JOIN logperformancedata lpd
        ON lpd.performancedatalabelid = pdl.performancedatalabelid
    INNER JOIN servicestatus ss
        ON lpd.servicestatusid = ss.servicestatusid
    INNER JOIN host h
        ON ss.hostid = h.hostid
    INNER JOIN hostgroupcollection hgc
        ON h.hostid = hgc.hostid
    INNER JOIN hostgroup hg
        ON hgc.hostgroupid = hg.hostgroupid
WHERE pdl.performancename = ?
    AND hg.NAME = ?
    AND lpd.lastchecktime >= ?
    AND lpd.lastchecktime <= ?
GROUP BY h.hostname
```

gw-epr-hostgroup.rptdesign

DataSource:

1. jdbc:postgresql://localhost:5432/gwcollagedb

DataSet: HostGroupChooser

SELECT NAME FROM hostgroup ORDER BY NAME

DataSet: host-counts

```
Count(h.hostid) AS numhosts, a numhostswithdata
SELECT
FROM
          hostgroup hg
INNER JOIN hostgroupcollection hgc
ON
        ha hostgroupid = hac hostgroupid
INNER JOIN host h
ON
        hqc.hostid = h.hostid
INNER JOIN
        SELECT 1
                                 AS recid.
              Count(DISTINCT h.hostid) AS numhostswithdata
                  performancedatalabel pdl
        FROM
        INNER JOIN logperformancedata lpd
                lpd.performancedatalabelid = pdl.performancedatalabelid
        ON
        INNER JOIN servicestatus ss
                lpd servicestatusid = ss servicestatusid
        ON
        INNER JOIN host h
        ON
                ss.hostid = h.hostid
        INNER JOIN hostgroupcollection hgc
                h.hostid = hgc.hostid
        INNER JOIN hostgroup hg
```

```
ON hgc.hostgroupid = hg.hostgroupid
WHERE hg.NAME = ?
AND pdl.performancename = ? ) AS a
WHERE hg.NAME = ?
GROUP BY a.numhostswithdata
```

DataSet: hostgroup-performance

```
Cast(lpd.lastchecktime AS DATE) AS LastCheckTime,
    Min(lpd.minimum)
                            AS Minimum.
                            AS Average,
    Avg(lpd average)
    Max(lpd.maximum)
                              AS Maximum.
    pdl performancename
    hg NAME
                           AS HostGroup
FROM performancedatalabel pdl
    INNER JOIN logperformancedata lpd
        ON lpd.performancedatalabelid = pdl.performancedatalabelid
    INNER JOIN servicestatus ss
        ON lpd servicestatusid = ss servicestatusid
    INNER JOIN host h
        ON ss.hostid = h.hostid
    INNER JOIN hostgroupcollection hac
        ON h.hostid = hqc.hostid
    INNER JOIN hostgroup hg
        ON hgc.hostgroupid = hg.hostgroupid
WHERE pdl.performancename = ?
    AND hg.NAME = ?
    AND lpd.lastchecktime >= ?
    AND lpd.lastchecktime <= ?
GROUP BY Dayofyear(lpd.lastchecktime),
     pdl.performancename,
     hg hostgroupid:
```

DataSet: hostgroup-host-info

```
SELECT
    Avg(lpd.average) AS Average,
    Max(Ipd.maximum) AS Maximum,
    Min(Ipd.minimum) AS Minimum,
    h.hostname
FROM performancedatalabel pdl
    INNER JOIN logperformancedata lpd
        ON lpd.performancedatalabelid = pdl.performancedatalabelid
    INNER JOIN servicestatus ss
        ON lpd servicestatusid = ss servicestatusid
    INNER JOIN host h
        ON ss.hostid = h.hostid
    INNER JOIN hostgroupcollection hgc
        ON h.hostid = hqc.hostid
    INNER JOIN hostgroup hg
        ON hgc.hostgroupid = hg.hostgroupid
WHERE pdl.performancename = ?
   AND hg.NAME = ?
   AND lpd.lastchecktime >= ?
    AND lpd.lastchecktime <= ?
GROUP BY h hostname
```

DataSet Definitions Details:

General

1. HostChooser / HostList

```
SELECT DISTINCT hostname FROM host
[, HostGroup, HostGroupCollection
WHERE
Host.HostID = HostGroupCollection.HostID
AND
HostGroup.HostGroupID = HostGroupCollection.HostGroupID
AND
HostGroup.Name IN (<List>)

]
ORDER BY hostname;
```

2. HostGroupChooser

SELECT NAME FROM hostgroup ORDER BY NAME

3. ServiceChooser

```
SELECT servicestatus.servicedescription
FROM servicestatus,
    host
WHERE host.hostid = servicestatus.hostid
AND host.hostname = ?;
```

Availability

1. gw-host-availability.rptdesign: host-service-chart

```
SELECT
FROM
      SELECT h.host_name,
            h.service name,
            h.datestamp.
             '% total
                             time ok' AS state name.
            h1.percent total time ok AS
                                                 time
      FROM
                service availability h
      INNER JOIN
            (
                 SELECT host_name,
                    service_name,
                    percent total time ok,
                    datestamp
                 FROM service availability) h1
              h1.host name = h.host name
      on
      AND
               h1.service name = h.service name
               h1.datestamp = h.datestamp
      AND
      WHERE
                 h.host name=?
               h.datestamp >= ?
      AND
               h.datestamp <= ?
      AND
      UNION
      SELECT h.host_name,
            h.service name,
            h.datestamp,
            '% known
                                        time critical scheduled' AS state name,
            h1.percent known time critical scheduled AS
                                                                          time
      FROM
                service_availability h
      INNER JOIN
            (
                 SELECT host name,
                    service name,
                    percent_known_time_critical_scheduled,
                    datestamp
                 FROM service availability) h1
      ON
              h1.host name = h.host name
      AND
               h1.service name = h.service name
               h1.datestamp = h.datestamp
      AND
      WHERE
                 h.host name=?
      AND
               h.datestamp >= ?
      AND
               h.datestamp <= ?
      UNION
      SELECT
                 h.host name,
            h.service name,
            h.datestamp,
            '% known
                                         time critical unscheduled' AS state name
            h1 percent known time critical unscheduled AS
                                                                             time
                service availability h
      FROM
      INNER JOIN
            (
                 SELECT host_name,
                    service name.
```

```
percent known time critical unscheduled,
              datestamp
          FROM service availability) h1
ON
        h1.host name = h.host name
AND
        h1.service name = h.service name
        h1.datestamp = h.datestamp
AND
WHERE
          h.host name=?
        h.datestamp >= ?
AND
AND
        h.datestamp <= ?
UNION
SELECT
          h.host name,
      h.service name.
      h.datestamp.
      '% known time warning scheduled' AS state name
      h1.percent_known_time_warning_scheduled AS time
         service availability h
FROM
INNER JOIN
      (
          SELECT host_name,
              service name,
              percent known time warning scheduled,
              datestamp
          FROM service availability) h1
ON
        h1.host name = h.host name
AND
        h1.service name = h.service name
AND
        h1.datestamp = h.datestamp
WHERE
          h.host name=?
AND
        h.datestamp >= ?
AND
        h.datestamp <= ?
UNION
SELECT
          h.host_name,
      h.service name.
      h.datestamp.
      '% known time warning unscheduled' AS state name.
      h1 percent known time warning unscheduled AS time
          service availability h
FROM
INNER JOIN
      (
          SELECT host_name,
              service name,
              percent_known_time_warning_unscheduled,
              datestamp
          FROM service availability) h1
ON
        h1.host name = h.host name
AND
        h1.service name = h.service name
AND
        h1.datestamp = h.datestamp
WHERE
          h.host name=?
        h.datestamp >= ?
AND
AND
        h.datestamp <= ?
UNION
SELECT
          h host name,
      h.service_name,
      h.datestamp,
      '% time other' AS state name,
      (100.0 - (h1 percent total time ok +
            h1.percent known time critical scheduled +
```

```
h1 percent known time critical unscheduled +
                  h1 percent known time warning scheduled +
                  h1 percent known time warning unscheduled)) AS time
      FROM
                service availability h
      INNER JOIN
            (
                 SELECT host_name,
                     service name,
                     percent total time ok,
                     percent known time critical scheduled,
                     percent known time critical unscheduled,
                     percent known time warning scheduled,
                     percent known time warning unscheduled,
                     datestamp
                 FROM service availability) h1
      ON
              h1.host_name = h.host_name
      AND
               h1.service name = h.service name
      AND
               h1.datestamp = h.datestamp
      WHERE
                 h.host_name=?
               h.datestamp >= ?
      AND
               h.datestamp <= ? ) AS ha
      AND
ORDER BY ha.datestamp, ha.service name
```

2. gw-host-availability.rptdesign:host-chart

```
SELECT
FROM
      SELECT
                h.host name.
            h.datestamp.
            '% total time up' AS state name,
            h1 percent total time up AS time
                host availability h
      FROM
      INNER JOIN
            (
                SELECT host_name,
                    percent_total_time_up,
                    datestamp
                FROM host_availability) h1
      ON
              h1.host name = h.host name
      AND
               h1.datestamp = h.datestamp
      WHERE
                 h.host name=?
      AND
               h.datestamp >= ?
               h.datestamp <= ?
      AND
      UNION
      SELECT
                 h.host_name,
            h.datestamp.
            '% time down unscheduled' AS state_name,
            h1.percent time down unscheduled AS time
                host_availability h
      FROM
      INNER JOIN
             SELECT host name,
                 percent time down unscheduled,
                 datestamp
             FROM host_availability) h1
```

```
ON
              h1.host name = h.host name
      AND
               h1.datestamp = h.datestamp
                 h.host name=?
      WHERE
      AND
               h.datestamp >= ?
      AND
               h.datestamp <= ?
      UNION
      SELECT
                 h.host_name,
            h.datestamp,
            '% time down scheduled' AS state name,
            h1 percent time down scheduled AS time
                host availability h
      FROM
      INNER JOIN
            (
             SELECT host name,
                 percent_time_down_scheduled,
                 datestamp
             FROM host availability) h1
      ON
              h1.host name = h.host name
      AND
               h1.datestamp = h.datestamp
      WHERE
                 h.host name=?
      AND
               h.datestamp >= ?
      AND
               h.datestamp <= ?
      UNION
      SELECT
                 h.host name,
            h.datestamp.
            '% time other'.
            (100.0 -
               (h1.percent_total_time_up +
               h1.percent time down unscheduled +
               h1 percent_time_down_scheduled)) AS time
      FROM
                host_availability h
      INNER JOIN
             SELECT host name.
                 percent total time up.
                 percent time down unscheduled,
                 percent time down scheduled,
                 datestamp
             FROM host_availability) h1
      ON
              h1.host name = h.host name
               h1.datestamp = h.datestamp
      AND
                 h.host name=?
      WHERE
      AND
               h.datestamp >= ?
      AND
               h.datestamp <= ? ) AS ha
ORDER BY ha.datestamp
```

3. gw-host-availability.rptdesign: gw-service-availability

```
WHERE service_availability.host_name = ?

AND service_availability.datestamp >= ?

AND service_availability.datestamp <= ?

ORDER BY service_availability.datestamp,

service_availability.service_name
```

4. gw-host-availability.rptdesign: gw-service-availability

5. gw-hostgroup-availability.rptdesign: hostgroup-service-chart

```
SELECT <sup>3</sup>
FROM (SELECT h.hostgroup name,
        h.datestamp.
        '% TOTAL TIME OK'
                              AS STATE NAME.
        h1.percent total time ok AS Time
    FROM hostgroup service availability h
        INNER JOIN (SELECT hostgroup_name,
                   percent total time ok,
                   datestamp
              FROM hostgroup_service_availability
              WHERE hostgroup_name = Replace(?, '', '+')
                   AND datestamp >= ?
                   AND datestamp <= ?) h1
            ON h1.hostgroup name = h.hostgroup name
              AND h1.datestamp = h.datestamp
    UNION
    SELECT h hostgroup name,
        h.datestamp
        '% KNOWN TIME CRITICAL - SCHEDULED' AS STATE NAME,
        h1 percent known time critical scheduled AS time
    FROM hostgroup_service_availability h
        INNER JOIN (SELECT hostgroup_name,
                   percent known time critical scheduled,
                   datestamp
              FROM hostgroup service availability
              WHERE hostgroup name = Replace(?, '', '+')
                  AND datestamp >= ?
                   AND datestamp <= ?) h1
            ON h1.hostgroup name = h.hostgroup name
              AND h1.datestamp = h.datestamp
    UNION
    SELECT h.hostgroup_name,
        h.datestamp,
        '% KNOWN TIME CRITICAL - UNSCHEDULED'
                                                      AS STATE NAME,
```

```
h1 percent known time critical unscheduled AS Time
FROM hostgroup service availability h
    INNER JOIN (SELECT hostgroup name,
              percent known time critical unscheduled,
              datestamp
          FROM hostgroup service availability
          WHERE hostgroup_name = Replace(?, '', '+')
              AND datestamp >= ?
              AND datestamp <= ?) h1
        ON h1.hostgroup name = h.hostgroup name
          AND h1.datestamp = h.datestamp
UNION
SELECT h.hostgroup_name,
    h datestamp.
    '% KNOWN TIME WARNING - SCHEDULED'
                                               AS STATE NAME.
   h1_percent_known_time_warning_scheduled AS Time
FROM hostgroup service availability h
    INNER JOIN (SELECT hostgroup_name,
              percent_known_time_warning_scheduled,
              datestamp
          FROM hostgroup service availability
          WHERE hostgroup name = Replace(?, '', '+')
              AND datestamp >= ?
              AND datestamp <= ?) h1
        ON h1.hostgroup name = h.hostgroup name
          AND h1.datestamp = h.datestamp
UNION
SELECT h.hostgroup_name,
    h.datestamp.
    '% KNOWN TIME WARNING - UNSCHEDULED' AS STATE_NAME,
    h1.percent_known_time_warning_unscheduled AS Time
FROM hostgroup service availability h
    INNER JOIN (SELECT hostgroup name,
              percent known time warning unscheduled,
              datestamp
          FROM hostgroup service availability
          WHERE hostgroup name = Replace(?, '', '+')
              AND datestamp >= ?
              AND datestamp <= ?) h1
        ON h1.hostgroup name = h.hostgroup name
          AND h1.datestamp = h.datestamp
UNION
SELECT h hostgroup name,
    h.datestamp.
    '% TIME OTHER'
                                            AS
    STATE NAME
    (100.0 - (h1.percent total time ok
          + h1 percent known time critical scheduled
          + h1.percent known time critical unscheduled
          + h1 percent known time warning scheduled
          + h1.percent_known_time_warning_unscheduled ) ) AS
    Time
FROM hostgroup service availability h
    INNER JOIN (SELECT hostgroup name,
              percent total time ok.
```

6. gw-hostgroup-availability.rptdesign: hostgroup-host-chart

```
SELECT
FROM (SELECT h.hostgroup name,
        h.datestamp.
        '% TOTAL TIME UP'
                              AS STATE NAME,
        h1.percent total time up AS Time
    FROM hostgroup host availability h
        INNER JOIN (SELECT hostgroup name,
                  percent total time up.
                  datestamp
              FROM hostgroup_host_availability
              WHERE hostgroup name = Replace(?, '', '+')
                  AND datestamp >= ?
                  AND datestamp <= ?) h1
            ON h1.hostgroup name = h.hostgroup name
              AND h1.datestamp = h.datestamp
    UNION
    SELECT h.hostgroup name, h.datestamp,
        '% TIME DOWN - UNSCHEDULED'
                                           AS STATE NAME.
        h1 percent time down unscheduled AS time
    FROM hostgroup host availability h
        INNER JOIN (SELECT hostgroup name,
                  percent time down unscheduled.
                  datestamp
              FROM hostgroup_host_availability
              WHERE hostgroup name = Replace(?, '', '+')
                  AND datestamp >= ?
                  AND datestamp <= ?) h1
            ON h1.hostgroup name = h.hostgroup name
              AND h1.datestamp = h.datestamp
    UNION
    SELECT h.hostgroup name,
        h.datestamp.
        '% TIME DOWN - SCHEDULED'
                                        AS STATE NAME,
        h1.percent_time_down_scheduled AS Time
    FROM hostgroup_host_availability h
        INNER JOIN (SELECT hostgroup name,
                  percent_time_down_scheduled,
                  datestamp
              FROM hostgroup host availability
              WHERE hostgroup_name = Replace(?, ' ', '+')
```

```
AND datestamp >= ?
                   AND datestamp <= ?) h1
             ON h1.hostgroup name = h.hostgroup name
              AND h1.datestamp = h.datestamp
    UNION
    SELECT h.hostgroup_name,
        h.datestamp.
        '% TIME OTHER',
        (100.0 - (h1.percent total time up
               + h1.percent time down unscheduled
               + h1.percent time down scheduled ) ) AS Time
    FROM hostgroup host availability h
        INNER JOIN (SELECT hostgroup name,
                   percent total time up,
                   percent time down unscheduled,
                   percent_time_down_scheduled,
                   datestamp
               FROM hostgroup_host_availability
               WHERE hostgroup_name = Replace(?, '', '+')
                   AND datestamp >= ?
                   AND datestamp <= ?) h1
             ON h1.hostgroup name = h.hostgroup name
              AND h1.datestamp = h.datestamp)AS ha
ORDER BY ha datestamp
```

7. gw-hostgroup-availability.rptdesign:gw-hg-service-availability

```
SELECT has datestamp, has hostgroup name.
   CASE
    WHEN ( hgs.percent total time ok <= 0 ) THEN 0
    ELSE (Trunc(Cast(hgs.percent total time ok AS NUMERIC), 2))
   END AS PERCENT_TOTAL_TIME_OK,
   CASE
    WHEN ( hgs percent known time critical scheduled <= 0 ) THEN 0
    ELSE (Trunc(Cast(hgs.percent known time critical scheduled AS NUMERIC)
         2))
   END AS PERCENT KNOWN TIME CRITICAL SCHEDULED,
   CASE
    WHEN ( has percent known time critical unscheduled <= 0 ) THEN 0
    ELSE (Trunc(Cast(hgs.percent known time critical unscheduled AS
              NUMERIC), 2)
   END AS PERCENT KNOWN TIME CRITICAL UNSCHEDULED,
    WHEN ( hgs.percent_known_time_warning_scheduled <= 0 )THEN 0
    ELSE (Trunc(Cast(hgs percent known time warning scheduled AS NUMERIC)
        2))
   END AS PERCENT KNOWN TIME WARNING SCHEDULED,
   CASE
    WHEN ( hgs.percent known time warning unscheduled <= 0 )THEN 0
    ELSE Trunc(Cast(hgs percent known time warning unscheduled AS NUMERIC),
   END AS PERCENT KNOWN TIME WARNING UNSCHEDULED,
   CASE
    WHEN ( ( 100.0 - ( percent_total_time_ok
```

```
+ percent known time critical scheduled
                + percent known time critical unscheduled
                + percent known time warning scheduled
                + percent_known_time_warning_unscheduled ) ) <= 0 )
    THEN 0
     ELSE Trunc(Cast(100.0 - (percent total time ok
                   + percent_known_time_critical_scheduled
                   + percent_known_time_critical_unscheduled
                   + percent known time warning scheduled
                    + percent known time warning unscheduled ) AS
              NUMERIC), 2)
    END AS PERCENT OTHER
FROM hostgroup_service_availability hgs
WHERE hgs.hostgroup name = Replace(?, '', '+')
   AND has datestamp >= ?
   AND hgs.datestamp <= ?
ORDER BY hgs.datestamp
```

8. gw-hostgroup-availability.rptdesign:gw-hg-host-availability

9. gw-service-state-transitions.rptdesign:service-data

```
SELECT servicestatus servicedescription, monitorstatus NAME
FROM monitorstatus, servicestatus, host
WHERE servicestatus monitorstatusid = monitorstatus monitorstatusid
AND servicestatus servicedescription = ?
AND servicestatus hostid = host hostid
AND host hostname = ?;
```

Event

1. gw-event-history.rptdesign: GWEventStatisticsMonitorStatus

```
http://localhost:8080/foundation-webapp/services/wscommon?wsdl
<?xml version="1.0"?>
<SOAP-ENV:Envelope xmlns:xsd="http://www.w3.org/2001/XMLSchema" xmlns:SOAP-
ENC="http://schemas.xmlsoap.org/soap/encoding/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-
instance" xmlns:SOAP-ENV="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Body>
    <m:performEntityQuery xmlns:m="urn:fws">
       <entityType xsi:type="xsd:string">&?entityType?&</entityType>
         <LeftFilter>
           <LeftFilter>
              <StringProperty>
                <name>StatisticType</name>
                <value>&?StatisticType?&</value>
             </StringProperty>
              <Operator>EQ</Operator>
           </LeftFilter>
           <RightFilter>
             <LeftFilter>
                <StringProperty>
                  <name>&?Query?&</name>
                  <value>&?value?&</value>
                </StringProperty>
                <Operator>EQ</Operator>
             </LeftFilter>
             <RightFilter>
                <StringProperty>
                  <name>ApplicationType</name>
                  <value>&?ApplicationType?&</value>
                </StringProperty>
                <Operator>EQ</Operator>
              </RightFilter>
              <Operator>AND</Operator>
           </RightFilter>
           <Operator>AND</Operator>
         </LeftFilter>
         <RightFilter>
           <LeftFilter>
             <DateProperty>
                <name>StartDate</name>
                <value>&?StartDate?&</value>
             </DateProperty>
             <Operator>EQ</Operator>
           </LeftFilter>
           <RightFilter>
             <DateProperty>
                <name>EndDate</name>
                <value>&?EndDate?&</value>
              </DateProperty>
              <Operator>EQ</Operator>
           </RightFilter>
```

```
<
```

Performance

1. gw-epr-host-multi-variable.rptreport:LogPerformanceData

```
SELECT left1.lastchecktime AS LastCheckTime,
                   AS left min.
   left1.minimum
   left1.maximum
                   AS left max.
   left1 average AS left avg
   right1 minimum AS right min.
   right1 maximum AS right max.
   right1 average AS right avg
FROM (SELECT lastchecktime, minimum, maximum, average
    FROM logperformancedata
    WHERE performancedatalabelid = (SELECT performancedatalabelid
                      FROM performancedatalabel
                      WHERE performancename = ?)
        AND servicestatusid IN (SELECT servicestatusid
                     FROM servicestatus
                     WHERE hostid = (SELECT hostid
                              FROM host
                              WHERE hostname = ?)))
   AS left1.
   (SELECT lastchecktime, minimum, maximum, average
    FROM logperformancedata
    WHERE performancedatalabelid = (SELECT performancedatalabelid
                      FROM performancedatalabel
                      WHERE performancename = ?)
        AND servicestatusid IN (SELECT servicestatusid
                     FROM servicestatus
                     WHERE hostid = (SELECT hostid
                              FROM host
                              WHERE hostname = ?)))
   AS right1
WHERE Date(left1.lastchecktime) = Date(right1.lastchecktime)
   AND Date(left1.lastchecktime) BETWEEN? AND?
```

2. gw-epr-host.rptdesign:host-performance\

```
SELECT Cast(lpd.lastchecktime AS DATE) AS LastCheckTime.
   Max(lpd.maximum)
                            AS Maximum.
    Min(lpd.minimum)
                            AS Minimum.
    Avg(lpd.average)
                           AS Average
    pdl.performancename.
   h hostname
FROM performancedatalabel pdl
   INNER JOIN logperformancedata lpd
        ON lpd performancedatalabelid = pdl performancedatalabelid
   INNER JOIN servicestatus ss
        ON lpd servicestatusid = ss servicestatusid
   INNER JOIN host h
        ON ss.hostid = h.hostid
WHERE pdl.performancename = ?
   AND h.hostname = ?
   AND Cast(Ipd.lastchecktime AS DATE) >= Cast(? AS DATE)
   AND Cast(lpd lastchecktime AS DATE) <= Cast(? AS DATE)
```

GROUP BY Ipd.lastchecktime, pdl.performancename, h.hostname;

3. gw-epr-host.rptdesign:host-service-performance

```
SELECT Max(Ipd.maximum) AS Maximum,
    Min(Ipd minimum) AS Minimum.
    Avg(lpd.average) AS Average.
    ss servicedescription
FROM performancedatalabel pdl
    INNER JOIN logperformancedata lpd
        ON lpd.performancedatalabelid = pdl.performancedatalabelid
    INNER JOIN servicestatus ss
        ON lpd.servicestatusid = ss.servicestatusid
    INNER JOIN host h
        ON ss.hostid = h.hostid
WHERE pdl.performancename = ?
   AND h.hostname = ?
   AND Cast(lpd.lastchecktime AS DATE) >= Cast(? AS DATE)
   AND Cast(lpd.lastchecktime AS DATE) <= Cast(? AS DATE)
GROUP BY pdl.performancename, h.hostname, ss.servicedescription
```

4. gw-epr-hostgroup-multi-variable.rptdesign:LogPerformanceData

```
SELECT left1.lastchecktime AS LastCheckTime.
    left1 average
                   AS left avg.
    right1 average AS right avg
FROM (SELECT Date(lpd.lastchecktime) AS LastCheckTime,
        hg1.NAME
                           AS HostGroupName Left,
        Avg(average)
                           AS Average
    FROM logperformancedata lpd,
        servicestatus ss1,
        hostgroupcollection hg col 1,
        hostgroup hg1,
        performancedatalabel pdl
    WHERE Ipd performancedatalabelid = pdl performancedatalabelid
        AND pdl.performancename = ?
        AND lpd servicestatusid = ss1 servicestatusid
        AND ss1.hostid = hg col 1.hostid
        AND hg col 1.hostgroupid = hg1.hostgroupid
        AND hq1.NAME = ?
    GROUP BY Date(Ipd.lastchecktime),
          hg1.NAME
    ORDER BY Date(Ipd.lastchecktime) ASC) AS left1,
    (SELECT Date(lpd.lastchecktime) AS LastCheckTime,
                           AS HostGroupName Left,
        hq1.NAME
        Avg(average)
                           AS Average
    FROM logperformancedata lpd,
        servicestatus ss1,
        hostgroupcollection hg_col_1,
        hostgroup hg1,
        performancedatalabel pdl
    WHERE Ipd performancedatalabelid = pdl performancedatalabelid
        AND pdl.performancename = ?
        AND lpd.servicestatusid = ss1.servicestatusid
```

```
AND ss1.hostid = hg_col_1.hostid
AND hg_col_1.hostgroupid = hg1.hostgroupid
AND hg1.NAME = ?
GROUP BY Date(lpd.lastchecktime),
hg1.NAME
ORDER BY Date(lpd.lastchecktime) ASC) AS right1
WHERE Date(left1.lastchecktime) = Date(right1.lastchecktime)
AND Date(left1.lastchecktime) BETWEEN ? AND ?
```

5. gw-epr-hostgroup-multi-variable.rptdesign: PerformanceDataTable

```
SELECT left1 lastchecktime AS LastCheckTime.
    left1.hostgroupname AS HostGroupName Left,
    left1.hostname
                    AS HostName_Left,
                    AS left min,
   left1 minimum
                    AS left max,
   left1 maximum
                   AS left avg
   left1 average
    right1.hostgroupname AS HostGroupName Right.
    right1 hostname AS HostName Right,
    right1 minimum
                     AS right min,
    right1 maximum
                    AS right max.
    right1 average
                    AS right avg
FROM (SELECT lpd.lastchecktime)
        hq1.NAME
                                AS HostGroupName
        (SELECT hostname
        FROM host
        WHERE hostid = hg col 1.hostid) AS HostName,
        minimum,
        maximum.
        average
    FROM logperformancedata lpd,
        servicestatus ss1.
        hostgroupcollection hg_col_1,
        hostgroup hg1
    WHERE performancedatalabelid = (SELECT performancedatalabelid
                      FROM performancedatalabel
                      WHERE performancename = ?)
        AND lpd servicestatusid = ss1.servicestatusid
        AND ss1.hostid = hg_col_1.hostid
        AND hg col 1.hostgroupid = hg1.hostgroupid
        AND hg1.NAME = ?) AS left1,
    (SELECT lpd lastchecktime,
        hq1.NAME
                                AS HostGroupName.
        (SELECT hostname
        FROM host
        WHERE hostid = hg col 1.hostid) AS HostName,
        minimum.
        maximum,
        average
    FROM logperformancedata lpd.
        servicestatus ss1.
        hostgroupcollection hg col 1,
        hostgroup hg1
    WHERE performancedatalabelid = (SELECT performancedatalabelid
                      FROM performancedatalabel
```

```
WHERE performancename = ?)

AND lpd.servicestatusid = ss1.servicestatusid

AND ss1.hostid = hg_col_1.hostid

AND hg_col_1.hostgroupid = hg1.hostgroupid

AND hg1.NAME = ?) AS right1

WHERE Date(left1.lastchecktime) = Date(right1.lastchecktime)

AND Date(left1.lastchecktime) BETWEEN ? AND ?
```

6. gw-epr-hostgroup-topfive.rptdesign:misc-graph-labels

```
SELECT h.hostname,
    pdl.servicedisplayname,
    pdl performancename,
    pdl.metriclabel,
    pdl.unit
FROM performancedatalabel pdl
    INNER JOIN logperformancedata lpd
        ON lpd performancedatalabelid = pdl performancedatalabelid
    INNER JOIN servicestatus ss
        ON lpd servicestatusid = ss servicestatusid
    INNER JOIN host h
        ON ss.hostid = h.hostid
    INNER JOIN hostgroupcollection hgc
         ON h.hostid = hgc.hostid
    INNER JOIN hostgroup hg
         ON hgc hostgroupid = hg hostgroupid
WHERE pdl.performancename = ?
    AND hq.name = ?
    AND lpd.lastchecktime >= ?
   AND lpd.lastchecktime <= ?
LIMIT 1
```

7. gw-epr-hostgroup-topfive.rptdesign:host-count

```
Count(h.hostid) AS numhosts.
      a.numhostswithdata
FROM
          hostgroup hg
INNER JOIN hostgroupcollection hgc
ON
        hg.hostgroupid = hgc.hostgroupid
INNER JOIN host h
ON
        hqc.hostid = h.hostid
INNER JOIN
      (
        SELECT 1
                                  AS recid.
              Count(DISTINCT h.hostid) AS numhostswithdata
                  performancedatalabel pdl
        INNER JOIN logperformancedata lpd
                lpd.performancedatalabelid = pdl.performancedatalabelid
        INNER JOIN servicestatus ss
                lpd.servicestatusid = ss.servicestatusid
        INNER JOIN host h
                ss.hostid = h.hostid
        INNER JOIN hostgroupcollection hgc
               h.hostid = hgc.hostid
```

```
INNER JOIN hostgroup hg
ON hgc.hostgroupid = hg.hostgroupid
WHERE hg.NAME = ?
AND pdl.performancename = ? ) AS a
WHERE hg.NAME = ?
GROUP BY a.numhostswithdata
```