

HP Service Request Catalog

for the Windows® operating system

Software Version: 1.30

Deployment Best Practices and Sizing Guide



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Contents

1	Service Request Catalog Sizing	7
	Web Server	7
	Load Balancers	8
	SM Web Service Application Nodes	9
	Apache Tomcat catalina.bat File	9
	Service Request Catalog applicationContext.properties File	9
	Service Manager sm.ini File	10





1 Service Request Catalog Sizing

The goal of the Performance Center of Excellence (PCoE) is to deliver scalable and reliable HP Software products to its customers. This includes performance risk analysis information and performance recommendations targeted at enterprise environments.



This document provides guidelines to help Service Request Catalog (SRC) 1.30 customers to deploy SRC with Service Manager (SM) 9.30. The configuration recommendations and guidelines are based on tests conducted in HP Performance labs. These best practice recommendations help you configure your hardware resources for better performance.

Before you implement SRC, make sure you have configured SM 7.11 to comply with all available best practice recommendations for SM deployments.

For specific information about supported hardware, software, and other requirements, see the Service Manager 9.30 Support Matrix on the HP Software Support Online web site described on [page 4](#).

Deployment Model

The deployment model shown on [Figure 1](#) on page 8 includes these components:

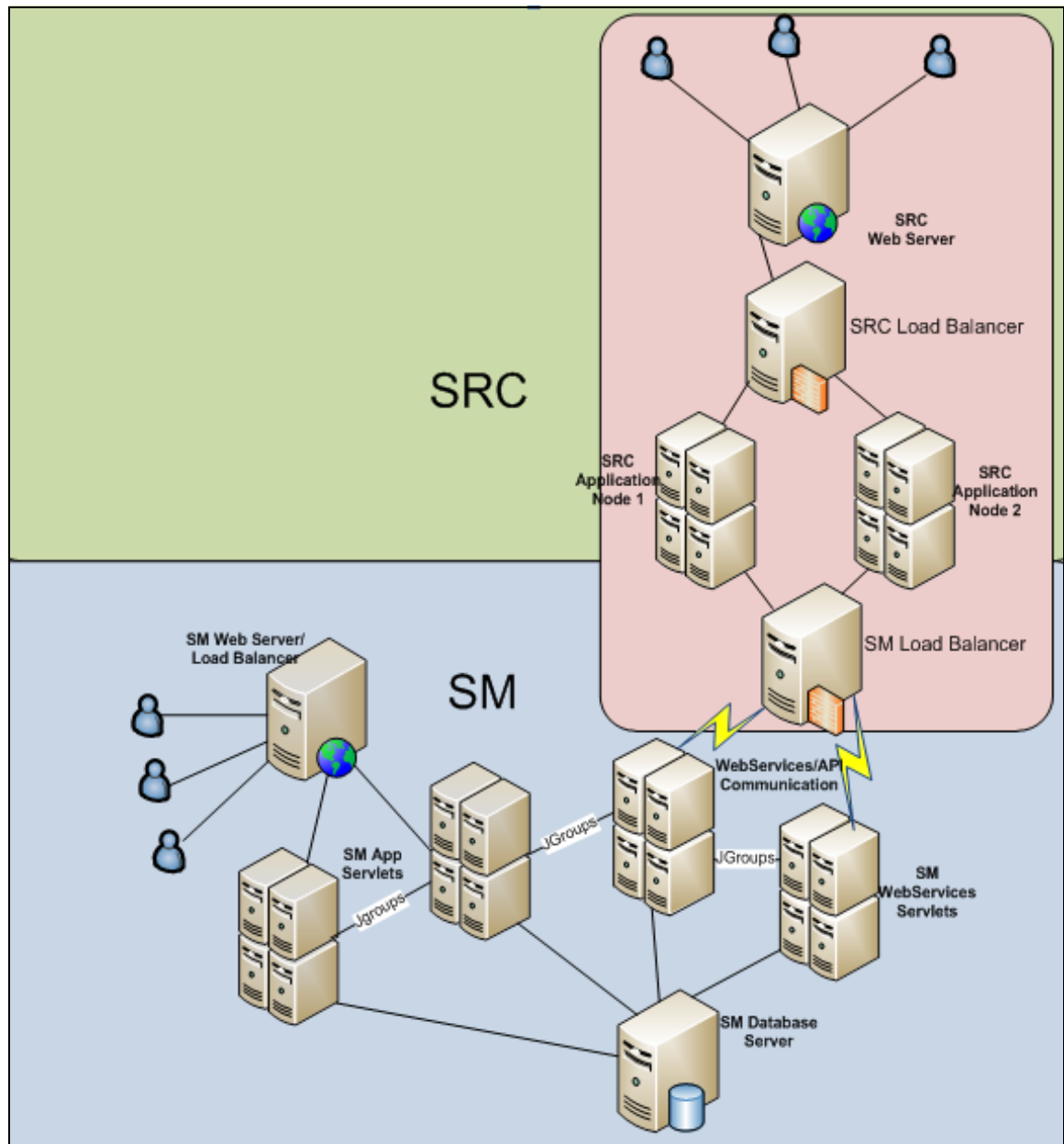
- A web server hosting Apache Tomcat and a supported browser
- Multiple Load Balancers
- SRC application nodes.
- SM web service application nodes
- SM server instance
- SM database server

Web Server

The SRC application is deployed on a server with a supported operating system running a supported browser application.



Figure 1 Deployment Model



Load Balancers

A Load Balancer directs user traffic from the web server to one SRC application servers.

The web service traffic from the SRC application servers should be routed through a second Load Balancer. This Load Balancer needs the ability to route the traffic to Single-server IP/ Multiple ports and Multiple servers/Multiple ports. The LoadBalancer should be configured to route the user traffic to both SRC application nodes where all the user traffic is routed to the first SRC application node until that node fails. While the first application node handles the user traffic, the second node should be available to maintain the catalog refresh schedule.

If the first application node fails, the Load Balancer should detect the failure and switch the user traffic to the second application node. If the Load Balancer shifts user traffic, the current user session is terminated. That user must log in again.

The Load Balancer between the SRC application nodes and SM application nodes needs to maintain the sticky session logic.



Sticky session logic: After the load balancer forwards user traffic to an application server, it ensures that all further requests in that session are forwarded to the same server as long as that session is active. The Load balancer persists the session based on certain information like IP address, port, and cookie.

SM Web Service Application Nodes

SM web service application nodes are deployed horizontally based on the number of concurrent users expected at peak user traffic periods. The user traffic from the SRC application nodes is routed to a second Load Balancer, which distributes that traffic among the available SM application nodes. This design provides a redundancy strategy at the SM application server layer.

Recommended Settings

The following settings are recommended for optimum performance.

Apache Tomcat catalina.bat File

Specify minimum and maximum Java heap size values in the Apache Tomcat catalina.bat file.

-XX:MaxPermSize=128m

Service Request Catalog applicationContext.properties File

You can change the default values of certain parameters to make sure the Service Request Catalog server starts and runs efficiently and the catalog refreshes at an optimum interval.

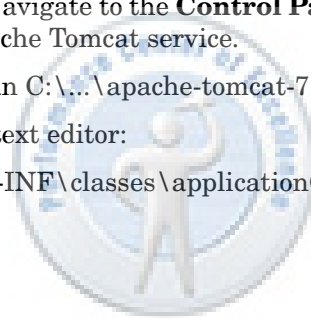
- 1 Stop the Tomcat server using one of the following methods.

Windows Service: Navigate to the **Control Panel > Administrative Tools > Services** dialog to stop the Apache Tomcat service.

Manual Process: Run `C:\...\apache-tomcat-7.0n\bin\shutdown.bat`.

- 2 Open this file with a text editor:

`C:\...\src-n.nn\WEB-INF\classes\applicationContext.properties`



- 3 Make sure the following parameters have these values.

Parameter	Recommended Value
src.sm.attachmentDownloadBatchSize	20
src.sm.catalogLanguageBatchSize	50
src.reloadCatalogAfterEvery	1800000 (msec)
src.refreshLookupsAfterEvery	21600000 (msec)

- 4 If you support multiple locales, you can reduce the value of the src.languageSet parameter to download only the languages used.

- 5 In the # **SM config properties** section, change these parameters:

```
src.sm.defaultMaxConnectionsPerHost=25
src.sm.maxTotalConnections=25
```

Specify a value between 25 to 60 depending upon the user traffic that you expect. Increase this value by 10 for each additional Service Manager node. Do not exceed 60 regardless of the number of Service Manager nodes. For example, if there are six or more Service Manager nodes supported by Loadbalancer, set this value to 60.

Note: HP recommends that you do not change src.sm.userInboxBatchSize=100.

Service Manager sm.ini File

On the Service Manager server, locate the sm.ini file. The default path is:

```
C:\Program Files\HP\Service Manager 9.30\Server\RUN\sm.ini
```

For each Service Manager application node, add the following parameter, or change the existing value for threadspersprocess. For example:

```
threadspersprocess:60
```

Hardware Recommendations

In a scenario where there is an estimated load of 400 concurrent users, HP recommends the following minimum hardware configuration.

Hardware Component	Recommendation
CPU	Quad Core 3.0 GHz
RAM	4 GB
Storage	10 GB

Operational Constraints

The server startup elapsed time is proportional to the volume of the catalog item data downloaded from the SM server. Catalog volume depends on the number of items, number of images associated with an item, and attachments for a single item.

Over a period of time, as the volume of the requests in the SRC/SM system increase, response times may increase for some specific user transactions that query against a large volume of request data. For example, dashboard and status inbox updates typically query a large volume of data.



