Genesys Mobile Services Deployment Guide

Configure DFMs in Load Balancing Deployment

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Included in your Installation Package (IP) are special configuration files, called DFMs, which are required for Orchestration Server-based services. These files define Genesys Mobile Services-specific SCXML constructs that are required for the execution of SCXML applications used within Orchestration Server-based services.
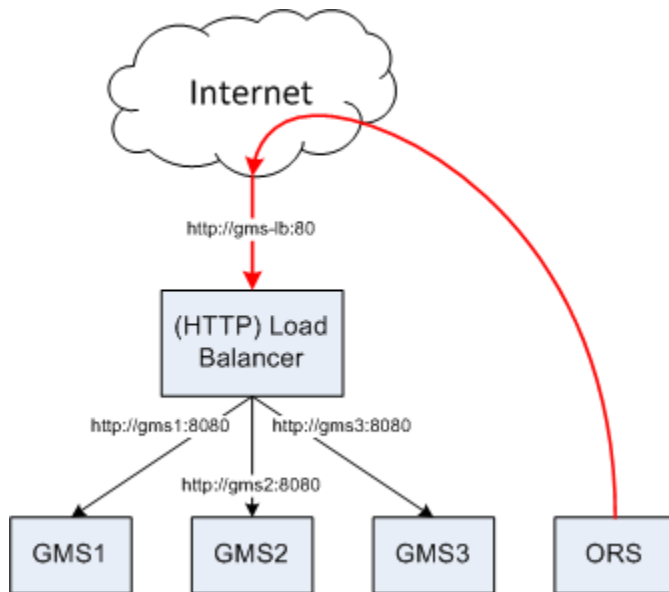
> **Important**
> Starting 8.5.104, you must update the DFM files deployed locally with the latest version provided in the GMS Admin UI.

Contents

Simple HTTP Connection to a Load Balancer

HTTP_simple connections can be set up in two cases:

- Simple connection to an internal load balancer.

- Simple connection to an external load balancer:

    - If you use a load balancer address external to the company network in the simple connecti
      Orchestration Server (ORS) must be able to reach to the outside world (Internet) before it
      "back" to the load balancer and further on to GMS instances.

```
<dfm name='gsgBasedServices' namespace='http://www.genesyslab.com/modules/dfm/
gsgBasedServices/v1'>
 ...
<connections>
<connection name='HTTP_simple' type='http' selectionmode='simple'>
<servers>
<server name='gsg' host='gms-lb' port='80' />
</servers>
</connection>
 ...
</dfm>
```

> ### Important
>
> Using a load balancer address external to the company network implies extra hops to the Internet. Longer access times and security policies that allow ORS to go outside of the network might create downturns.

Round Robin Connections
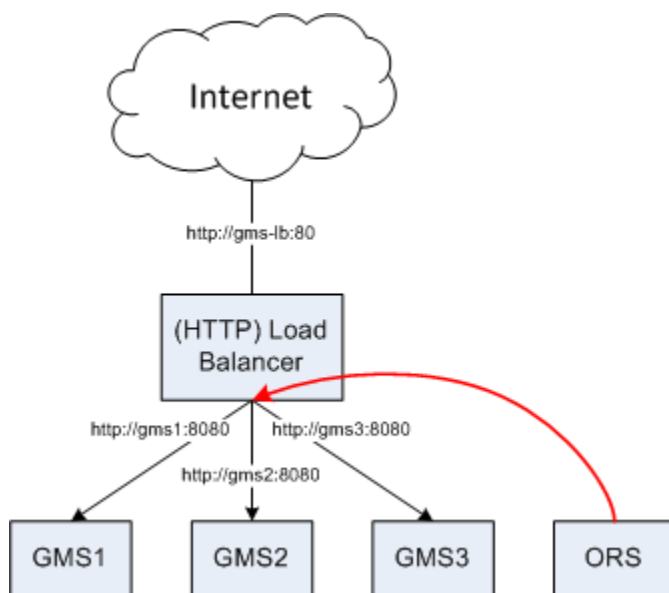
In the absence of an external load balancer or if the load balancer is external and you want t extra hops to the internet (and/or deny ORS access to the outside internet), you can configur robin connections. The round-robin connection type basically works as an internal load balan whenever GMS services are being invoked by ORS. To implement this configuration, create ro robin connections to each GMS node, as follows:

```
<connection name='HTTP_round_robin' type='http' selectionmode='round-robin'>
    <servers>
        <server name='gsg1' host='gms1' port='8080' />
        <server name='gsg2' host='gms2' port='8080' />
        <server name='gsg3' host='gms3' port='8080' />
    </servers>
</connection>
```

If you set up round robin connections, you can use the `conntype` attribute to control how OR!
reaches GMS. You must set the `conntype` attribute for HTTP transports to `HTTP_round_robin`
POST, and DELETE requests:

```
<transport name='HTTP_GET' conntype='HTTP_round_robin'>
```

Important

ORS is not designed as a soft load balancer, thus does not handle GMS node failure in
an optimal way. In addition, you must modify DFM files again, in case additional GMS
nodes are added to the cluster, it does not make sense to use only a partial GMS
cluster in the DFM configuration.

Modifying URL in HTTP transports

You might need to modify the `url` parameter of various HTTP transports if you use an external load
balancer that is configured to "hide" the GMS Admin UI (/genesys/admin) part of the URL.

```
<transport name='HTTP_GET' conntype='HTTP_round_robin'>
  <param name='method' expr='GET'/>
  <param name='enctype' expr='application/x-www-form-urlencoded'/>
 <param name='url' expr='/genesys/1/service/'/>
</transport>
```