

Step by step Guide to Configure Sybase Relay Server



Applies to:

Sybase Relay Server, Sybase Unwired Platform 1.5.5. For more information, visit the [Mobile homepage](#).

Summary

The Relay Server enables secure, load-balanced communication between mobile devices and MobiLink, Afaria and iAnywhere Mobile Office servers through a web server. The Relay Server provides the following:

1. A common communication architecture for mobile devices communicating with MobiLink, Afaria and iAnywhere Mobile Office servers.
2. A mechanism to enable a load-balanced and fault-tolerant environment for MobiLink, Afaria and iAnywhere Mobile Office servers.
3. A way to help communication between mobile devices and MobiLink, Afaria and iAnywhere Mobile Office servers in a way that integrates easily with existing corporate firewall configurations and policies.

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Author Bio

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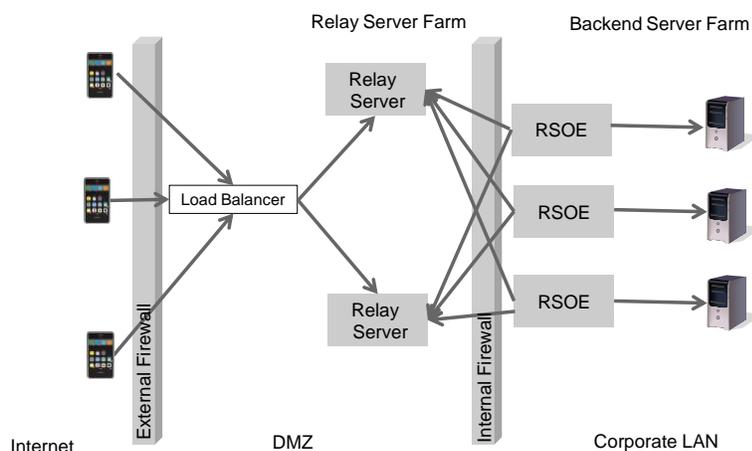
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Introduction

A Relay Server deployment consists of the following:

Mobile devices running client applications and services that need to communicate with back-end servers running in a corporate LAN.

1. Optional load balancer to direct requests from the mobile devices to a group of Relay Servers.
2. One or more Relay Servers running in the corporate DMZ.
3. Back-end servers running in a corporate LAN that are responsible for servicing client requests.
4. One Relay Server Outbound Enabler (RSOE) per back-end server. The Outbound Enabler manages all communication between a back-end server and the Relay Server farm.



The Relay Server consists of a set of web extensions, a background process for maintaining state information, and a web server.

Because the Relay Server is a web extension running in a web server, all communication is performed using HTTP or HTTPS. Using HTTP easily integrates with existing corporate firewall configurations and policies. The Relay Server requires that the connection from the corporate LAN to the Relay Server be initiated from inside the corporate LAN. This provides a more secure deployment environment because it does not require inbound connections from the DMZ into the corporate LAN.

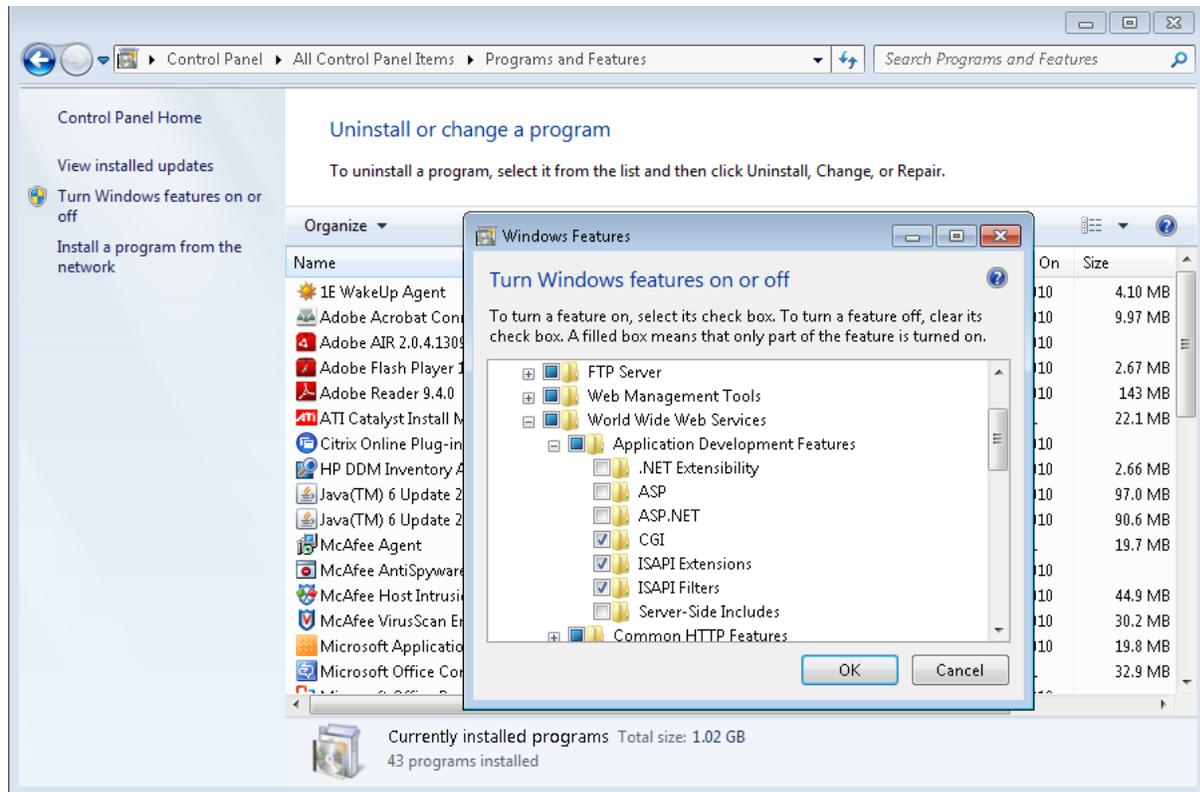
The Relay Server contains two web extensions: a client extension and a server extension. The client extension handles client requests made from applications running on mobile devices. The server extension handles requests made by the Outbound Enabler on behalf of a back-end server.

Installing the Relay Server Components to IIS 7.x on Windows

Prerequisites

Microsoft IIS 7.0 or 7.5 is installed on Windows 2008 or Windows 2008 R2, with the Microsoft IIS ISAPI Extensions feature on your server.

Turn on the CGI , ISAPI extensions , ISAPI filters



Tasks

1. From the installation package , get the relevant Relay Server ZIP file:
relayserver.zip for 32 –bit operating systems or relayserver_x64.zip for 64-bit operating system.

2. Extract the Zip file under C:/inetpub/wwwroot\ to create the folder structure:

- a. C:\inetpub\wwwroot\ias_relay_server
- b. C:\inetpub\wwwroot\ias_relay_server\Server
- c. C:\inetpub\wwwroot\ias_relay_server\Client

Modify the System path variable to refer to include C:/intepub/wwwroot/ias_relay_server/Servers

3. Back up %SystemDrive%\Windows\System32\inetsrv\config\applicationHost.config.

Open applicationHost.config in an editor, and merge the following sections into their respective locations in the file, then save the changes (detailed info follows):

To add an application pool for the Relay Server, edit the applicationHost.config file to add the following code to the <system.applicationHost> » <applicationPools> section:

```

<add name="RelayServer" queueLength="65535" autoStart="true" managedRuntimeVersion=""
managedPipelineMode="Integrated">
  <processModel identityType="LocalSystem" idleTimeout="00:00:00" maxProcesses="20"
pingingEnabled="false" pingInterval="00:00:30" pingResponseTime="00:01:30" />
  <recycling disallowOverlappingRotation="true">
    <periodicRestart time="00:00:00">
      <schedule>
        <clear />
      </schedule>
    </periodicRestart>
  </recycling>
  <failure rapidFailProtection="false" />
  <cpu resetInterval="00:00:00" />
</add>

```

- To add the Relay Server application to the default site, edit the applicationHost.config file to add the following code to the <system.applicationHost> » <applicationPools> » <sites> » <site name="Default Web Site"> section:

```

<application path="/ias_relay_Server" applicationPool="RelayServer">
  <virtualDirectory path="/" physicalPath="c:\inetpub\wwwroot\ias_relay_server" />
</application>

```

- To add the Relay Server ISAPI extensions, edit the applicationHost.config file to add the following code to the <system.webServer> » <security> » <isapiCgiRestriction> section:

```

<add path="c:\inetpub\wwwroot\ias_relay_server\Client\rs_client.dll" allowed="true" />
<add path="c:\inetpub\wwwroot\ias_relay_server\Server\rs_server.dll" allowed="true" />

```

- To add the Relay Server handlers, edit the applicationHost.config file to add the following code to the <configuration> section.

```

<location path="Default Web Site/ias_relay_server/client">
<system.webServer>
<handlers accessPolicy="Execute, Script">
</handlers>
</system.webServer>
</location>
<location path="Default Web Site/ias_relay_server/server">
<system.webServer>
<handlers accessPolicy="Execute, Script">
</handlers>
</system.webServer>
</location>
<location path="Default Web Site/ias_relay_server">
<system.webServer>

```

```

<security>
<authentication>
<anonymousAuthentication userName="" />
</authentication>
<requestFiltering>
<requestLimits maxAllowedContentLength="2147483647" />
</requestFiltering>
</security>
</system.webServer>
</location>

```

7. Open a Web browser, and ensure `http://localhost:80` loads the default page correctly

Configuring the Relay Server to Run as a Window Service on Relay Server

Tasks

1. From the command prompt, change to `C:\inetpubs\wwwroot\ias_relay_server\Server`

In the command prompt, enter the following at the command line and substitute all parameter values to match your configuration:

```

dbsvc -as -s auto -w SUPRelayServer "C:\inetpub\wwwroot\ias_relay_server\server\rshost.exe" -q -
qc -f "C:\inetpub\wwwroot\ias_relay_server\server\rs.config" -o "c:\Sybase\logs\rs.log"

```

Note: The version of the DLL files under `C:\inetpubs\wwwroot\ias_relay_server\Server` and `dbsvc` should be same.

2. This command configures the relay server host process (`rshost.exe`) as a Windows service. To start or stop the `rshost` service, from the Windows Services control panel, proceed as follows:
 - o Locate the *SQL Anywhere - SUPRelayServer* service
 - o To start or stop the service, right-click the service, and choose the corresponding command

From the command prompt, following options available:

- o Change to `C:\inetpubs\wwwroot\ias_relay_server\Server`
- o To start the service, enter `dbsvc.exe -u SUPRelayServer`
- o To stop the service, enter `dbsvc.exe -x SUPRelayServer`
- o To uninstall the service, enter `dbsvc.exe -d SUPRelayServer`

To update the `rshost` with the latest relay server configuration, enter `rshost.exe -f rs.config -u`

Configuring Backend Enabler for Relay Server

Tasks

1. On a machine where the Sybase Unwired Platform is installed, configure a relay server by editing `relayserver.properties`. The following sample displays the default property values:

```
relayserver.type = IIS
```

```
relayserver.host = myrelayserver
```

```
relayserver.http_port = 80
```

```
relayserver.https_port = 80
```

```
relayserver.farm_name = myrelayserver.myunwiredplatformRBS
```

```
relayserver.token = 9bd6d7cf0468a1d0af2c480e1fd7
```

```
relayserver.msg.farm_name = myrelayserver.myunwiredplatformMBS
```

```
relayserver.msg.token = 9bd6d7cf0468a1d0af2c480e1fd7
```

```
relayserver.webserver.farm_name = myrelayserver.myunwiredplatformDCN
```

```
relayserver.webserver.token = 9bd6d7cf0468a1d0af2c480e1fd7
```

```
relayserver.protocol = http
```

Note: `relayserver.properties` will be at location:
 C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\config\

2. Run C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\bin\regRelayServer.bat **install auto**

Note: The current `RegRelayServer.bat` implementation contains a bug. For this reason you need to clean up the results of the batch job in order to make this work. The bug is currently known to affect SUP 1.5.2 + 1.5.3.+1.5.5

a. `startsoe.bat`

The `-ID` tag should only include the host name of your SUP server. By default some additional text is added. This will need to be removed so only the SUP host name is defined.

Example:

Wrong: `-id "SUP152GA-SSUPServer1"`

Right: `-id "SUP152GA-S"`

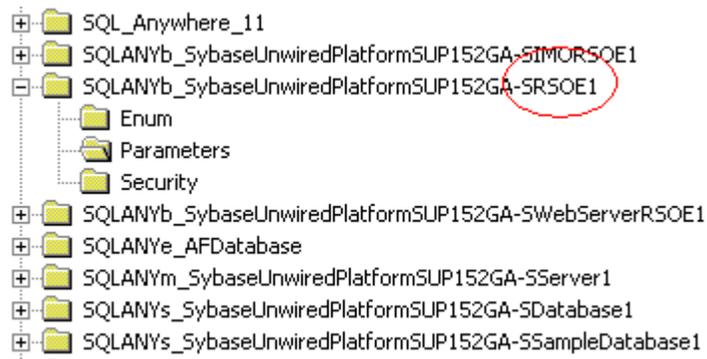
Note: You find the `startsoe.bat` here C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\bin

b. Clean Registry

Open the `regedit`

HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Services\

Look for the SQLANY.. Service that ends with RSOE1 at the end
 e.g. SQLANYb_SybaseUnwiredPlatformSUP152GA-RSOE1\Parameters



Clean up the –id parameter for this registry key:

SQLANYb_SybaseUnwiredPlatformSUP152GA-SRSOE1\Parameters

From: “-id SUP152GA-SSUPServer1”

To: “-id SUP152GA-S”

c. stoprsoe

Goto the location C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\bin and run stoprsoe.bat

d.startrsoe

Goto the location C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\bin and run startrsoe.bat

3. Copy rs.config from location C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\config\

To your relay server location C:\inetpubs\wwwroot\ias_relay_server\Server.

On the Relay server:

From the Windows Services control panel:

Locate the SQL Anywhere - SUPRelayServer service.

To stop the service, right-click the service and choose the stop command.

4. Restart the Sybase Unwired Server

5. Logs

C:\Sybase\UnwiredPlatform\Servers\UnwiredServer\logs

RSOE.log RBS

Msgrsoe.log MBS

webserver_rsoe.log DCN / DOE

Logs messages on successful implementation should be :

<UpChannel-0000> Successfully connected to relay server: myrelayserver:80

<DnChannel-0000> Successfully connected to relay server: myrelayserver:80

Configuration Instruction for Connecting Device to the Relay Server

Instructions for SUP Replication-based clients connecting to farm "sybaseunwiredplatform"

Use the Unwired Client Object API (SynchronizationProfile) to set the following values in the application. If the application is built using Device Application Designer, you may need to configure the following setting the Profile Setting screen of the application.

Set the Network Protocol to HTTP or HTTPS

Set the Server Name: myrelayserver

Set the Port Number to 80 (HTTP) or 443 (HTTPS)

Set the Network Stream Parameters to

"url_suffix=ias_relay_server/client/rs_client.dll/myrelayserver.sybaseunwiredplatformRBS"

Instructions for SUP Messaging-based clients connecting to farm " sybaseunwiredplatformMBS "

Please register your device in Sybase Control Center and use the following settings. The same entries must be configured in the Connection Setting page in the "Sybase Settings" client on your device or emulator:

Server Name: myrelayserver

Server Port: 80

Company ID: myrelayserver.sybaseunwiredplatformMBS

Username: Your user name registered with the Unwired Platform

Activation Code: The activation code generated by the Unwired Platform or provided during registration

Instructions for SUP Data Change Notification/DOE-C clients connecting to farm "sybaseunwiredplatform"

The farm is used to send incoming Data Change Notification requests and/or incoming DOE messages to the Unwired Platform. Point appropriate configurations files to the Relay Server URL:

http://myrelayserver/ias_relay_server/client/rs_client.dll/myrelayserver.sybaseunwiredplatformDCN

OR

https://myrelayserver/ias_relay_server/client/rs_client.dll/myrelayserver.sybaseunwiredplatformDCN

Result

The Relay Server is a cost effective way of integrating Sybase iAnywhere products through a common secure gateway for data transmission that easily integrates into the existing Web and IT infrastructure. The Relay Server provides multi-tenant load balancing and failover adding to the wide spectrum of services required for enterprise mobility. Using this step by step guide you can easily configure Relay Server in your landscape and leverage the utilities of the Relay Server

Related Content

For more information, visit the [Mobile homepage](#)

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