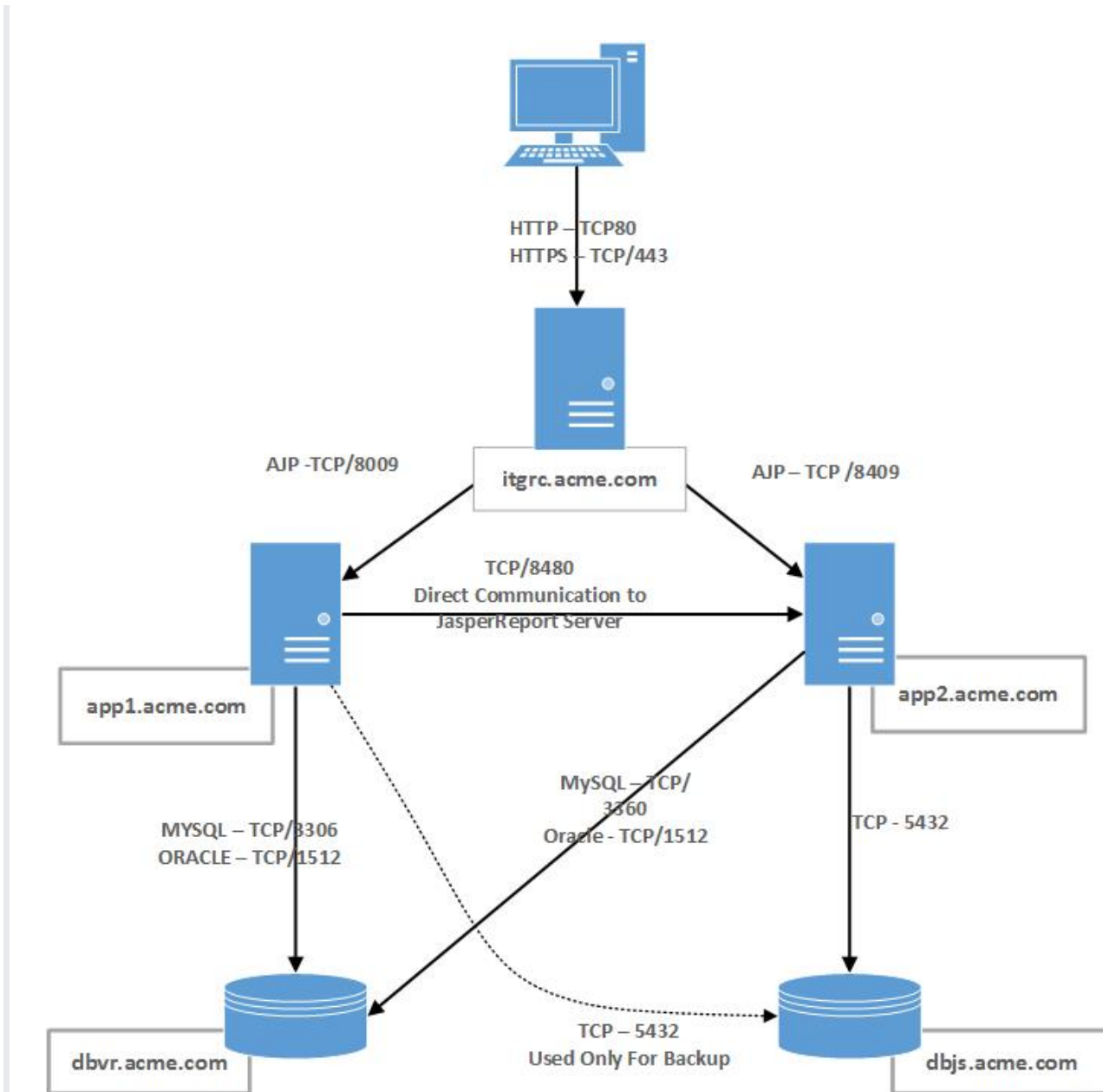


Ports in a Multiple Server Installation

The following graphic provides the use of ports in a multiple server installation.



Open Ports

A multi-server installation allows you to open only certain ports between hosts for increased security. Browsers communicate with RiskVision Server components and JasperReports Server using the HTTPS protocol. If the port TCP/80 is open, any HTTP request on that port will be redirected to HTTPS on port TCP/443.

The following ports must be open on each host in a multi-server deployment.

Host	Server Process	Open Ports
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itgrc.acme.com	Apache HTTPS server	TCP/80, TCP/443 to world
app1.acme.com	RiskVision Tomcat application server	TCP/8009 to itgrc.acme.com
app2.acme.com	JasperReports Server Tomcat application server	TCP/8409 to itgrc.acme.com TCP/8480 to app1.acme.com (used over HTTP) TCP/8480 to localhost
dbrv.acme.com	MySQL database server	TCP/3306 to app1.acme.com and app2.acme.com
	Oracle database server	TCP/1521 to app1.acme.com and app2.acme.com
dbjs.acme.com	PostgreSQL database	TCP/5432 to app1.acme.com and app2.acme.com

Note: If Apache and RiskVision Tomcat are on separate servers, any firewall between them needs to allow the RiskVision Tomcat server to connect to port TCP/443 of the Apache server. If this path is not open, there will be issues with Jasper reports embedded in the detail pane tabs.