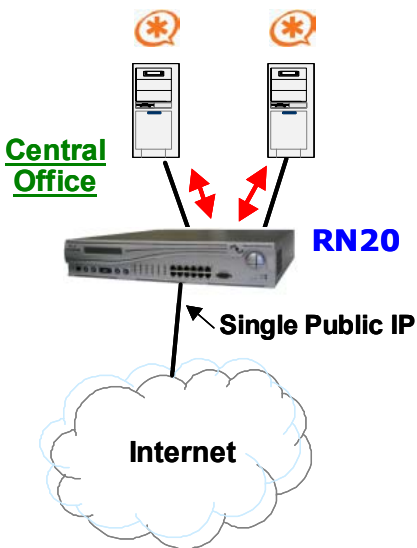


Asterisk 1+1 High Availability (HA) feature.

Customers always require 24x7 availability from any IP PBX. When using an open source IP PBX such as Asterisk, this can become a challenge, since the Asterisk runs on a Linux machine with potentially low reliability and required maintenance—leading to down time.



Ideally, customers should have at least two identical Linux machines running the Asterisk IP PBX with an RN appliance between them, as shown in the first figure.

When customers connect two Asterisk machines to the RN appliance, it monitors both machines and simulates real SIP registration requests toward both machines. By analyzing their responses, the RN appliance will automatically detect an Asterisk server failure and redirect all calls to the working Asterisk server. Since the RN appliance is using the real application-level protocol, it will be able to identify any server failure, from a hardware failure to Asterisk data base errors.

Since both machines shown in the figure are connected to the RN appliance, it protects both by representing them to the outside world as a single IP address—allowing IT personnel to maintain or replace either of the Asterisk servers without VoIP service interruption, and without requiring IP phone reconfiguration or re-registration.

The 1+1 HA feature works between any two Asterisk servers, even when both are not on the same network, or even geographically spread out as shown in the second figure. The figure shows a main Asterisk IP PBX in the central office, and a remote branch office with an RN300 and a local Asterisk IP PBX providing redundant VoIP service and/or local VoIP calls. Both Asterisk servers are connected to the PSTN Network. The RN300 constantly sends SIP registration requests to the central office server. If the server stops responding, the RN300 automatically redirects all calls toward the local Asterisk IP PBX. Having synchronized databases in both Asterisk IP PBX servers, branch office customers will have uninterrupted VoIP service.

This unique RN functionality enables customers to provide reliable 24x7 service with the Asterisk IP PBX—bringing open source IP PBX to enterprise-level solutions.

