



JI Technology – High Availability Solution

High Availability application server for Redundancy and Disaster Recovery management

JITsvrHA

JI Technology

Founded in 2008 to provide solutions and business development for MNO, MVNO, System Integrators & Service Providers, these solutions include charging, messaging, gateway applications and service control solutions. Our current & past engagements include Prepaid, Loyalty, Multi Payment Channel service, IOT, SMS gateways, 4G/5G core for Private Networks/MNO/MVNO, Fintech consulting & others.



PRIVATE 4G & 5G EPC

Complete 4G/5G EPC for Enterprise, integrators and service providers using a common core for both 4G and 5G radios



DEVICE CONTROL

1st layer of security for Private Networks by controlling access using IMEI and IMSI



BESPOKE SOLUTIONS

Competitive & agile. Presales through delivery



HIGH AVAILABILITY

Monitor applications and handle multiple failure scenarios to support redundancy and disaster recovery

HA and DR for private & local 4G|5G environments.

HA (High Availability) strategies deal with small, more localized failures or faults. DR (Disaster Recovery) is about having a plan for when the system or network goes down, and how to handle the results of a system or network. Most private 4G/5G networks are mission critical meaning they should be available at all times even in the event of an application / system / network failure no matter if local hardware failure, or power failure or disaster.

Why JIT HA / DR solution?

The JITsvrHA (High Availability) is an N+1 cluster management solution that supports Active/Active, Active/Warm-Standby (Active-Passive), Active/Cold-Standby processes to ensure continuous availability, Local redundancy, geo-redundancy & Disaster recovery.

- Application agnostic. Supports monitoring and management of any applications. For example: JIT applications, Private 4G/5G core, Postgres, Asterisk PBX, HTTP Apache & other web servers, Tomcat applications, any database etc.
- Manual Failover supported or routine/scheduled maintenance
- Color coded GUI status monitoring & Control Command Line Interface
- Fail over logging and Alarms (log file and in GUI)
- Failover for flagged processes, Flagged VIP addresses
- Automatic handshaking to determine Node priorities

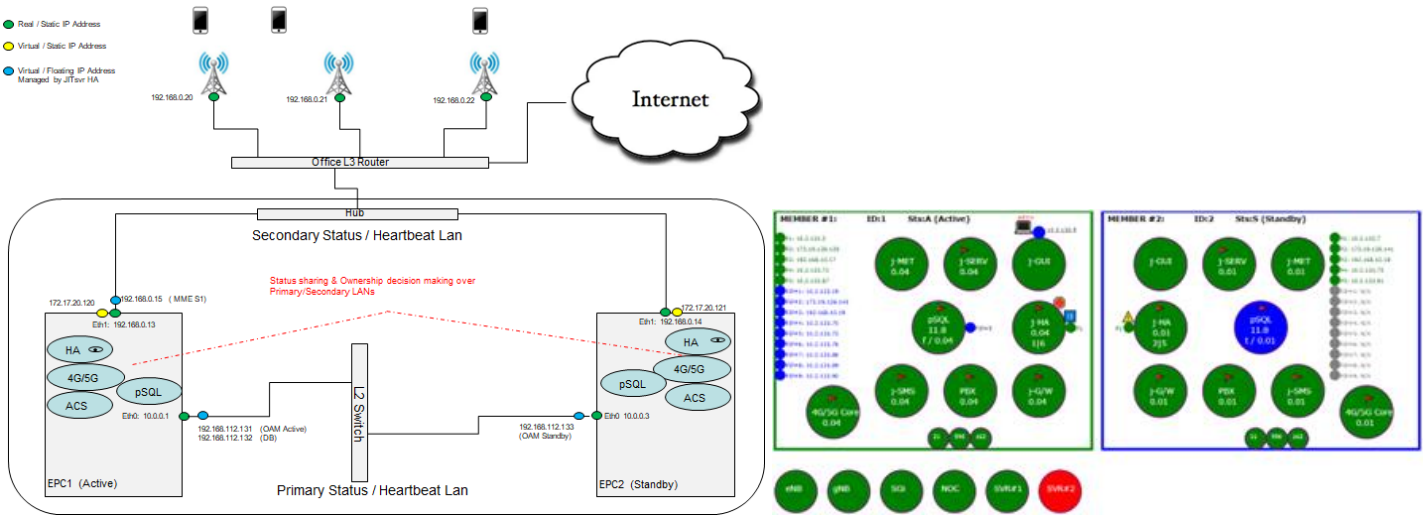




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JITsvrHA Solution details

The JITsvrHA is a single process per cluster member. The JITsvrHA process performs roles of member status management & application/status management. If a failure is detected, then the failover functions are performed.

- Easy to stop/start/pause/resume the High Availability manager via CLI & GUI
- Easy to monitor the status of the HA manager and each of the members via CLI & GUI
- Cluster scales to multiple members. Min cluster size is 2 members.
- Confirmed for at least single point of failure availability management
- Options to use dedicated heartbeat LAN or share common LAN using virtual IP.
- Handles power down on both servers in a dual node cluster
- Verified with the sXGP/Local 5G environment (Private 4G/5G core, Multiple eNB vendor, Multiple UE Vendor, uSIM/eSIM)
- Verified with X86 Clusters
- Monitor multiple floating virtual IP addresses
- Monitor static IP addresses
- Monitor NIC cards
- Linux Process checking
- Process heartbeat checking (check process is responding)
- Logging & SNMP for failures
- Auto-syncing of PostgresDB
- Configurable Hooks to call local failover scripts for stopping/starting/restarting/syncing applications
- Private 4G/5G core specific hooks to ensure VoLTE is handled by passive node when it changes to Active
- Coupled with the JITsvrACS, an attach delay time to stagger attach attempts when all UE re-attach at the same time following a failure
- Configurable interval timers for checks monitored members, local process status, IP status etc
- Visit us at <http://www.jitechnology.com>

