System Health Check

Initial Checks

Role	Check	Comments
VPN	Connectivity	Make sure the VPN is running OK, and that all systems are accessible by SSH and RDP.
Web Application	Connectivity	Connect via the IP address of the load balancer (if redundant, connect via the shared IP address). Login as sysadmin, switch to a user with admin rights, and check a few views: • Agent Home • Mini Client • Supervisor • Execute a report
Test Call	Functionality	Make a test call. Check that it is received by the system and that audio is heard. If possible: • Make a call to an ACD queue which is forwarded to an agent. • Check the agent's Agent Home indicates the incoming call and that the status of the call changes from ringing to busy (this indicates, the webserver is communicating with the platform UDP listener cluster). • Check that two way audio is heard.
Test Chat / Whatsapp	Functionality	Make a test chat. Make sure it is distributed to an agent, and that the agent can reply.
Virus Scanners	Activity	No virus scanner should be installed on the telephony server. Virus scanners can have negative impact on live telephony systems and should not scan in and outgoing traffic in the network, or the filesystems used by jtel software.

Component and Role Checks

Role	Check	Comments

ALL LINUX	Uptime and Errors	Use: **uptime** to check for how long the system has been up. If it has been restarted, then check the following for why: **less /var/log/messages** You may need to go back to an older file than the current log file to see why.
ALL LINUX	Disk Space	Use: **df -h** to make sure the disk is not full. Particularly on the database systems make sure this space will not run out soon. Note: on some systems, **/var/lib/mysql** may be mounted separately. Use: **mount** to verify how it is mounted or **cat /etc/fstab**
ALL LINUX	CPU Load	Use both of the following to identify CPU load problems: **top** **sar** (historical) **sar -u 1** (real-time)
ALL LINUX	Time Sync	Use the following commands to make sure the time sync is OK: **ntpq -p** (older systems) **chronyc sources** (newer systems) **timedatectl**

ALL LINUX	File System writable	Sometimes, if a file system error has occurred, linux will either:
		
		• Not mount it at all (this is easy to see / find)
		• Mount it read-only (this is not so obvious)
		
		Try writing to a file:
		
		`cat << EOFF > /root/test.txt`
		`Test`
		`EOFF`
		`cat /root/test.txt`

ALL LINUX	Expected processes running?	**ps -ef | less**
WINDOWS	Time Sync	Check the ntp status using the monitor application.

WINDOWS	CPU Load	Check the task manager to make sure no process is running very high CPU. Note: on a loaded system 50% or more CPU is perfectly fine, as long as it is either: • 8-Server • SIP and RTP Stack (Aculab)
DB	DB Master-Master DB Slaves	Make sure replication is running: **SHOW SLAVE STATUS\G** Make sure MySQL is not crashing: **less /var/log/mysqld.log**
LB	Redundant LB	Check the status of the pcs cluster with: **pcs status** Make sure one of the load balancers has the shared IP address, and that all resources are started.
LB	haproxy Stats and Control Page	Open haproxy (on both load balancers in a redundant system) using the following url: **http://<load-balancer>:7777** Make sure the expected resources are present and all up: • Expected database servers (in a redundant solution) are up and running. • Only one load balancer is serving connections. • Only one of the DB masters has active connections.
STORE	Redundant Store	Check the status of DRBD with: **drbdadm status jtelshared** Make sure it is primary/primary (for older installations) or primary secondary (for newer installations). Check the status of the pcs cluster with: **pcs status** Make sure all of the resources are started: • Mount of **/srv/jtel/shared** is started on one of the STORE servers • Samba is started on one of the STORE servers • The shared IP is started on one of the STORE servers

STORE	Non-Redundant Store	Check the status of the samba service: **smbstatus** **ps -ef | grep samba** Make sure it is running.
STORE	Space	Check the available space on the store with **df -h**
TEL	8-Server started	**startup.cmd** batch file window present? **giHal.exe** batch file window present and running? **giAcu.exe** (SIP Registrations) present and running (if required)? **8Server.exe** present and running?
TEL	8-Server health	Check errors / warnings for excessive error messages, such as ODBC errors or .r5 files not found errors. ODBC errors can indicate a database problem (for example, a mysql crash), or a syntax error in a sql procedure. File not found errors (particularly .r5 files) can indicate a storage problem.
TEL	8-Server stuck initialising	If 8-Server says "Initialising" on all lines, and does not exit this status for a long time, then there may be connectivity problems to the storage. This is best mitigated by making sure the samba credentials are correct, and that all "jtel" users have the same credentials.
TEL	Telephony Server not Receiving Calls	Start a wireshark trace for SIP using this capture filter: **port 5060 or ip[6:2] & 0x1fff != 0** If SIP messages are being received, then the problem might be a firewall rule injection by a domain policy. Check the firewall rules to make sure the required ports are opened.
TEL	PBX Connector	Telephony connector started and running? Messages being received from the PBX?

TEL	Platform UDP Listener	Check the Platform UDP listener is started
		Does the cluster contain all expected members? For example:
| | | ```
2021-03-18 04:02:11,263  INFO ClusterService: [acd-chat-2-1]:5701 [jtel-cluster-2

Members {size:16, ver:655} [
        Member [acd-chat-2-1]:5701 - d00296a2-b77b-43f4-8f2d-253aa3c73319 this
        Member [acd-tel1-2]:5701 - 306cc617-98e8-46ba-af76-e7c462a33958
        Member [acd-tel2-1]:5701 - b709eedc-95f3-4011-ab25-3e1c922dfb53
        Member [acd-tel2-2]:5701 - 8b954452-b443-4790-9ae9-92339c3c4aaf
        Member [acd-tel1-1]:5701 - 0fc1b287-a4cc-4066-9ecf-72445e21b58c
        Member [acd-web2-3]:5701 - ce048053-7bab-4ec6-8739-c50cfd631d5a
        Member [acd-web2-5]:5701 - 0de0f146-39b9-4a81-8d60-0834cdb1832d
        Member [acd-web2-2]:5701 - 78ded150-4a6c-4360-88b7-a35a39827b52
        Member [acd-web2-4]:5701 - 0e92c204-76b3-4ae5-a63f-f6aa3a289d74
        Member [acd-web2-1]:5701 - 565400ae-21f4-4573-8b7f-03f503dc196a
        Member [acd-web2-6]:5701 - baffdaca-8e7a-4b14-93d3-b0add684444d
        Member [acd-web1-5]:5701 - 64022427-baff-4cf6-a75e-dbe15a8f4cc2
        Member [acd-web1-6]:5701 - 69835d0b-c9d9-42a7-94ed-bfa8785c9b9e
        Member [acd-web1-4]:5701 - 701bf011-4f6e-4349-85eb-7585c0c175f2
        Member [acd-web1-1]:5701 - feb66be6-70a5-4a7c-be54-fb0a3aaecf8c
        Member [acd-web1-2]:5701 - ae2935b8-df2e-4f51-b9e9-13e8a4554441
]
``` |
TEL	Disk Space	Use the windows explorer to make sure the disk is not full.
WEB	Webservers	Check each webserver individually using
		http://<server>:8080/CarrierPortal/sysadmin/login
		Make sure it is possible to login.
		Make sure the logo is visible (if not, this indicates a file share mount error to **/home/jtel/shared**)
WEB	Certificate	Make sure the certificate is OK by accessing the system via the load-balancer (if necessary, using an alias in your hosts file).
		This is mandatory, for example, for SalesForce integrations.

WEB	Stats Counters	To check the general health of the web application and database, the following stats pages can be used: http(s)://<load-balancer>/CarrierPortal/pages/common/Stats.xhtml Cache counters (average should be below 1 ms): Page counters (average should be below 300 ms):
CHAT	Application running	Make sure the chat application is running: **ps -ef | grep jtel-clientmessenger**
REST	Application running	Make sure the chat application is running: **ps -ef | grep jrest**