TSSC/IMC v9.3.x Fix List

TSSC/IMC code level 9.3.8 replaces previous code levels 9.2.11, 9.2.14 and 9.2.16.

Since TSSC/IMC may get updated from 7.x, 8.x or 9.x level of code, please review not only the 9.3.8 specific changes and improvements, yet also those already provided in prior code level as needed.

Changes introduced with TSSC/IMC v9.3.8 (June 2022)

- Updated Linux kernel
- Updated Java JRE 8.0.6.35
- Service specific changes:
 - o Added start/stop button for AOS and remote support center to main TSSC web page



- o Improve reporting for latest available code level ready for activate in Web UI
- o Added check to only proceed with TSSC code activate if enough free space is available
- o Fixed issue where serial port connection didn't work properly
- \circ Added ability for future TSSC patches to correctly report if eg. reboot is required
- $\circ \quad \mathsf{Fixed}\,\mathsf{issue}\,\mathsf{where}\,\mathsf{Blue}\,\mathsf{Diamond}\,\mathsf{FTPS}\,\mathsf{upload}\,\mathsf{config}\,\mathsf{screen}\,\mathsf{was}\,\mathsf{shifted}\,\mathsf{off}\,\mathsf{screen}$
- Call Home related changes:
 - o Reduced retry interval when Call Home is in locked state to prevent log wrap
 - o Improved reporting for systems where Call Home fails due to entitlement checking
- Code Load related changes:
 - $\circ \quad \text{Fixed issue where call home proxy configuration may get lost during code updates} \\$
- Security related changes:
 - Addressed potential 'Polkit' vulnerability
 Note: This fix was previously provided via TSSC patch
 - o Addressed potential 'Spring4Shell' vulnerability
 - Fixed issue where trying to test or enable LDAP policy caused browser tab to close
 - o Fixed issue where failed logins were not properly reported in RSYSLOG

- Fixed issue where LDAP password was not properly concealed Note: This fix was previously provided via TSSC patch
- o Fixed issue where HMAC-SHA1 is not removed from SSH cipher list when SHA1 is disabled

Additional changes previously introduced with TSSC/IMC v9.2.14 (November 2021) and v9.2.16 (February 2022)

- Call Home related changes:
 - o Updated embedded ECC common client to latest version
 - Added support for valid ASCII characters in client email address
 Note: Reference of supported characters: https://en.wikipedia.org/wiki/Email_address
 - Cognitive Support Platform (CSP):
 - Modified Retain/PMR references in TSSC/IMC user interface to report CSP instead
 - Added support for proper CSP case number to be reported in call home log
 - Added support for CSP case number in call home filename
 - Added support for client business name field to contain space/blank character to support multiple strings to more easily match CSP profile information

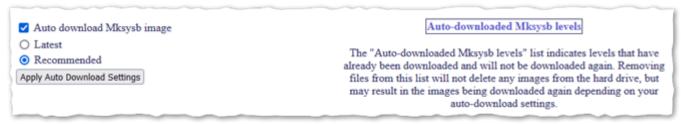


- o Fixed several issues related to streaming call home
- o Fixed issue where call home data package contained data ID with unexpected format
- o Improved proper maintenance of call home settings across code loads
- Fix Acquisition related changes:
 - o Added Fix Acquisition page into 'wizard' for TS7700 First Time Install
 - $\circ \quad \mathsf{Removed}\,\mathsf{obsolete}\,\mathsf{'Download}\,\mathsf{TS7700}\,\mathsf{Code'}\,\mathsf{option}$
 - o Added ability to acquire TSSC/IMC patches through Fix Acquisition

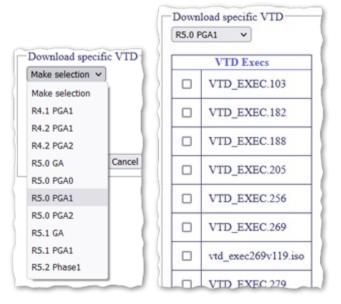
o Cleaned up Fix Acquisition web page



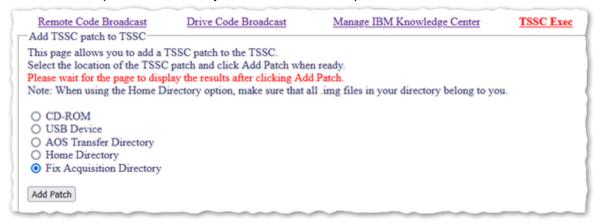
o Added ability to automatically download latest or recommended MksSysB through Fix Acquisition



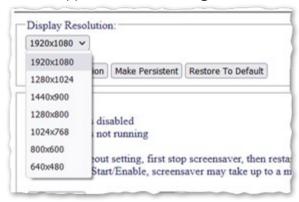
Added ability to download select vtd_exec for specific code level through Fix Acquisition



- o Fixed issue where vtd_exec downloaded through Fix Acquisition were not verified by MD5 checksum
- o Added "Fix Acquisition Directory" as source for TSSC patch install

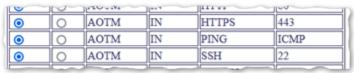


- o Updated call home configuration to utilize secure download for Fix Acquisition
- Service specific changes:
 - Fixed issue where window manager (login GUI) fails to start on Dell 7060 with v9.2.11
 Note: This fix was previously provided via TSSC/IMC patch for v9.2.11
 - Added support for additional AOS broker
 Note: This fix was previously provided via TSSC/IMC patch for v9.2.11 and below
 - o Fixed issue where tunnel to attached system didn't use port 9088 as intended
 - o Added support to allow setting flexible screen resolution



- TS4500 related changes:
 - o Improved handling of LCC assigned DHCP address required for IMC to start in kiosk mode
- Remote Access related changes:
 - o Fixed issue where AOS idle timeout didn't handle newly added AOS broker IP addresses/hostnames
- Security related changes:

- o Fixed/improved several shortcomings as a result of AppScan analysis
- o Changed Firewall page to report AOTM as opposed to Grid, and bond0 / bond0:1 in case of same subnet configuration



o Added ability to "Recreate Default Certificate" to regenerate one with new expiration date



- o Fixed issue where LDAP accepted an expired LDAP server certificate
- o Removed Log4j v1 to remove any potential future exposure

Note: ~50 Github Issues have been addressed in 9.3.8

Changes introduced with TSSC/IMC v9.3.10 (August 2022)

- Add support for new TS7770 machine type/model 3948-VED and 3948-CSB
- Service specific changes:
 - $\circ \quad \text{Fixed issue where restore of TSSC configuration backup from attached host fails due to serial number check}$
 - o Improved call home data offload where data packages sent using 'offloadpkg' can have a filename including parenthesis
 - Fixed issue where blanks in client name were not properly maintained across code loads
 Note: This fix was previously provided via TSSC patch
 - Fixed issue where tape drive code broadcast to attached TS7700 didn't work due to improperly grayed out broadcast button Note: This fix was previously provided via TSSC patch

- o Improved verbiage in various interfaces replacing 'Knowledge Center' with 'IBM Documents'
- o Improved verbiage in various interfaces replacing 'RETAIN' with 'CSP'
- o Fixed issue where improper TSSC IP address was reported in main web page section 'System Console Product Information'
- o Fixed issue where TSSC Web UI got into a hang condition when trying to import IBM service documentation
- o Added support for importing PDF documentation via 'Copy CD to Console' function
- o Fixed issue where Fix Acquisition could fail when ECC is configured to use client proxy with authentication
- o Improved usability for grayed out 'Start RSC' by showing flyover help
- o Fixed issue where filesystem 'updatepkg' being full could prevent TSSC login
- Security related changes:
 - o Add support for SNMP V3 to send encrypted traps
 - o Improved log handling and messaging for RSYSLOG
 - o Fixed issue where LDAP could fail when password contains special character
 - o Fixed issue where LDAP password was truncated to max length of 16 character

Note: ~25 Github Issues have been addressed in 9.3.10

Changes introduced with TSSC/IMC v9.3.11 (November 2022)

- TS4500/IMC specific changes:
 - o Added ability to perform manual and scheduled TS4500 configuration backup



• Service specific changes:

Added ability to select BANKO/BANK1 boot selection in 'rsRasMenu'

```
# TSSC Menus
# |->Shutdown Options ...
# 1. Restart TSSC
# 2. Shut Down TSSC
# 3. Show current boot BANK [ BANK0 | BANK1]
# 4. Show installed TSSC version for each BANK
# 5. Set boot BANK to BANK0
# 6. Set boot BANK to BANK1
```

- Updated First Time Install wizard to match TS7700 roadmap documentation
- Embedded latest TSSC/IMC service documentation
- Remote Access related changes:
 - o Added support for third AOS broker

Hostname	IP Address	Port	Description
aosrelay1.us.ihost.com	72.15.223.60	443	US AOS Broker ¹⁾
aosback.us.ihost.com	72.15.223.61	443	US AOS Broker 1)
aoshats.us.ihost.com	72.15.223.62	443	US AOS Broker ¹⁾

o Updated 'remote support center' configuration with new front server default values

Hostname	IP Address	Port	Description
xrsc-front-srv-1.southdata.ibm.com3)	170.225.126.11	22, 443 1)	remote support center front server
xrsc-front-srv-2.southdata.ibm.com3)	170.225.126.12	22, 443 1)	remote support center front server
xrsc-front-srv-3.eastdata.ibm.com3)	170.225.127.11	22, 443 1)	remote support center front server
xrsc-front-srv-4.eastdata.ibm.com3)	170.225.127.12	22, 443 ¹⁾	remote support center front server

- $\circ \quad \mathsf{Modified}\,\mathsf{'remote}\,\mathsf{support}\,\mathsf{center'}\,\mathsf{configuration}\,\mathsf{to}\,\mathsf{restart}\,\mathsf{running}\,\mathsf{service}\,\mathsf{after}\,\mathsf{TSSC/IMC}\,\mathsf{reboot}$
- Call Home related changes:
 - o Fixed shortcomings in streaming Call Home implementation Note: streaming Call Home should only be enabled starting with this level of code
 - o Improved log details for Call Home failures when backend server is unavailable
 - Added support for problem cases to be opened in Call Home Connect Cloud vs CSP Note: This change applies only to MENA and LA countries

Note: ~10 Github Issues have been addressed in 9.3.11