

# SDP Release Notes

Perforce Professional Services

Version v2025.2, 2026-07-21

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# Preface

## Please Give Us Feedback

Perforce welcomes feedback from our users. Please send any suggestions for improving this document or the SDP to [consulting-p4@perforce.com](mailto:consulting-p4@perforce.com).

# Chapter 1. Overview

These release notes document the most important changes to the SDP.

There are two flavors of the SDP, Unix and Windows.

For UNIX/Linux, see: [SDP Guide for UNIX/Linux](#)

For Windows, see: [SDP Guide for Windows](#)

# Chapter 2. What's New?

## 2.1. What's Coming Next in SDP 2026.1?

SDP is moving from Classic to Streams, into the `//p4-sdp` depot, with SDP 2026.1. This is an enabling step moving in the direction of OS package installation options coming farther down the road. In the coming SDP 2026.1 release:

- Support for P4D 2026.1, the 'Secure By Default' release of P4D, will be added.
- Rebranding changes (moving away from 'Helix' branding) will be completed.



While the coming SDP 2026.1 will formally add support for P4D 2026.1, SDP 2025.2 Patch 1 is known to work well with P4D 2026.1. Per docs, our standard advice applies: Upgrade to the latest available SDP before upgrading P4D.

Here are highlights of this current and other recent releases. For more detail see [Chapter 6, Change History](#) below.

## 2.2. What's New in SDP 2025.2 Patch 1? (This Release)

- Enhancements to `p4verify.sh`.
- Added new troubleshooting docs, `force_start` docs, etc.
- Improvements to `upgrade.sh` including a warning if P4 version is newer than SDP version (SDP-1285).
- Added support for RHEL/Rocky Linux 10.
- Install robustness improvements.
- Various script improvements.
- Several configurable best practices updates.
- Improvements to `mkrep.sh`.
- Other minor bug fixes.



While the coming SDP 2026.1 will formally add support for P4D 2026.1, SDP 2025.2 Patch 1 is known to work well with P4D 2026.1. Per docs, our standard advice applies: Upgrade to the latest available SDP before upgrading P4D.

## 2.3. What Was New in SDP 2025.2?

- SDP 2025.2 formally added support for P4 2025.2.
- SDP development continues in parallel in the `//p4-sdp` stream depot.

## 2.4. What Was New in SDP 2025.1 Patch 4

- Refinements to `install_sdp.sh` and `opt_perforce_sdp_backup.sh`.
- Fixed typo in release notes; patches to 2025.1 were mislabeled as patches to 2025.2 (not yet released).
- SDP development continues in parallel in the `//p4-sdp` stream depot.

## 2.5. What Was New in SDP 2025.1 Patch 3

- Fixed backward compatibility issue with `opt_perforce_sdp_backup.sh`.
- SDP development continues in parallel in the `//p4-sdp` stream depot.

## 2.6. What Was New in SDP 2025.1 Patch 2

- Fixed 2 regressions, one for mailx (email sending), one for groups w/spaces in the name.
- Enhanced `opt_perforce_sdp_backup.sh` so `install_sdp.sh` works w/NFS & 'root squash' enabled.
- SDP development continues in parallel in the `//p4-sdp` stream depot.

## 2.7. What Was New in SDP 2025.1 Patch 1

- Improved support in `install_sdp.sh` for Infrastructure as Code (IaC) with SDP-1289 and SDP-1291.
- The `install_sdp.sh` has an option to avoid using cleartext passwords, enabled by default.
- Tweaks to `mkrep.sh`.
- The `refresh_P4ROOT_from_offline_db.sh` script handles `client.readonly.dir` better with SDP-1299.
- SDP development continues in parallel in the `//p4-sdp` stream depot.

## 2.8. What Was New in SDP 2025.1

- Change default P4 Server version to 2025.1.
- Best Practices Tweaks.
- Bug fix to `install_sdp.sh` for interacting with pre-existing non-local (LDAP) OSUSER.
- SDP development is now happening in parallel in the `//p4-sdp` stream depot as part of our streams adoption strategy.
- SDP development continues in parallel in the `//p4-sdp` stream depot.

## 2.9. What Was New in SDP 2024.2 Patch 4

- Enhanced `ccheck.sh` and `verify_sdp.sh`. Check security easily with: `ccheck.sh -sec`
- Security enhancements.

- Various other fixes.

## 2.10. What Was New in SDP 2024.2 Patch 3

- More hardening for `install_sdp.sh` in security hardened environments, and doc correction to '-local' mode e.g. for air gap installs.
- Enhanced `ccheck.sh` and `verify_sdp.sh`.
- Various other fixes.

## 2.11. What Was New in SDP 2024.2

The main themes of the SDP 2024.2:

- Change default P4 Server version to 2024.2.
- The `live_checkpoint.sh` works on p4d servers other than the commit.
- Upgrade Procedure supports Legacy and new Package Structures

For more information, see [SDP Classic and OS Package Structures](#).

## Chapter 3. SDP Health Checks

If you need to contact Perforce Support to diagnose an issue with the SDP on UNIX/Linux, you can use the `/p4/common/bin/sdp_health_check.sh` script. This script is included with the SDP (starting with SDP 2023.1 Patch 3). If your installation does not have this script, it can be downloaded separately. Every version of the `sdp_health_check.sh` script can be used any and all versions of the UNIX/Linux SDP dating back to 2007, so you don't need to be concerned with version compatibility.

If your P4 server machine has outbound internet access, execute the following while logged in as the operating system user that owns the `/p4/common/bin` directory (typically `perforce` or `p4admin`):

```
cd /p4/common/bin
[[ -e sdp_health_check.sh ]] && mv -f sdp_health_check.sh
sdp_health_check.sh.moved.$(date +%Y-%m-%d-%H%M%S')
curl -L -O
https://workshop.perforce.com/download/guest/perforce_software/sdp/tools/sdp_health_ch
eck.sh
chmod +x sdp_health_check.sh
./sdp_health_check.sh
```

If your P4 server machine does not have outbound internet access, acquire the `sdp_health_check.sh` file from a machine that does have outbound internet access, and then somehow get that file to your P4 server machine.

If you have multiple server machines with SDP, possibly including machines running P4D replicas or edge servers, P4Proxy or P4Broker servers, run the health check on all machines of interest.

The `sdp_health_check.sh` script will produce a log file that can be provided to Perforce Support to help diagnose configuration issues and other problems. The script has these characteristics:

- It is always safe to run. It does only analysis and reporting.
- It does only fast checks, and has no interactive prompts. Some log files are captured such as `checkpoint.log`, but not potentially large ones such as the `p4d` server log.
- It requires no command line arguments.
- It does not transfer highly sensitive information like Protections or user information.
- It works for any and all UNIX/Linux SDP version since 2007.

# Chapter 4. SDP Supported Maintenance Schedule

The SDP has the same support schedule as the P4 Server.

See the [P4 Server Maintenance Support](#).

# Chapter 5. SDP and P4D Version Compatibility

The released versions of SDP match released versions of P4D. For example, SDP 2025.2 is guaranteed to work with P4D 2025.2. As of July 21, 2026, SDP 2025.2 is supported with these P4D versions:

- P4D 2025.2
- P4D 2025.1
- P4D 2024.2
- P4D 2024.1

The SDP is often forward- and backward-compatible with other P4D versions, but for best results they should be kept in sync by upgrading SDP before P4D. This is partly because the SDP contains logic that helps upgrade P4D, which can change as P4D evolves.

The SDP is aware of the P4D version, and has backward-compatibility logic to support older versions of P4D. This is guaranteed for the supported versions of P4D listed above. Backward compatibility of SDP with older versions of P4D may extend farther back, though without the "officially supported" guarantee.

# Chapter 6. Change History

## 6.1. SDP 2025.2 Patch 1:

Released: Rev. SDP/MultiArch/2025.2/33059 (2026/07/21).

Jobs Fixed since change 32234 up to 33059 (B=Bug, D=Doc, F=Feature):

- [SDP-1376](#) (B): Home dir backup directive file `~perforce/.p4-sdp.home_dir_backup` had root ownership. Fixed.
- [SDP-1375](#) (F): Temporarily set `dm.user.resetpassword=1` as a workaround pending an upstream p4d server change.
- [SDP-1374](#) (B): `mkrep.sh` might fail if service users unexpectedly exist at start. Fixed.
- [SDP-1372](#) (F): Update `mkrep.sh` to work with `dm.user.resetpassword=1`.
- [SDP-1371](#) (B): `mkrep.sh` does not set `serviceUser` for master/commit server when created. Fixed.
- [SDP-1368](#) (F): `gen_sudoers.sh`: Add entries to manage `monitor_locks.{service,timer}`.
- [SDP-1365](#) (F): Add `strace` support to `p4*_base` init scripts, with docs.
- [SDP-1364](#) (B): `makedirs.sh` `chmod` error on creating second instance as `perforce`. Fixed.
- [SDP-1362](#) (F): Add Rocky Linux 10 to SDP Test Suite (compatible with RHEL 10).
- [SDP-1361](#) (B): Broken `get_mail_sender_opt()` impacted script emails on some platforms. Fixed.
- [SDP-1360](#) (B): User reported emails no longer working after upgrading SDP. Fixed.
- [SDP-1358](#) (B): Ensure `sys.pressure.mem.*` are disabled in `ccheck.sh` (for now).
- [SDP-1348](#) (F): Expand ownership checks in `verify_sdp.sh` beyond just `P4ROOT`.
- [SDP-1344](#) (B): The `depot_verify_chunks.py` hits "maximum recursion depth exceeded" error on a massive 15T depot.
- [SDP-1343](#) (B): Using the non-default `UseEncryptedPassword=0` setting in `sdp_install.cfg` can fail.
- [SDP-1342](#) (B): `gen_sudoers.sh` fails, breaking `install_sdp.sh`, if `sudoers` does not accept host.
- [SDP-1338](#) (F): New best practice: Set `db.partitioned.dropondelete=1`.
- [SDP-1337](#) (B): Set owner/perms on all SDP `systemd` unit files.
- [SDP-1335](#) (F): New best practice: Set `dm.protects.hide=1`.
- [SDP-1332](#) (B): `p4verify.sh` does not use encoded password. Fixed.
- [SDP-1331](#) (F): `gen_sudoers.sh`: Add entries to manage `p4metrics` and `vmagent` services.
- [SDP-1330](#) (F): `p4verify.sh`: Add `'-since <date>'` and `'-last <string>'` options to target changelists over a time period.
- [SDP-1326](#) (B): Custom `SDP_START_DELAY` value was not honored. Fixed.
- [SDP-1278](#) (F): Clarify that `P4MASTERHOST` and `P4MASTERPORT` are overwritten on a replica in `instance_vars.template`.
- [SDP-1154](#) (F): `mkrep.sh` should create `Address` as well as `ExternalAddress` for new servers.

- [SDP-1120](#) (F): SDP Health Check - Added error/warning summary.
- [SDP-1072](#) (D): Add SDP Coding Standard (DRAFT) for Bash to simplify AI collaboration.
- [SDP-890](#) (D): Add troubleshooting doc to handle interrupted live checkpoint.
- [SDP-853](#) (B): p4verify.sh generates 'error: A revision range cannot be used here.' Fixed.
- [SDP-837](#) (F): Make force\_start in p4d\_N\_init easier with systemd.
- [SDP-779](#) (F): Prevent accidental run of configure\_new\_server.sh on existing server.

## 6.2. SDP 2025.2 GA:

Released: Rev. SDP/MultiArch/2025.2/32234 (2025/12/05).

Jobs Fixed since change 32192 up to 32234 (B=Bug, D=Doc, F=Feature):

- [SDP-1325](#) (B): Refined install\_sdp.sh and mkdirs.sh to work with LDAP groups with spaces in the name.
- [SDP-1321](#) (F): New best practice: Set lbr.unloaddepot.compress=1 for P4D 2025.2+.
- [SDP-1285](#) (F): Add warning in upgrade.sh if P4 version is newer than current SDP version.
- [SDP-1166](#) (F): Changed default version in get\_helix\_binaries.sh to r25.2.

## 6.3. SDP 2025.1 Patch 4:

Released: Rev. SDP/MultiArch/2025.1/32192 (2025/11/21).

Jobs Fixed since change 32172 up to 32192 (B=Bug, D=Doc, F=Feature):

- [SDP-1318](#) (B): SDP upgrade in new OS Package Structure reports error from opt\_perforce\_sdp\_upgrade service. Fixed.
- [SDP-1314](#) (F): install\_sdp.sh: If Hostname set, now adds '--static' option to 'hostnamectl set-hostname'.

## 6.4. SDP 2025.1 Patch 3:

Released: Rev. SDP/MultiArch/2025.1/32172 (2025/11/08).

Jobs Fixed since change 32165 up to 32172 (B=Bug, D=Doc, F=Feature):

- [SDP-1313](#) (B): Backward compatibility issue w/opt\_perforce\_sdp\_backup service w/root-owned dirs. Fixed.

## 6.5. SDP 2025.1 Patch 2:

Released: Rev. SDP/MultiArch/2025.1/32165 (2025/11/08).

Jobs Fixed since change 32133 up to 32165 (B=Bug, D=Doc, F=Feature):

- [SDP-1236](#) (F): Enhanced `opt_perforce_sdp_backup.sh` to work with NFS with root squash enabled.
- [SDP-1312](#) (B): `install_sdp.sh` v5.16.2 fails if LDAP group has spaces in the name.
- [SDP-1311](#) (B): `get_mail_sender_opt()` generates malformed `-a` argument for GNU Mailutils.

## 6.6. SDP 2025.1 Patch 1:

Released: Rev. SDP/MultiArch/2025.1/32133 (2025/10/29).

Jobs Fixed since change 31674 up to 32133 (B=Bug, D=Doc, F=Feature):

- [SDP-1307](#) (B): `p4verify.sh` chokes on depot names containing special characters like parenthesis.
- [SDP-1305](#) (D): Add in information about edge server `live_checkpoint` option.
- [SDP-1302](#) (F): Enhance `sdp_health_check.sh` to include `verify_sdp.sh` call with `'-only systemd_config'`.
- [SDP-1301](#) (B): Secondary cleanup of standby journal.NNN files fixed.
- [SDP-1299](#) (B): `refresh_P4ROOT_from_offline_db.sh` fails to copy `client.readonly.dir`.
- [SDP-1296](#) (F): `p4verify.sh`: Add `'-recent=head'` to verify only head revs.
- [SDP-1295](#) (B): Fixed `sdp_upgrade.sh` bug handling LDAP group names containing spaces.
- [SDP-1293](#) (D): Document methodology for using multiple `/hxdepots-N` volumes in SDP Guide.
- [SDP-1291](#) (F): Add script to recover SDP from backup dir created by `opt_perforce_sdp_backup` service.
- [SDP-1290](#) (B): The `opt_perforce_sdp_backup` service needs to preserve `/p4/ssl` and `/p4/N/bin` directories.
- [SDP-1289](#) (F): Enhance `install_sdp.sh` to install SDP on server with existing P4 data volumes.
- [SDP-1288](#) (B): Fixed issue with `install_sdp.sh` working in non-systemd environment (e.g. Docker).
- [SDP-1283](#) (B): Crontab call to `'p4 unlock'` with both `'-f'` and `'-x'` gives usage error. Fixed.
- [SDP-1275](#) (D): Add doc on LVM storage setup.
- [SDP-1265](#) (F): Support `'p4 monitor -L'` by default.
- [SDP-1219](#) (D): Modernized SDP Guide on traditional backup/recovery methods.
- [SDP-1207](#) (F): Fully support `s-nail` as an alternative to `mailx`, including auto-detection.
- [SDP-1130](#) (F): For `'p4 pull'` metadata replication, use `'-I 100'` in `mkrep.sh`.
- [SDP-1113](#) (F): Added `'-p4config'` option to `mkrep.sh` to target arbitrary `p4d` server.
- [SDP-1012](#) (F): `sdp_health_check.sh`: capture broker conf file, if in use.
- [SDP-877](#) (B): `mkrep.sh` can choke on bad server spec for old master `ServerId`. Fixed.
- [SDP-641](#) (F): Get SDP to work w/o cleartext password file.

## 6.7. SDP 2025.1 GA:

Released: Rev. SDP/MultiArch/2025.1/31674 (2025/06/04).

Jobs Fixed since change 31570 up to 31674 (B=Bug, D=Doc, F=Feature):

- [SDP-1263](#) (F): Updated OS packages in `install_sdp.sh` to include tuned and other needed tools.
- [SDP-1262](#) (D): Updated Windows to Linux Migration Guide to reference `install_sdp.sh`.
- [SDP-1261](#) (B): `install_sdp.sh` no longer tries to assign groups if OSUSER is an LDAP user rather than local.
- [SDP-1260](#) (F): Added `track=1` to `configure_new_server.{bat,sh}` and to `configurables.cfg`.
- [SDP-1234](#) (F): `sdp_upgrade.sh` needs enhanced check to deal with old/new install procedures as root.
- [SDP-1165](#) (F): Changed default version in `get_helix_binaries.sh` to `r25.1`.

## 6.8. SDP 2024.2 Patch 4:

Released: Rev. SDP/MultiArch/2024.2/31570 (2025/05/14).

Jobs Fixed since change 31564 up to 31570 (B=Bug, D=Doc, F=Feature):

- [SDP-1258](#) (B): Fixed owner/perms issue with `sdp_upgrade.sh` for servers deployed with `install_sdp.sh`.

Released: Rev. SDP/MultiArch/2024.2/31564 (2025/05/14).

Jobs Fixed since change 31367 up to 31564 (B=Bug, D=Doc, F=Feature):

- [SDP-1256](#) (F): `p4login` now produces one log file per day.
- [SDP-1255](#) (B): `mkrep.sh` directions had bogus `{ReplicaHost}` text. Fixed.
- [SDP-1253](#) (F): Make `ccheck.sh` validate disk space before setting `filesystems.*.min` too low.
- [SDP-1250](#) (B): `mkdirs.sh` script failed to load crontab on Ubuntu.
- [SDP-1248](#) (F): SDP Health Check now does security checks if SDP is 2024.2 Patch 4 or later.
- [SDP-1247](#) (F): Added `'-csec'` option to `verify_sdp.sh` to call `'ccheck.sh'` with `'-sec'`.
- [SDP-1246](#) (F): Added `'-fix'` and `'-FIX'` options to `ccheck.sh`.
- [SDP-1245](#) (F): Doing `'p4login -v -service'` on commit logs into External address of active edges.
- [SDP-1244](#) (F): Removed setcap handling code from `upgrade.sh` now that we can rely on `AmbientCapabilities` in `systemd`.
- [SDP-1243](#) (F): `ccheck.sh` now sports a new `'-sec'` option to focus on security-related configurables.
- [SDP-1241](#) (B): Fixed issue in `ccheck.sh` with handling values specified as `Unset`.
- [SDP-1240](#) (F): New best practice - set `dm.user.setinitialpasswd=0`.
- [SDP-1239](#) (B): `mkdirs.sh` did not support complex passwords. Fixed.

- [SDP-1238](#) (B): Security fixes to harden against vulnerability.
- [SDP-1237](#) (F): Enhanced verify\_sdp.sh to check systemd service for AmbientCapabilities.
- [SDP-1233](#) (F): Eliminated noise in checkpoint logs related to track=1.
- [SDP-1231](#) (F): New best practice - set server.rolechecks=1.
- [SDP-1227](#) (F): Add 'protections' check to verify\_sdp.sh, ensure perforce super is last line and remote user disabled.
- [SDP-1220](#) (F): Workaround: Preflight journal health check in p4d\_base would fail if the temporary journal contains "db.have.pt" journal entries for a "partitioned-jnl" client.
- [SDP-1177](#) (F): Remove setcap and getcap from limited sudoers and upgrade.sh.
- [SDP-1174](#) (F): Enhanced verify\_sdp.sh to verify server spec sanity.
- [SDP-1006](#) (F): sdp\_health\_check: capture list of triggers installed.
- [SDP-793](#) (F): Remove refs to service user password.

## 6.9. SDP 2024.2 Patch 3:

Released: Rev. SDP/MultiArch/2024.2/31367 (2025/03/23).

Jobs Fixed since change 31193 up to 31367 (B=Bug, D=Doc, F=Feature):

- [SDP-1218](#) (B): mkdirs.sh overwrites existing crontab when adding multiple instances.
- [SDP-1217](#) (B): Adjust perforce\_bashrc template to avoid setting HISTFILE if it is readonly.
- [SDP-1213](#) (F): Added default P4ALIASES for perforce OS user.
- [SDP-1210](#) (F): Enhance verify\_sdp.sh to report if \$P4ROOT/state{pullL,failover} files exist on p4d server.
- [SDP-1209](#) (B): Cron file is still loaded when mkdirs.sh is called with -test. Fixed.
- [SDP-1205](#) (B): Fixed bug in run\_if\_broker.sh.
- [SDP-1204](#) (F): Add server=1 and track=1 to default p4p startup.
- [SDP-1200](#) (B): install\_sdp.sh on apt-get systems waits cache to update to improve robustness.
- [SDP-1199](#) (B): install\_sdp.sh fails if perforce OS user pre-exists due to LDAP rather than useradd.
- [SDP-1198](#) (B): install\_sdp.sh now works if umask for root is not default, e.g. 0027 instead of 0022.
- [SDP-1197](#) (B): install\_sdp.sh now installs OS packages before checking for required utils like rsync.
- [SDP-1196](#) (B): install\_sdp.sh now appends OSUSER to /etc/cron.allow if it exists.
- [SDP-1195](#) (B): Fix so MASTER\_ID value written into mkdirs.N.cfg file is correct.
- [SDP-1193](#) (B): Confusion about location of helix\_binaries dir for -local installs. Fixed.
- [SDP-1192](#) (B): Fixed issue with case mismatch with ServerID and db.config settings.
- [SDP-1037](#) (F): Added verify\_sdp.sh '-online' checks that P4USER exists with super access.

## 6.10. SDP 2024.2 Patch 3:

Released: Rev. SDP/MultiArch/2024.2/31193 (2025/01/17).

Jobs Fixed since change 31084 up to 31193 (B=Bug, D=Doc, F=Feature):

- [SDP-1189](#) (B): p4login is wrongly sensitive to case of ServerID on case-insensitive server. Fixed.
- [SDP-1188](#) (F): verify\_sdp.sh should output if this is master/edge/replica and error otherwise
- [SDP-1187](#) (F): verify\_sdp.sh should validate a commit server is defined
- [SDP-1186](#) (B): mkdirs.sh did not detect SELinux and thus did not prepare for SELinux. Fixed.
- [SDP-1185](#) (B): SDPInfo trigger crashes Swarm servers.
- [SDP-1184](#) (B): Case sensitivity bug with server specs.
- [SDP-1182](#) (B): install\_sdp.sh ignores p4d version specified in cfg file.
- [SDP-1175](#) (B): Preserve non-journaled partitioned clients in swap of P4ROOT/offline\_db.
- [SDP-737](#) (F): In SDP Legacy Upgrade Guide, advise p4d -cunset P4JOURNAL if needed.
- [SDP-722](#) (D): Document the usage of the /p4/common/site folder more fully.

## 6.11. SDP 2024.2 Patch 1:

Released: Rev. SDP/MultiArch/2024.2/31084 (2024/12/21).

Jobs Fixed since change 31075 up to 31084 (B=Bug, D=Doc, F=Feature):

- [SDP-1183](#) (B): sdp\_upgrade.sh munges values from P4USER and other settings. Patched.

## 6.12. SDP 2024.2 GA:

Released: Rev. SDP/MultiArch/2024.2/31075 (2024/12/20).

Jobs Fixed since change 30924 up to 31075 (B=Bug, D=Doc, F=Feature):

- [SDP-1181](#) (B): daily\_checkpoint.sh on edge skips checkpoint dump if journal rotation needed.
- [SDP-1176](#) (B): request\_replica\_checkpoint.sh no longer removes old checkpoints/journals.
- [SDP-1173](#) (B): Eliminated excessive buildup of cruft directories in /tmp.
- [SDP-1157](#) (F): Decouple SDP from NFS. Phase 3 - Parallel Operation with New and Legacy Structure
- [SDP-1119](#) (F): Add a preflight for owner of files in P4ROOT.
- [SDP-1105](#) (F): Changed default Helix Core version in get\_helix\_binaries.sh to r24.2.
- [SDP-1079](#) (F): Make live\_checkpoint.sh work on replicas/edges.
- [SDP-811](#) (F): Eliminate Python 2.x dependency in SDP.
- [SDP-765](#) (F): Upgrade p4review2.py to work with Python 3.

## 6.13. SDP 2024.1 Patch 2:

Released: Rev. SDP/MultiArch/2024.1/30924 (2024/11/21).

Jobs Fixed since change 30917 up to 30924 (B=Bug, D=Doc, F=Feature):

- [SDP-1169](#) (B): Fixed obscure "one day a month" bug in sdp\_upgrade.sh that failed to detect SDP version if released on the 20th.

## 6.14. SDP 2024.1 Patch 1:

Released: Rev. SDP/MultiArch/2024.1/30917 (2024/11/20).

Jobs Fixed since change 30385 up to 30917 (B=Bug, D=Doc, F=Feature):

- [SDP-1167](#) (D): Server Spec Standard: ServerID for commit is now: {commit|master}[,<OrgName>[,<SDPInstance>]].
- [SDP-1163](#) (B): p4login errors out with multi-line server.id file.
- [SDP-1162](#) (B): load\_checkpoint.sh: With '-latest', fails to get serial checkpoint.
- [SDP-1151](#) (B): upgrade.sh: Fixed message indicating why 2nd journal rotation skipped.
- [SDP-1150](#) (F): New best practice configurable: dm.user.hideinvalid=1.
- [SDP-1147](#) (B): Enhanced indication of p4pcm.pl running status from log file.
- [SDP-1146](#) (B): ccheck.sh: Fixed issue checking for 'Unset' configurables.
- [SDP-1143](#) (D): The trigger type should be "change-submit" when adding CheckCaseTrigger in SDP guide.
- [SDP-1142](#) (F): Enable CAP\_SYS\_RESOURCE capability using systemd rather than relying on setcap.
- [SDP-1140](#) (F): New configurable best practice - set rt.monitorfile.
- [SDP-1139](#) (F): For Windows, make daily\_backup.bat work for edge servers.
- [SDP-1137](#) (B): Enabling Track=1 causes errors in daily journal rotation log file in Windows SDP.
- [SDP-1136](#) (F): mkdirs.sh: Add -no\_cron option.
- [SDP-1134](#) (B): gen\_default\_broker\_cfg.sh error line 32: unbound variable. Fixed.
- [SDP-1129](#) (B): The call to 'p4 unlock' in crontab template needs '-f'.
- [SDP-1125](#) (B): Fixed bug setting filesys.\*.min safety values in configure\_new\_server.sh.
- [SDP-1124](#) (F): Add limited sudoers and sudoers configuration to sdp.
- [SDP-1123](#) (F): Add '-no\_enable' option to avoid enabling installed services.
- [SDP-1122](#) (B): Enhance mkdirs.sh to call get\_helix\_binaries.sh if/as needed.
- [SDP-1117](#) (B): The get\_helix\_binaries.sh gives an error if USER is not defined. Fixed.
- [SDP-1116](#) (F): Adapt recover\_edge.sh to use latest checkpoint even if parallel.
- [SDP-1094](#) (B): The OK and .md5 files for parallel ckps don't get cleaned.

- [SDP-1088](#) (B): `sync_replica.sh` shouldn't require consistent parallel checkpoint config across servers.
- [SDP-1084](#) (B): Checkpoint cleanup logic no longer distinguishes between parallel and serial.
- [SDP-1078](#) (D): Documentation needs to be expanded to clearly state setting up of a Proxy or Broker via the SDP.
- [SDP-1077](#) (D): Add doc for installing standalone p4p, describe Instance Bin dir.
- [SDP-1071](#) (F): Incorporate Helix Installer functionality into SDP with new `install_sdp.sh` script.
- [SDP-1069](#) (F): Decouple `/p4/common` and `/p4/sdp` from NFS (Phase 1 of 3; silent beta opt-in).
- [SDP-1057](#) (B): `mkdirs` with type `p4proxy` generates incorrect `P4PROXY` values in `common/config/p4_1.vars`.
- [SDP-1056](#) (B): `mkdirs.sh` dealing with `p4broker` can create bogus `common/bin` entries.
- [SDP-1055](#) (B): `mkdirs.sh` fails and returns 0 (success) if unbound variables in `mkdirs.cfg`.
- [SDP-1054](#) (B): `mkdirs.sh` with type `p4proxy` fails if no `p4d` in `helix_binaries`.
- [SDP-1040](#) (B): `mkdirs.sh` for proxy doesn't create dirs required by `verify_sdp.sh`.
- [SDP-1018](#) (F): Support `p4d` OOM Killer Defense feature on NFS.
- [SDP-1013](#) (F): New trigger to add SDP Version in 'p4 info'.
- [875](#) (F): Auto-configure `p4pcm.pl` '-t{low|high}' thresholds per available storage.

## 6.15. Web Doc Only 2024/07/16

2024/07/16 - A documentation-only hot patch of SDP web docs adjusting URLs (driven by web security improvements) was pushed to address issues with broken Apache-redirected URLs in docs. This change was for web docs only, and did not result in an update to the SDP tarball, thus this change is not tagged as an SDP release.

## 6.16. SDP 2024.1 GA:

Released: Rev. SDP/MultiArch/2024.1/30385 (2024/06/11).

Jobs Fixed since change 30295 up to 30385 (B=Bug, D=Doc, F=Feature):

- [SDP-1361](#) (B): Broken `get_mail_sender_opt()` impacted script emails on some platforms. Fixed.
- [SDP-1112](#) (F): Enhance `mkdirs.sh` to handle SELinux for installed services.
- [SDP-1111](#) (F): Add support for `/HxCheckpoints` volume separate from `/HxDepsots`.
- [SDP-1109](#) (D): Incorrect path of "typemap" example file in SDP Linux Guide.
- [SDP-1108](#) (B): Fixed errors in new `-cshow` logic generating errors for empty data set.
- [SDP-1107](#) (B): `ccheck.sh` scripts misses reporting that `auth.id` should be set. Fixed.
- [SDP-1104](#) (F): Changed default Helix Core version in `get_helix_binaries` to `r24.1`.
- [SDP-1095](#) (F): Support per-host architecture variations, e.g. `linux26x86_64` and `linux26aarch64`, e.g. Graviton.

- [SDP-1092](#) (F): Make load\_checkpoint.sh suitable for migrations with checkpoint and journals coming over time.
- [SDP-1065](#) (F): AWS SNS can be always, or only on failure.
- [SDP-649](#) (F): Enhance mkdirs.sh to handle systemd configuration for installed services.

## 6.17. SDP 2023.2 Patch 1:

Released: Rev. SDP/MultiArch/2023.2/30295 (2024/05/08).

Jobs Fixed since change 30041 up to 30295 (B=Bug, D=Doc, F=Feature):

- [SDP-1106](#) (F): Added support for podman in tests.
- [SDP-1103](#) (F): P4MASTER\_ID now accepts 'commit' as synonym for 'master'.
- [SDP-1102](#) (B): Fixed log rotation issue in proxy\_rotated.sh.
- [SDP-1101](#) (B): p4verify.sh: Fixed issue detecting verify errors containing non-ASCII patterns.
- [SDP-1100](#) (F): Standardized location of core dumps for p4d/p4broker/p4p.
- [SDP-1099](#) (F): p4verify.sh: Add '-no\_z' option to verify without -z.
- [SDP-1098](#) (F): load\_checkpoint.sh: Add '-no\_start' option.
- [SDP-1097](#) (F): ccheck.sh: Made 'prod' profile the default.
- [SDP-1091](#) (F): Add '-p4config' option to p4sanity\_check.sh to target P4PORT of external server.
- [SDP-1089](#) (B): p4verify.sh sends mail twice. Fixed.
- [SDP-1097](#) (F): Change p4d -cshow or -jd calls in SDP to avoid locking.
- [SDP-1085](#) (F): request\_replica\_checkpoint.sh script now supports parallel checkpoints.
- [SDP-1084](#) (F): Checkpoint cleanup logic no longer distinguishes between parallel and serial.
- [SDP-1083](#) (F): p4verify.sh: Add verification of long-term 31+day ticket.
- [SDP-1082](#) (B): CheckCaseTrigger.py bug with uppercase depot names on case sensitive servers. Fixed.
- [SDP-1080](#) (F): Add '-p4config' option to p4verify.sh to target external (possibly non-SDP) server.
- [SDP-1068](#) (B): Prevent crond sending bogus emails from SDP scripts if track is set.
- [SDP-1067](#) (B): Fix FROM value in email function to avoid email server blocking.
- [SDP-1066](#) (F): New best practice: Set submit.noretransfer=1.
- [SDP-1064](#) (D): Add SDP docs on limited sudoers option for installing SDP.

## 6.18. SDP 2023.2 GA

Released: Rev. SDP/MultiArch/2023.2/30041 (2023/12/22)

Jobs Fixed since change 29949 up to 30041 (B=Bug, D=Doc, F=Feature):

- [SDP-1062](#) (F): Enhanced upgrade.sh to better prepare for a rollback.

- [SDP-1061](#) (B): SSO\_default.sh trigger did not support 'opt out' model. Fixed.
- [SDP-1060](#) (F): Changed default Helix Core version in get\_helix\_binaries.sh to r23.2.
- [SDP-1059](#) (F): Add keep\_offline\_db\_current.sh utility to maintain offline\_db on standby.
- [SDP-1058](#) (B): verify\_sdp.sh fails after mkdirs.sh with type p4proxy.
- [SDP-1053](#) (F): Add support for new Traits depot in P4D 2023.2.
- [SDP-1052](#) (F): sdp\_health\_check.sh: Add support for SDP installations that define P4SUPER.
- [SDP-1051](#) (F): CheckCaseTrigger.py: Fixed performance issues with large CLs and deep directory structures.
- [SDP-1045](#) (F): Update Windows SDP to support P4D 2023.2 atomic journal rotations.
- [SDP-1035](#) (D): Inconsistent documentation for trigger script.
- [SDP-1021](#) (F): Adapt SDP to P4-22821, search path for journalPrefixBackup.
- [SDP-845](#) (D): upgrade.sh: Doc, error message, and pedantic output improvements.
- [SDP-544](#) (F): Enhance verify\_sdp.sh to check for best practice configurables.

## 6.19. SDP 2023.1 Patch 4

Released: Rev. SDP/MultiArch/2023.1/29949 (2023/12/01)

Jobs Fixed since change 29890 up to 29949 (B=Bug, D=Doc, F=Feature):

- [SDP-1048](#) (B): Date format change for checkpoints in SDP not compatible with P4Prometheus.
- [SDP-1047](#) (B): SDP configure\_new\_server.sh not adding initial super user correctly.
- [SDP-1046](#) (B): The update\_limits.py in SDP 2023.1 Patch 3 spawns CPU-bound zombies.
- [SDP-1003](#) (D): Customers misusing 'Helix Installer' are creating support cases.

## 6.20. SDP 2023.1 Patch 3

Released: Rev. SDP/MultiArch/2023.1/29890 (2023/11/11)

Jobs Fixed since change 26999 up to 29890 (B=Bug, D=Doc, F=Feature):

- [SDP-1042](#) (F): Enhance load\_checkpoint.sh to exit with error if not enough disk space available.
- [SDP-1039](#) (F): Added '-latest' option to load\_checkpoint.sh.
- [SDP-1038](#) (F): load\_checkpoint.sh: Added safety feature to defend against using '< /dev/null' and forgetting '-y'.
- [SDP-1036](#) (F): Add support for s-nail email utility.
- [SDP-1033](#) (F): p4verify.sh now verifies and schedules pull transfers for Extensions depot.
- [SDP-1032](#) (F): Changed default P4MASTERHOST to localhost.
- [SDP-1031](#) (F): The configure\_new\_server.sh now initializes an empty data set, creating perforce user, Automation group, initializing Protections, etc.

- [SDP-1030](#) (F): Change security default from 0 (demo) to 4 (production).
- [SDP-1029](#) (F): Include the `sdp_health_check.sh` with every build of the SDP.
- [SDP-1028](#) (B): `upgrade.sh` could stall if `sudo` was not configured correctly for 2023.1+ p4d upgrades.
- [SDP-1026](#) (F): Add parallel checkpoint support to `load_checkpoint.sh`.
- [SDP-1025](#) (F): In `replica_status.sh`, add '-v' to 'p4 -LL' if p4d is 2021.1+.
- [SDP-1024](#) (B): `mkdirs.sh` typo; line end with `wrap || \` has extra `i` at end.
- [SDP-1023](#) (B): Change format of datestamp in certain log files to make it easier to parse.
- [SDP-1022](#) (F): Better handling of existing P4ROOT in `load_checkpoint.sh`.
- [SDP-1019](#) (B): In `proxy_rotate.sh` and `broker_rotate.sh`, call to `check_dirs()` expects `dirs` for a p4d server.
- [SDP-772](#) (F): Define `client.sendq.dir` configurable.
- [SDP-734](#) (F): `p4verify.sh` now verifies Extensions depot.
- [SDP-712](#) (B): `load_checkpoint.sh` should not require a license unless p4d needs it.
- [SDP-615](#) (B): `load_checkpoint.sh` can show 'EXITCODE: 0' on failure.
- [SDP-244](#) (F): Define `client.readonly.dir` configurable (Windows).
- [SDP-243](#) (F): Define `client.readonly.dir` configurable (UNIX/Linux).

## 6.21. SDP 2023.1 Patch 2

Released: Rev. SDP/MultiArch/2023.1/29699 (2023/07/11)

Jobs Fixed since change 29621 up to 29699 (B=Bug, D=Doc, F=Feature):

- [SDP-778](#) (B): NFS sharing `/p4/common` causes `upgrade.sh` to classify major upgrade as patch.
- [SDP-915](#) (F): Add `-paths` option to `p4verify.sh` to verify specified paths.
- [SDP-916](#) (F): Enhance granularity and extractability of timing info for `p4verify.sh`.
- [SDP-917](#) (B): Upgrade on Ubuntu does not attempt 'sudo setcap'.
- [SDP-918](#) (B): Add `db.storage` to list of tables to checkpoint on an edge.
- [SDP-919](#) (F): `p4verify.sh`: Added `-ignores <regex_ignores_file>` option.
- [SDP-920](#) (B): Avoid use of `setcap` in Docker environments.

## 6.22. SDP 2023.1 Patch 1

Released: Rev. SDP/MultiArch/2023.1/29621 (2023/05/25)

Jobs Fixed since change 29610 up to 29621 (B=Bug, D=Doc, F=Feature):

- [SDP-914](#) (F): Added `setcap` ability to `mkdirs.sh`

## 6.23. SDP 2023.1 GA

Released: Rev. SDP/MultiArch/2023.1/29610 (2023/05/25)

Jobs Fixed since change 29441 up to 29610 (B=Bug, D=Doc, F=Feature):

- [SDP-1044](#) (B): mkrep.sh now handle situation where no server spec exists.
- [SDP-797](#) (F): sync\_replica.sh to maintain offline\_db on a 'ham' replica.
- [SDP-813](#) (F): mkrep.sh: Add preflight check for running on master and P4MASTER\_ID OK.
- [SDP-840](#) (F): Set net.parallel.{max,threads} to reasonable defaults.
- [SDP-866](#) (F): Add configurables for Helix Authentication Service (HAS).
- [SDP-867](#) (F): Change server.extensions.dir to /hxlogs.
- [SDP-868](#) (B): Fix call to p4login.bat in configure\_new\_server.bat (missing instance arg).
- [SDP-888](#) (B): mkrep.sh gets generated ServerID wrong if '-f' used when not daisy chaining.
- [SDP-892](#) (B): The sdp\_upgrade.sh script erroneously resets DO\_PARALLEL\_CHECKPOINTS to 0.
- [SDP-898](#) (B): Checkpoints fail if DO\_PARALLEL\_CHECKPOINTS is enabled and 'bc' utility not available.
- [SDP-900](#) (F): Add support for r23.1 hyper-parallel multi-thread per db table checkpoint capability.
- [SDP-903](#) (B): Broken / changed behavior in p4verify log name rotation.
- [SDP-904](#) (F): p4verify.sh: Add '-w <Wait>' and '-q <MaxActivePullQueueSize>' options.
- [SDP-906](#) (F): Update default Helix Core server release version to 2023.1
- [SDP-907](#) (F): Added '-Q <MaxTotalPullQueueSize>' option to p4verify.sh.
- [SDP-908](#) (B): Fix update\_limits.py crash if unicode chars are in names/emails.
- [SDP-909](#) (F): p4verify.sh: Add safety feature to avoid verifying cache mode replica by default.
- [SDP-912](#) (F): Added P4D r23.1 OOM defense in SDP upgrade.sh.

## 6.24. SDP 2022.2 Patch 2

Released: Rev. SDP/MultiArch/2022.2/29441 (2023/02/27)

Jobs Fixed since change 29399 up to 29441 (B=Bug, D=Doc, F=Feature):

- [SDP-872](#) (B): For parallel checkpoint replay, need to add '-N'.
- [SDP-878](#) (B): p4login fails to get P4TARGET if replica ServerID is subset of another.
- [SDP-880](#) (B): p4login expands only first comma in SDP\_AUTOMATION\_USERS var.

## 6.25. SDP 2022.2 Patch 1

Released: Rev. SDP/MultiArch/2022.2/29399 (2023/02/06)

Jobs Fixed since change 29250 up to 29399 (B=Bug, D=Doc, F=Feature):

- [SDP-624](#) (F): Add mkrep.sh support for '<N>' per standard: `<HelixServerTag>_<ReplicaTypeTag>[<N>]_<SiteTag>`
- [SDP-777](#) (F): mkrep.sh: Support daisy chaining of forwarding replicas.
- [SDP-857](#) (F): mkrep.sh: Add preflight check to avoid overwriting existing ServerID.
- [SDP-858](#) (F): mkrep.sh: Add '-os' option to overwrite an existing ServerID.
- [SDP-860](#) (B): Directories that differ only by case aren't being caught by script.
- [SDP-861](#) (B): mkdirs.sh now creates crontab for proxy-only installs.
- [SDP-862](#) (F): Adjust p4pcm.pl so it does not require a local perl build.
- [SDP-864](#) (F): Added '-delay <delay>' option to load\_checkpoint.sh to delay call to p4verify.sh.
- [SDP-865](#) (F): Enhance robustness of systemctl management of p4d/p4p/p4broker.
- [SDP-871](#) (F): Add perl as required tool for sdp\_upgrade.sh.
- [SDP-873](#) (B): Add rotation of p4triggers.log to rotate\_last\_run\_logs in backup\_functions.sh
- [SDP-874](#) (F): mkdirs.sh now creates crontab for broker-only installs.
- [SDP-876](#) (F): Enhanced docs re: MAILTO/MAILFROM settings in Instance Vars file.

## 6.26. SDP 2022.2 GA

Released: Rev. SDP/MultiArch/2022.2/29250 (2022/12/08)

Jobs Fixed since change 29203 up to 29250 (B=Bug, D=Doc, F=Feature):

- [SDP-776](#) (F): Add support for parallel checkpoint ops with -jcp/-jdp/-jrp.
- [SDP-854](#) (F): Set default Helix Core version in get\_helix\_binaries.sh to r22.2.
- [SDP-855](#) (B): Changes to PROXY\_V\_FLAGS are not persisted during upgrades.
- [SDP-856](#) (B): sdp\_upgrade.sh did not properly extract values from p4\_N.vars containing '='.

## 6.27. SDP 2022.1 Patch 3

Released: Rev. SDP/MultiArch/2022.1/29203 (2022/11/22)

Jobs Fixed since change 29141 up to 29203 (B=Bug, D=Doc, F=Feature):

- [SDP-848](#) (B): New CheckCaseTrigger.py from SDP 2022.1 Patch 2 doesn't catch case-only folder renames.
- [SDP-850](#) (B): Eliminate harmless errors when mkdirs.sh used for proxy-only/broker-only hosts.
- [SDP-851](#) (B): load\_checkpoint.sh: Avoid moving P4JOURNAL aside if replayed.

## 6.28. SDP 2022.1 Patch 2

Released: Rev. SDP/MultiArch/2022.1/29141 (2022/10/29)

Jobs Fixed since change 28987 up to 29141 (B=Bug, D=Doc, F=Feature):

- [SDP-823](#) (B): P4MASTERPORT value was incorrect for proxy-only or broker-only machines.
- [SDP-824](#) (B): CheckCaseTrigger.py fails if has Unicode mode enabled.
- [SDP-825](#) (D): Clarify doc to indicate RHEL 8 is fine; only CentOS 8 is discouraged.
- [SDP-827](#) (F): Add monitor\_metrics.log to list of logs rotated.
- [SDP-829](#) (F): Split p4verify.sh log into Summary and Full, with Summary suitable for SNS.
- [SDP-834](#) (F): Add log rotation for proxy-only and broker-only hosts.
- [SDP-835](#) (F): Remove requirement for systemd \*.service files to have open perms.
- [SDP-836](#) (F): Init scripts automatically trust local and target port for p4p/p4broker.
- [SDP-838](#) (B): Fixed issue with CheckCaseTrigger.py for Unicode mode p4d.
- [SDP-842](#) (B): Fix issue on older OS versions where grep -A 99999999999 fails.
- [SDP-843](#) (B): A series of sdp\_upgrade.sh calls will overwrite/truncate custom site/config files.
- [SDP-844](#) (F): Dramatic performance improvement for CheckCaseTrigger.py.
- [SDP-846](#) (F): Add sample script to make SSO default with HAS.

## 6.29. SDP 2022.1 Patch 1

Released: Rev. SDP/MultiArch/2022.1/28987 (2022/08/25)

Jobs Fixed since change 28855 up to 28987 (F=Feature, B=Bug):

- [SDP-806](#) (B): sdp\_upgrade.sh needs Enter key to get mv commands to go if perms are bad.
- [SDP-808](#) (F): Account for NFS sharing of HxDeps on sdp\_upgrade.sh.
- [SDP-812](#) (B): p4verify.sh P4D\_VERSION unbound variable w/'-o MISSING' and env not sourced.
- [SDP-816](#) (F): Add timestamp to init script calls in p4d\_base.
- [SDP-817](#) (F): Doc updates for SDP Training and offline checkpoint PowerPoint docs.
- [SDP-820](#) (F): p4dstate.sh: Collect lslocks output even if older version of lslocks with no JSON option.

## 6.30. SDP 2022.1 GA

Released: Rev. SDP/MultiArch/2022.1/28855 (2022/05/27)

Jobs Fixed since change 28649 up to 28855 (F=Feature, B=Bug):

- [SDP-331](#) (B): DOC: lack of clarity on folder ownership.

- [SDP-724](#) (F): Add SDP Troubleshooting and FAQ to SDP core docs.
- [SDP-725](#) (B): Typo in the instructions
- [SDP-770](#) (B): Server start is more robust if /var/log is full.
- [SDP-771](#) (F): Add ping or similar check for P4MASTERHOST.
- [SDP-773](#) (F): p4verify.sh: Add '-dlf <depot\_list\_file>' to specify prioritized list of depots.
- [SDP-774](#) (F): p4verify.sh: Add low-RAM utilization option to p4verify.sh.
- [SDP-780](#) (F): Update Perforce Support address to [support-helix-core@perforce.com](mailto:support-helix-core@perforce.com).
- [SDP-782](#) (F): Improve Swarm triggers test script to check for self-signed certs.
- [SDP-783](#) (B): load\_checkpoint.sh: Fixed error in event of slow broker restart.
- [SDP-794](#) (F): Enhance error message in verify\_sdp.sh if p4d\_N script is malformed.
- [SDP-796](#) (F): Updated default Helix Core (p4d/p4broker/p4p/p4) version to r22.1.
- [SDP-798](#) (B): Changed URL for get\_helix\_binaries.sh back to ftp.perforce.com.

## 6.31. SDP 2021.2 Patch 1

Released: Rev. SDP/MultiArch/2021.2/28649 (2022/03/03)

Jobs Fixed since change 28410 up to 28649 (F=Feature, B=Bug):

- [SDP-562](#) (F): Support SELinux in enforcing mode on RHEL 8/CentOS 8/Rocky Linux 8.
- [SDP-635](#) (F): Get verify\_sdp.sh to find bogus script/symlink targets.
- [SDP-636](#) (F): Get verify\_sdp.sh to find bogus bins in /p4/common/bin.
- [SDP-712](#) (B): load\_checkpoint.sh should not require a license unless p4d needs it.
- [SDP-729](#) (F): Add support for custom pre- and post- processing to mkrep.sh.
- [SDP-733](#) (F): Enhances mkrep Phase 2 docs to mention loading checkpoint and journal.
- [SDP-740](#) (B): sdp\_upgrade.sh ignores a narrow subset of preflight checks.
- [SDP-742](#) (B): load\_checkpoint.sh fails for untrusted SSL ports.
- [SDP-744](#) (F): Enhance load\_checkpoint.sh to be able to call p4verify.sh.
- [SDP-747](#) (F): Added info about SDP Health Check script to core SDP docs.
- [SDP-748](#) (B): mkrep.sh forgets ssl: prefix on ExternalAddress for new replicas.
- [SDP-749](#) (B): sync\_replica.sh needs to work for HA of an edge server.
- [SDP-759](#) (F): Support IPv6 SSL Prefixes.
- [SDP-761](#) (F): Tech Preview: Give daily\_checkpoint.sh ability to skip offline\_db regeneration.
- [SDP-763](#) (F): Enhanced p4verify.ps1 with new '-fast' and '-nt' options.

## 6.32. SDP 2021.2 GA

Released: Rev. SDP/MultiArch/2021.2/28410 (2021/11/24)

Jobs Fixed since change 28261 up to 28410 (F=Feature, B=Bug):

- [SDP-710](#) (F): Simplify creation of proxy-only and broker-only instances with `mkdirs.sh`.
- [SDP-713](#) (B): Customizations to `p4_1.vars` are not preserved during `sdp_upgrade.sh`
- [SDP-716](#) (F): Add error message when `p4d_base` fails to start due to `systemd`
- [SDP-717](#) (F): Updated default Helix Core version to 2021.2 in `get_helix_binaries.sh`.

## 6.33. SDP 2021.1 Patch 2 (Doc Only, No Functional Changes)

Released: Rev. SDP/MultiArch/2021.1/28261 (2021/11/13)

Jobs Fixed since change 28253 up to 28261 (F=Feature, B=Bug):

- [SDP-709](#) (B): Doc typo fix in SDP Guide. Non-functional change.

## 6.34. SDP 2021.1 Patch 1

Released: Rev. SDP/MultiArch/2021.1/28253 (2021/11/13)

Jobs Fixed since change 28238 up to 28253 (F=Feature, B=Bug):

- [SDP-706](#) (B): Fixed detection of `P4MASTERHOST` and other settings.
- [SDP-707](#) (F): Enhanced docs on Upgrading the SDP.
- [SDP-708](#) (F): Downgraded `p4` counter `SDP_VERSION` checks to warning.

## 6.35. SDP 2021.1 GA

### SDP 2021.1 Release Overview

The banner feature of the SDP 2021.1 release is the `sdp_upgrade.sh` script that automates SDP upgrades on Linux so long as the starting version is SDP 2020.1.

This is part of a larger effort prioritize ease of upgrades for the SDP and Helix Core.

For more information, see the section in the SDP Guide on [Upgrading the SDP](#).

Released: Rev. SDP/MultiArch/2021.1/28238 (2021/11/12)

Jobs Fixed since change 27955 up to 28238 (F=Feature, B=Bug):

- [SDP-191](#) (B): Fixed default thresholds values in proxy cache cleaner.
- [SDP-540](#) (F): Add `sdp_upgrade.sh` script to the SDP.
- [SDP-549](#) (F): Enhanced `load_checkpoint.sh` to accept journals after checkpoint.

- [SDP-615](#) (B): load\_checkpoint.sh can show 'EXITCODE: 0' on failure.
- [SDP-645](#) (F): Enhance p4verify.sh to expose new '--only' option in p4d r21.1+.
- [SDP-667](#) (F): Make preview mode default behavior for upgrade.sh; add '-y' to confirm.
- [SDP-668](#) (F): Do you have a way to automate validation of http/https links in files when packaging up the SDP so broken links can be checked with each release?
- [SDP-674](#) (B): Unclear verify\_sdp.sh message related to P4JOURNAL configurable def'n.
- [SDP-676](#) (F): Added optional feature to remove excess \$LOGS/journal.NNN files on standbys.
- [SDP-677](#) (F): For verify\_sdp.sh, add '-warn' like '-skip' to warn for named tests.
- [SDP-678](#) (B): load\_checkpoint.sh logins for replicas fail if p4d starts slow with systemd.
- [SDP-683](#) (B): Document setup for desktop shortcut for p4env.bat
- [SDP-684](#) (B): The configure\_new\_server.bat set auth.id wrongly to p4\_
- [SDP-686](#) (B): Remove replica\_status.log as part of standard cleanup.
- [SDP-688](#) (F): Document creation of P4Admin Desktop Shortcut for Windows SDP.
- [SDP-691](#) (F): In mkdirs.sh, make SDP perms configurable 600/640/644 or 700/750/755.
- [SDP-698](#) (B): p4verify.sh no longer relies on \$USER being defined.
- [SDP-699](#) (F): Added upgrade.sh to enable custom pre- and post-upgrade processing.
- [SDP-702](#) (B): The recover\_edge.sh script should write offline\_db\_usable.txt.

## 6.36. Checking the SDP Version

Once installed, the SDP **Version** file exists as `/p4/sdp/Version`. This is a simple text file that contains the SDP version string. The version can be checked using a command like `cat`, as in this sample command:

```
$ cat /p4/sdp/Version
Rev. SDP/MultiArch/2020.1/27955 (2021/08/13)
```

That string can be found in Change History below.

## 6.37. SDP 2020.1 Patch 12

Released: Rev. SDP/MultiArch/2020.1/27955 (2021/08/13)

Jobs Fixed since change 27919 up to 27955 (F=Feature, B=Bug):

- [SDP-675](#) (B): "Preflight journal health check" issue caused by a grep command not coping well with non ascii characters.

## 6.38. SDP 2020.1 Patch 11

Released: Rev. SDP/MultiArch/2020.1/27919 (2021/07/19)

Jobs Fixed since change 27899 up to 27919 (F=Feature, B=Bug):

- [SDP-669](#) (F): Implement p4env.bat and p4login.bat properly with PowerShell.
- [SDP-670](#) (B): verify\_sdp.sh can wrongly give 'Current user ... does not own' error.

## 6.39. SDP 2020.1 Patch 10

Released: Rev. SDP/MultiArch/2020.1/27899 (2021/07/13)

Jobs Fixed since change 27820 up to 27899 (F=Feature, B=Bug):

- [SDP-659](#) (F): SDP daily checkpoint call to verify\_sdp.sh now skips license checks.
- [SDP-662](#) (F): Enhanced SDP Guide for Windows re: Scheduled Tasks.
- [SDP-664](#) (F): Clarify that SDP r20.1 supports Helix Core binaries up to r21.1.

## 6.40. SDP 2020.1 Patch 9

Released: Rev. SDP/MultiArch/2020.1/27820 (2021/06/19)

Jobs Fixed since change 27763 up to 27820 (F=Feature, B=Bug):

- [SDP-648](#) (F): Updated p4d version-specific list of federated db.\* files for edge servers.
- [SDP-650](#) (B): clear\_depot\_Map\_fields.sh doc is unclear for unload depots.
- [SDP-651](#) (F): clear\_depot\_Map\_fields.sh support for graph depots added.
- [SDP-656](#) (B): replica\_status.sh now captures all error output if replica is offline.
- [SDP-657](#) (F): Enhanced mkdirs.sh checks for edge server setup.

## 6.41. SDP 2020.1 Patch 8 (Doc Only, No Functional Changes)

Released: Rev. SDP/MultiArch/2020.1/27763 (2021/05/07)

Jobs Fixed since change 27759 up to 27763 (F=Feature, B=Bug):

- [SDP-644](#) (B): Fix typo in SDP Legacy Upgrade Guide.

## 6.42. SDP 2020.1 Patch 7

Released: Rev. SDP/MultiArch/2020.1/27759 (2021/05/07)

Jobs Fixed since change 27536 up to 27759 (F=Feature, B=Bug):

- [SDP-517](#) (B): Please use svcinst to start and stop the Perforce Service.
- [SDP-616](#) (F): Clarify usage for mkrep.sh '-f <FromServerID>' option.
- [SDP-617](#) (B): SDP on Windows should manage service only with svcinst.exe.
- [SDP-618](#) (F): Port update\_limits.py to Windows.
- [SDP-619](#) (F): Clear up confusion between ServerID and SDP instance name.
- [SDP-625](#) (B): upgrade.sh needs to bounce p4d for multi-instance patch-only upgrades.
- [SDP-627](#) (F): Add verify\_sdp.sh check for p4\*.services files w/o world read access.
- [SDP-630](#) (B): Bogus root ownership of ssl/config.txt after mkdirs.sh.
- [SDP-631](#) (B): verify\_sdp.sh Invalid error re: crontab on proxy servers.
- [SDP-638](#) (B): Address gaps in Legacy SDP Upgrade Guide for upgrades from 2014-era SDP.
- [SDP-639](#) (F): Make SDP password file check a skippable test in verify\_sdp.sh.
- [SDP-640](#) (B): verify\_sdp.sh check for password file existence does not run.

## 6.43. SDP 2020.1 Patch 6 (Doc Only, No Functional Changes)

Released: Rev. SDP/MultiArch/2020.1/27536 (2021/02/28)

Jobs Fixed since change 27524 up to 27536 (F=Feature, B=Bug):

## 6.44. SDP 2020.1 Patch 5

Released: Rev. SDP/MultiArch/2020.1/27524 (2021/02/26)

Jobs Fixed since change 27457 up to 27524 (F=Feature, B=Bug):

- [SDP-604](#) (F): Add more detail to Legacy SDP upgrade doc.
- [SDP-605](#) (B): Default 'p4' binary is in /p4/sdp/helix\_binaries.
- [SDP-607](#) (F): Do not set submit.allowbgtransfer for new servers.
- [SDP-609](#) (F): Enhanced SDP Guide (Unix) related to init scripts.
- [SDP-610](#) (F): Add doc coverage for using only limited sudo.
- [SDP-611](#) (F): Add doc coverage for using multiple broker configs.

## 6.45. SDP 2020.1 Patch 4

Released: Rev. SDP/MultiArch/2020.1/27457 (2021/02/17)

Jobs Fixed since change 27414 up to 27457 (F=Feature, B=Bug):

- [SDP-600](#) (F): Normalize usage of verify\_sdp.sh as called from other scripts.
- [SDP-601](#) (B): Local setting of VERIFY\_SDP\_SKIP\_TEST\_LIST ignored by upgrade.sh.

## 6.46. SDP 2020.1 Patch 3B

Released: Rev. SDP/MultiArch/2020.1/27414 (2021/02/07)

Jobs Fixed since change 27403 up to 27414 (F=Feature, B=Bug):

- [SDP-599](#) (B): Refinement needed to logic for test skipping p4root/offline\_db.

## 6.47. SDP 2020.1 Patch 3A

Released: Rev. SDP/MultiArch/2020.1/27403 (2021/02/06)

Jobs Fixed since change 27398 up to 27403 (F=Feature, B=Bug):

- [SDP-598](#) (F): For verify\_sdp.sh: Add check for P4TRUST files if SSL enabled.

## 6.48. SDP 2020.1 Patch 3

Released: Rev. SDP/MultiArch/2020.1/27398 (2021/02/06)

Jobs Fixed since change 27357 up to 27398 (F=Feature, B=Bug):

- [SDP-592](#) (B): verify\_sdp.sh reports same excess binary in path multiple times.
- [SDP-593](#) (B): verify\_sdp.sh should ignore dot '.' in PATH.
- [SDP-594](#) (F): mkdirs.sh should not deploy p4p or p4dtg by default.
- [SDP-595](#) (B): mkdirs.sh should not deploy p4d to p4p/p4broker only host.
- [SDP-596](#) (B): Install errors when running mkdirs.sh on replica servers

## 6.49. SDP 2020.1 Patch 2

Released: Rev. SDP/MultiArch/2020.1/27357 (2021/02/01)

Jobs Fixed since change 27351 up to 27357 (F=Feature, B=Bug):

- [SDP-591](#) (F): Release notes update only: Added GA/patch release headings.

## 6.50. SDP 2020.1 Patch 1

Released: Rev. SDP/MultiArch/2020.1/27351 (2021/01/31) - Patch 1

Jobs Fixed since change 27325 up to 27351 (F=Feature, B=Bug):

- [SDP-590](#) (F): Added sample script to implement rename of users for Swarm.
- [SDP-589](#) (B): Correct version checks for p4d major version.
- [SDP-570](#) (F): Add upgrade.sh '-M' manual option relinking binaries w/o -xu.
- [SDP-588](#) (F): Enhance verify\_sdp.sh to allow skipping offline\_db checks.

## 6.51. SDP 2020.1 GA

### SDP 2020.1 Release Overview

In a nutshell, here is what the SDP r2020.1 release is all about:

- **Improved Documentation.** The SDP documentation has been reformatted to AsciiDoc. Documentation coverage has been expanded, new content added, and documentation for various scripts is now included in the main documentation.
- Publishing of [The journalPrefix Standard](#).
- Updating of the [Server Spec Naming Standard](#).
- Bug fixes and improvements to [load\\_checkpoint.sh](#).
- Bug fixes and improvements to [p4verify.sh](#). The [-recent](#) flag is fixed and verification of shelves has improved.
- Bug fixes and improvements to [mkrep.sh](#), which adheres to documented standards.
- **Improved Helix Core Upgrades.** The [upgrade.sh](#) script that upgrades [p4](#), [p4d](#), [p4broker](#), and [p4p](#) has been greatly improved, and a new [get\\_helix\\_binaries.sh](#) script added. Documentation now covers how to do Global Topology "Outer to Inner" upgrades.
- **Improved Self-Verification.** The [verify\\_sdp.sh](#) script has been improved to do many more checks. This script is also relied on by other SDP scripts to ensure things are in a good start before they start their processing. The [refresh\\_P4ROOT\\_from\\_offline\\_db.sh](#) and [upgrade.sh](#) scripts use [verify\\_sdp.sh](#).
- The systemd interactions have been improved in a few key ways. Notably, on systems in which systemd is configured, a safety check now ensure that systemd is used, so that systemd's concept of service status is reliable. The format of the systemd unit files changes with this release.

More details is in the [Chapter 6, Change History](#) below.

Released: Rev. SDP/MultiArch/2020.1/27325 (2021/01/29) - General Availability

Jobs Fixed since change 26494 up to 27325 (F=Feature, B=Bug):

- [SDP-245](#) (B): Prevent generation of db.\* files in empty P4ROOT when sourcing [p4\\_vars](#).
- [SDP-246](#) (B): Sourcing [p4\\_vars](#) hangs if [live\\_checkpoint.sh](#) is running.
- [SDP-373](#) (B): Typo on page 22 of guide (Section 4.2): [modified](#) vs [modified](#)
- [SDP-397](#) (F): Support SDP hosts without [p4d](#), [p4p](#)/[p4broker](#) or [p4dtg](#) only.
- [SDP-428](#) (F): Add safety check to ensure systemd is used if required.
- [SDP-432](#) (F): Enhance distinction of what is Supported and Unsupported.
- [SDP-439](#) (B): DOC: SDP Guide for setting up a replica is missing key items.
- [SDP-460](#) (B): Script '[broker\\_rotate.sh](#)' is not mentioned in the SDP Guide (Unix).

- [SDP-461](#) (B): Script 'edge\_dump.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-462](#) (B): Script 'edge\_shelf\_replicate.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-463](#) (B): Script 'edge\_vars' is not mentioned in the SDP Guide (Unix).
- [SDP-464](#) (B): Script 'gen\_default\_broker\_cfg.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-465](#) (B): Script 'htd\_move\_logs.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-466](#) (B): Script 'journal\_watch.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-467](#) (B): Script 'kill\_idle.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-468](#) (B): Script 'load\_checkpoint.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-469](#) (B): Script 'mkrep.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-470](#) (B): Script 'p4broker\_base' is not mentioned in the SDP Guide (Unix).
- [SDP-471](#) (B): Script 'p4dstate.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-472](#) (B): Script 'p4ftpd\_base' is not mentioned in the SDP Guide (Unix).
- [SDP-473](#) (B): Script 'p4login-super.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-474](#) (B): Script 'p4p\_base' is not mentioned in the SDP Guide (Unix).
- [SDP-475](#) (B): Script 'p4pcm.pl' is not mentioned in the SDP Guide (Unix).
- [SDP-476](#) (B): Script 'p4review2.py' is not mentioned in the SDP Guide (Unix).
- [SDP-477](#) (B): Script 'p4sanity\_check.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-478](#) (B): Script 'p4web\_base' is not mentioned in the SDP Guide (Unix).
- [SDP-481](#) (B): Script 'ps\_functions.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-482](#) (B): Script 'purge\_revisions.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-483](#) (B): Script 'recover\_edge.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-484](#) (B): Script 'replica\_cleanup.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-485](#) (B): Script 'replica\_status.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-486](#) (B): Script 'request\_replica\_checkpoint.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-487](#) (B): Script 'rotate\_journal.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-488](#) (B): Script 'template.pl' is not mentioned in the SDP Guide (Unix).
- [SDP-489](#) (B): Script 'template.py' is not mentioned in the SDP Guide (Unix).
- [SDP-490](#) (B): Script 'template.py.cfg' is not mentioned in the SDP Guide (Unix).
- [SDP-491](#) (B): Script 'template.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-492](#) (B): Script 'update\_limits.py' is not mentioned in the SDP Guide (Unix).
- [SDP-493](#) (B): Script 'verify\_sdp.sh' is not mentioned in the SDP Guide (Unix).
- [SDP-495](#) (B): SDP Guide mentions now-deleted/obsolete script.
- [SDP-496](#) (B): Script 'backup\_functions.sh' is mentioned in the SDP Guide (Unix).
- [SDP-497](#) (B): Script 'p4d\_base' is mentioned in the SDP Guide (Unix).
- [SDP-498](#) (B): Script 'p4verify.sh' is mentioned in the SDP Guide (Unix).

- [SDP-499](#) (B): Script 'run\_if\_edge.sh' is mentioned in the SDP Guide (Unix).
- [SDP-500](#) (B): Script 'run\_if\_master.sh' is mentioned in the SDP Guide (Unix).
- [SDP-501](#) (B): Script 'run\_if\_replica.sh' is mentioned in the SDP Guide (Unix).
- [SDP-502](#) (B): Script 'sync\_replica.sh' is mentioned in the SDP Guide (Unix).
- [SDP-503](#) (B): SDP Guide mentions some scripts by most of the filename, not all of it.
- [SDP-504](#) (B): SDP Guide mentions "weekly\_checkpoint" script under "daily\_checkpoint":
- [SDP-505](#) (F): Added P4MASTERPORT checks to verify\_sdp.sh
- [SDP-507](#) (B): p4d\_1.service includes wrong doc link
- [SDP-508](#) (B): p4broker\_1.service includes wrong doc link
- [SDP-509](#) (B): "sdp-administrator-guide.docx" needs to be removed or updated.
- [SDP-512](#) (B): upgrade.sh needs clearer documented explanation
- [SDP-523](#) (B): Missing 'failover' document
- [SDP-535](#) (B): False-positive on journal corruption check w/multi-line journal entries.
- [SDP-538](#) (F): Document systemd interactions with SDP init scripts.
- [SDP-541](#) (F): Make 'p4d' rather than 'p4d\_N' safe to run.
- [SDP-543](#) (B): The configure\_new\_server.sh failed with unbound LOGFILE variable error.
- [SDP-545](#) (B): DOC: PDF contains "Reference source not found" errors.
- [SDP-546](#) (B): Documentation out of date.
- [SDP-548](#) (B): Standby won't start pull if journal.NNN exists.
- [SDP-554](#) (B): Incorrect Server ID when deploying an edge server.
- [SDP-553](#) (B): Remove 'Operating System' from configurable rejectList.
- [SDP-558](#) (B): Fix bug with '-recent' flag in p4verify.sh.
- [SDP-559](#) (B): Fix load\_checkpoint.sh init issue if '-s <ServerID>' is used.
- [SDP-564](#) (F): Normalized SDP Versioning will start in the SDP r20.1 release.
- [SDP-565](#) (F): Enhance verify\_sdp.sh to allow optional skip of some tests.
- [SDP-566](#) (F): Add Support-recommended sysctl settings to SDP.
- [SDP-567](#) (F): Add setting for server.extensions.dir.
- [SDP-569](#) (F): Rename upcoming /p4/sdp/exes to /p4/sdp/helix\_binaries
- [SDP-572](#) (B): Fixed issue where No Checkpoints reported if 'find' doesn't support '-printf'.
- [SDP-573](#) (B): mkdirs.sh is not respecting MASTER\_ID from config file
- [SDP-574](#) (B): daily\_checkpoint.sh hangs if journalPrefix is wrong.
- [SDP-575](#) (B): The stop\_p4d() function reports 'missing server.pid' error with systemd.
- [SDP-576](#) (F): Added documentation for handling multiple broker configs with systemd.
- [SDP-578](#) (B): The offline\_db\_usable.txt file is not updated when rotate\_journal.sh is used.
- [SDP-579](#) (B): Edge recover script fails to run if p4\_vars not sourced first.

- [SDP-581](#) (F): Added optional check that P4MASTER\_ID starts with 'master' to verify\_sdp.sh.
- [SDP-583](#) (E): Enhance verify\_sdp.sh and upgrade.sh to handle proxy-only and broker-only machines.

## 6.52. SDP 2019.3 Patch 7

Released: Rev. SDP/MultiArch/2019.3/26494 (2020/04/23).

Jobs Fixed since change 26478 up to 26494 (F=Feature, B=Bug):

- [SDP-529](#) (F): Add ability to limit specific commands to one-per-user, e.g. populate.
- [SDP-531](#) (B): The recover\_edge.sh script needed updating to use new start/stop functions.

## 6.53. SDP 2019.3 Patch 6

Released: Rev. SDP/MultiArch/2019.3/26478 (2020/04/12).

Jobs Fixed since change 26472 up to 26478 (F=Feature, B=Bug):

- [SDP-527](#) (B): Patch to rotate\_journal.sh and add test coverage for it.
- [SDP-528](#) (F): Enhance dynamic check to work with replicas that do not set journalPrefix.

## 6.54. SDP 2019.3 Patch 5

Released: Rev. SDP/MultiArch/2019.3/26472 (2020/04/10).

Jobs Fixed since change 26468 up to 26472 (F=Feature, B=Bug):

- [SDP-526](#) (F): Use dynamic journalPrefix detection for non-master servers.

## 6.55. SDP 2019.3 Patch 4

Released: Rev. SDP/MultiArch/2019.3/26468 (2020/04/10).

Jobs Fixed since change 26407 up to 26468 (F=Feature, B=Bug):

- [SDP-446](#) (B): wrong variables used in recreate\_offline\_db\_files
- [SDP-519](#) (B): Fixed missing variable initialization in load\_checkpoint.sh.
- [SDP-520](#) (F): Add login and trust logic to load\_checkpoint.sh.
- [SDP-521](#) (F): Have load\_checkpoint.sh handle P4SSLDIR and cert creation automatically.
- [SDP-522](#) (F): Have load\_checkpoint.sh check for a license file.
- [SDP-524](#) (B): Fix refresh\_P4ROOT\_from\_offline\_db.sh to work on a non-edge replica.
- [SDP-525](#) (B): Remove parallel checkpoint scripts temporarily.

## 6.56. SDP 2019.3 Patch 3

Released: Rev. SDP/MultiArch/2019.3/26407 (2020/03/28).

Jobs Fixed since change 26400 up to 26407 (F=Feature, B=Bug):

- [SDP-427](#) (F): Use systemd consistently if available for p4d start/stop.

## 6.57. SDP 2019.3 Patch 2

Released: Rev. SDP/MultiArch/2019.3/26400 (2020/03/28).

Jobs Fixed since change 26239 up to 26400 (F=Feature, B=Bug):

- [SDP-427](#) (F): Use systemd consistently if available for p4d start/stop.
- [SDP-431](#) (F): Make p4d startup resistant to timing issues for reboots & fast
- [SDP-436](#) (F): Provide snapshot hook for daily\_checkpoint.sh.
- [SDP-444](#) (F): Add script to safely refresh P4ROOT db.\* from offline\_db.
- [SDP-451](#) (F): Added '-f <P4TARGET>' flag to mkrep.sh.
- [SDP-452](#) (F): Enhance mkrep.sh to instruct using edge\_dump.sh for edge servers.
- [SDP-453](#) (F): For filtered replicas, have mkrep.sh instruct using '-P ServerID'.
- [SDP-454](#) (B): verify\_sdp.sh should handle being run as root
- [SDP-455](#) (F): Add license expiration check to verify\_sdp.sh.
- [SDP-510](#) (B): Fix issue with 'clean start' test suite run due to Python symlink issues.

## 6.58. SDP 2019.3 Patch 1

Released: Rev. SDP/MultiArch/2019.3/26239 (2020/01/08).

Jobs Fixed since change 26159 up to 26239 (F=Feature, B=Bug):

- [SDP-423](#) (B): slight typo in comment /p4/INSTANCe/checkpoints
- [SDP-430](#) (B): Fixed typo causing os\_tweaks.sh not to recognize Ubuntu 18.
- [SDP-437](#) (F): Enhance makedirs.sh for standby replicas to match other replica types.
- [SDP-441](#) (B): Upgrade.ps1 fails with error for Windows SDP
- [SDP-443](#) (B): Fix in maint scripts to pickup SDP\_INSTANCE if no arg passed.

## 6.59. SDP 2019.3 GA

Released: Rev. SDP/MultiArch/2019.3/26159 (2019/11/06).

Jobs Fixed since change 25949 up to 26159 (F=Feature, B=Bug):

- [SDP-448](#) (F): Enable 'p4 submit -b' by setting submit.allowbgtransfer=1 for P4D 2019.1.
- [SDP-352](#) (F): Eliminate excessive journal rotations on p4d startup.
- [SDP-412](#) (B): Backup failing as logs cannot be rotated as the server is too busy.
- [SDP-424](#) (B): sync\_replica.sh fails on standby replica w/rpl.journalcopy.location=1.
- [SDP-425](#) (B): mkrep.sh fails for replica of replica due to ReplicatingFrom field hard coded to master.1
- [SDP-426](#) (F): Add -f flag to p4d -jr on SDP for Windows.

## 6.60. SDP 2019.2 Patch 3

Released: Rev. SDP/MultiArch/2019.2/25949 (2019/08/12).

Jobs Fixed since change 25938 up to 25949 (F=Feature, B=Bug):

- [SDP-415](#) (B): Fixed typo in scripts for handling edge servers.

## 6.61. SDP 2019.2 Patch 2

Released: Rev. SDP/MultiArch/2019.2/25938 (2019/08/05).

Jobs Fixed since change 25923 up to 25938 (F=Feature, B=Bug):

- [SDP-414](#) (B): Fixed issue with safety check in edge processing scripts.

## 6.62. SDP 2019.2 Patch 1

Released: Rev. SDP/MultiArch/2019.2/25923 (2019/08/05).

Jobs Fixed since change 25594 up to 25923 (F=Feature, B=Bug):

- [SDP-398](#) (F): Disallow replicas from being initially mandatory per P4D 2019.1 requirement.
- [SDP-400](#) (B): Fixed p4login bug where P4PORT value can have a value of Unset.
- [SDP-401](#) (F): Enhanced replica\_status.sh to check archive replication.
- [SDP-403](#) (B): Fixed root-owned symlinks in /p4/N after running mkdirs.sh.
- [SDP-404](#) (F): Update edge scripts to support 2019.1+ changes to edge servers.
- [SDP-405](#) (F): Enhanced load\_checkpoint.sh to handle case-insensitive checkpoints.
- [SDP-410](#) (B): [R]CMDEXITCODE not set when [r]run() called with 'grep string' parameter.
- [SDP-413](#) (F): Add script to request checkpoint on edge/replica.

## 6.63. SDP 2019.2 GA

Released: Rev. SDP/MultiArch/2019.2/25594 (2019/05/02).

Jobs Fixed since change 25480 up to 25594 (F=Feature, B=Bug):

- [SDP-356](#) (F): Reduce SDP Core to contain only software supported by Perforce Support.
- [SDP-369](#) (F): Added flags to p4verify.sh to verify by type like shelved.
- [SDP-374](#) (B): Fixed off-by-three-orders-of-magnitude error in proxy cleanup script.
- [SDP-378](#) (F): Removed journalPrefix as command line parameter during journal rotation, deferring to db.config values.
- [SDP-380](#) (F): Removed journalPrefix as command line parameter during journal rotation, deferring to db.config values.
- [SDP-383](#) (F): Added '-a' flag meant to be equivalent of most common set of flags.
- [SDP-384](#) (B): Fixed failure to cleanup old logs in sdp\_sync.sh on Ubuntu Linux.
- [SDP-392](#) (B): upgrade.sh must handle new 19.1 features
- [SDP-393](#) (B): Fixed perms on purge\_revisions.sh and journal\_watch.sh.
- [SDP-394](#) (F): Added support for wildcards/globbing to purge\_revisions.sh scripts.
- [SDP-395](#) (F): Added support for 2019.1 upgrades and testing of same.

## 6.64. SDP 2019.1 Patch 6

Released: Rev. SDP/MultiArch/2019.1/25480 (2019/04/11).

Jobs Fixed since change 25386 up to 25480 (F=Feature, B=Bug):

- [SDP-382](#) (B): Fixed missing 'exit 1' in p4d\_base after 'p4d -xvU' check failure.
- [SDP-387](#) (F): Test harness should run verify\_sdp.sh and look for errors.
- [SDP-390](#) (B): Removed crontab refs to deleted scripts.
- [SDP-391](#) (B): In mkdirs.sh, fixed root ownership of generated crontab file.

## 6.65. SDP 2019.1 Patch 5

Released: Rev. SDP/MultiArch/2019.1/25386 (2019/03/21).

Jobs Fixed since change 25374 up to 25386 (F=Feature, B=Bug):

- [SDP-379](#) (B): Fixed mkdirs.sh issue with SSL-enabled installs due to chown issue.

## 6.66. SDP 2019.1 Patch 4

Released: Rev. SDP/MultiArch/2019.1/25374 (2019/03/21).

Jobs Fixed since change 25320 up to 25374 (F=Feature, B=Bug):

- [SDP-302](#) (F): Parallelized checkpoint processing to reduce duration.
- [SDP-375](#) (B): Fix ownership and missing symlink issues in mkdirs.sh.

## 6.67. SDP 2019.1 Patch 3

Released: Rev. SDP/MultiArch/2019.1/25320 (2019/03/08).

Jobs Fixed since change 25309 up to 25320 (F=Feature, B=Bug):

- [SDP-372](#) (B): Fixed breaking test - logic around \$CN was misunderstood.

## 6.68. SDP 2019.1 Patch 2

Released: Rev. SDP/MultiArch/2019.1/25309 (2019/03/07).

Jobs Fixed since change 25276 up to 25309 (F=Feature, B=Bug):

- [SDP-370](#) (B): Fix issue with mkdirs.sh -test mode.
- [SDP-371](#) (B): Fixed install\_sdp\_perl to work with updated P4Perl.

## 6.69. SDP 2019.1 Patch 1

Released: Rev. SDP/MultiArch/2019.1/25276 (2019/03/06).

Jobs Fixed since change 25238 up to 25276 (F=Feature, B=Bug):

- [SDP-368](#) (B): Fix syntax errors for SDP\_ADMIN\_PASSWORD\_FILE in backup\_functions.sh.

## 6.70. SDP 2019.1 GA

Released: Rev. SDP/MultiArch/2019.1/25238 (2019/03/02).

Jobs Fixed since change 23583 up to 25238 (F=Feature, B=Bug):

- [SDP-198](#) (B): DOC: SDP Guide needs more detail on SDP-controlled replica setup.
- [SDP-247](#) (B): Need a validation script to check current status, especially after an upgrade from older version of SDP.
- [SDP-255](#) (B): Update SDP documentation to deal with SSL enabled servers.
- [SDP-256](#) (B): Update documentation to include mkdirs.cfg instead of updating mkdirs.sh
- [SDP-269](#) (F): Optimize journalPrefix values for master, edge, standby, replica.
- [SDP-296](#) (B): Fixed bug where updates to os\_tweaks.sh dropped support for RHEL 6.5.
- [SDP-297](#) (B): Fixed handling of unload depots in p4verify.sh
- [SDP-298](#) (B): Avoid checking for shelved files in spec depot.
- [SDP-299](#) (F): Enhanced HMS failover for standby/journalcopy replicas to use 'p4 admin end-journal'
- [SDP-300](#) (F): Set rpl.journalcopy.location=1 for p4d 2018.1+ servers.
- [SDP-301](#) (B): Crontab spamming emails if configurable track=1

- [SDP-304](#) (B): Fixed issues with hms status for SSL-enabled servers, etc.
- [SDP-305](#) (F): Enhancements in libcore.sh bail(), errmsg(), initlog(), and stoplog() functions.
- [SDP-306](#) (B): Moved cset of P4JOURNAL so it's done only on master or edge server.
- [SDP-307](#) (F): Changed hms remote spec for the Public Depot to be the default 'origin'.
- [SDP-308](#) (F): Set rpl.journalcopy.location=1 for 2018.1+ standby replicas.
- [SDP-311](#) (B): Avoid unnecessary removal of rdb.lbr in db swap.
- [SDP-313](#) (F): Batch of validate\_sdp.sh enhancements.
- [SDP-314](#) (B): Fixed scary but otherwise harmless error in Cmd.pm
- [SDP-315](#) (F): Reformat protections table comment format during upgrades.
- [SDP-316](#) (F): Added script to rotate live journal due low disk space
- [SDP-317](#) (B): Fixed issue preventing failover from an edge server.
- [SDP-318](#) (B): Removed HMS references to /usr/local/bin/bash.
- [SDP-319](#) (F): Use 'p4 monitor terminate' rather than 'kill' for idle pids.
- [SDP-325](#) (F): Enhanced rejectList setting for P4EXP.
- [SDP-326](#) (F): Enhanced rejectList setting for P4EXP.
- [SDP-327](#) (B): DOC: must I create /hx\*?
- [SDP-328](#) (B): DOC: mismatch between setup instructions and setup script
- [SDP-329](#) (B): DOC: folder permissions
- [SDP-330](#) (B): DOC: to where should we copy the tgz file?
- [SDP-331](#) (B): DOC: lack of clarity on folder ownership.
- [SDP-332](#) (B): DOC: setting executable bit on p4 etc.
- [SDP-333](#) (B): DOC: reorder the create user/group sequence on Linux.
- [SDP-334](#) (B): DOC: no comment on mkdirs.N.cfg, referenced in the mkdirs.sh script.
- [SDP-335](#) (B): DOC: no comment on ssl certificate generation.
- [SDP-337](#) (B): The upgrade.sh script, used to update your p4/p4d executables and corresponding database, starts with the message:
- [SDP-338](#) (F): DOC: server upgrades and checkpoint
- [SDP-339](#) (B): DOC: non-existent script referenced in docs
- [SDP-341](#) (B): Critical recreate\_db\_checkpoint.sh bug with shared /hxdepots shared.
- [SDP-342](#) (B): Fixed issue with P4Triggers.py impacting CheckCaseTrigger.py, etc.
- [SDP-345](#) (B): Implemented '-r' flag to clean up old logs in global\_replica\_status.sh.
- [SDP-347](#) (F): Enhance CaseCheckTrigger to work even if defaultChangeType is set to restricted.
- [SDP-348](#) (F): Enhanced CheckCaseTrigger.py to enable bypass.
- [SDP-350](#) (F): Support SELinux ("Security Enhanced Linux") in enforcing mode.
- [SDP-353](#) (F): Avoid doing 'p4d -cset' for P4JOURNAL, but preserve safety feature.

- [SDP-362](#) (B): p4verify.sh -remote ignores SDP\_RECENT\_CHANGES\_TO\_VERIFY.
- [SDP-366](#) (F): Optimize display of Support messaging.
- [SDP-367](#) (B): p4verify.sh should also specify the -t (transfer) option for edge servers like it currently does for replicas.
- [SDP-49](#) (B): SDP Guide: inconsistent user name used in setup instructions. Page 9 of the pdf, step 1 says create user 'p4admin'. The rest of the guide that I've read, and the mkdirs.sh script, all refer to user 'perforce'.
- [SDP-73](#) (F): Add Evil Twin detector/prevention trigger.

## 6.71. SDP 2018 Patch 2

Released: Rev. SDP/MultiArch/2018.1/23583.p2 (2019/01/23).

Jobs Fixed since change 23583.p1 up to 23583.p2 (F=Feature, B=Bug): \* [SDP-366](#) (F): Optimize display of Support messaging. \* [SDP-341](#) (B): Critical recreate\_db\_sync\_replica.sh bug with shared /hxdepots shared.

## 6.72. SDP 2018.1 Patch 1

Released: Rev. SDP/MultiArch/2018.1/23583.p1 (2018/07/13).

PATCH release fixes \* [SDP-341](#). \* [SDP-341](#) (B): Critical recreate\_db\_checkpoint.sh bug with shared /hxdepots shared.

## 6.73. SDP 2018.1 Patch 0.5

Released: Rev. SDP/MultiArch/2018.1/23583 (2018/02/08).

Jobs Fixed since change 23504 up to 23583 (F=Feature, B=Bug):

- [SDP-287](#) (B): Fixed mkdirs.sh bug fixing ownership of wrong dir. 2nd fx for \* [SDP-287](#).

## 6.74. SDP 2018.1 GA

Released: Rev. SDP/MultiArch/2018.1/23504 (2018/01/19).

Jobs Fixed since change 23354 up to 23504 (F=Feature, B=Bug):

- [SDP-285](#) (B): The use of "tee" in p4d\_base causes start to hang on some systems with 2016.2 p4d
- [SDP-286](#) (B): Fixed: In configure\_new\_server.\*, super user not logged in after restart.
- [SDP-287](#) (B): Fixed mkdirs.sh bug fixing ownership of wrong dir.
- [SDP-290](#) (F): Added SDP-standard Ruby to PATH.
- [SDP-291](#) (F): Added workflow support triggers.
- [SDP-292](#) (F): Enhancements to p4dstate.sh.

## 6.75. SDP 2017.4 Patch 1

Released: Rev. SDP/MultiArch/2017.4/23354 (2017/12/08).

Jobs Fixed since change 23329 up to 23354 (F=Feature, B=Bug):

- [SDP-281](#) (B): Fixed journalPrefix logic in makedirs.sh

## 6.76. SDP 2017.4 GA

Released: Rev. SDP/MultiArch/2017.4/23329 (2017/12/05).

Jobs Fixed since change 23041 up to 23329 (F=Feature, B=Bug):

- [SDP-265](#) (B): sync\_replica.sh and recreate\_db\_sync\_replica.sh should avoid rsync compression
- [SDP-266](#) (B): Fixed logging issue with sync\_replica.sh and recreate\_db\_sync\_replica.sh.
- [SDP-267](#) (B): Fixed issue detecting an edge server; wrong EDGESERVER value.
- [SDP-268](#) (F): Added basic comments to all functions in backup\_functions.sh.
- [SDP-269](#) (F): Optimize journalPrefix values for master, edge, standby, replica.
- [SDP-270](#) (F): Added trigger script to create Swarm reviews (and unit test).
- [SDP-271](#) (F): Refactor to push common arg\_parse into P4Triggers.
- [SDP-272](#) (F): Enhance p4login info in error output, added -d debug flag.
- [SDP-273](#) (F): New RequireJob pre-submit trigger.
- [SDP-274](#) (F): Added trigger to validate contents YAML files.
- [SDP-276](#) (B): Make mkrep.sh work when /p4/hms instance does not exist.
- [SDP-277](#) (F): Added license time remaining check script.
- [SDP-278](#) (F): Enhance upgrade.sh run on machines with only broker/proxy.
- [SDP-279](#) (F): Added filetype.bypasslock=1 configurable, recommended for Swarm.
- [SDP-280](#) (F): Updated Support coverage info and enhanced other info in SDP README file.

## 6.77. SDP 2017.3 Patch 1

Released: Rev. SDP/MultiArch/2017.3/23041 (2017/10/24).

Jobs Fixed since change 23003 up to 23041 (F=Feature, B=Bug):

- [SDP-143](#) (F): Enhance init scripts to display usage with no args.
- [SDP-259](#) (B): Fixed logging issue in upgrade.sh - p4broker/p4p start/stop not captured.
- [SDP-260](#) (F): Simplified stop\_p4d() in backup function due to logic now in p4d\_base.
- [SDP-261](#) (B): Fixed minor issue message about rotating journal escaping log capture.
- [SDP-262](#) (F): Take advantage of '--daemonsafe' arg in P4D 2017.1.

- [SDP-263](#) (B): Fixed login count in p4login script.

## 6.78. SDP 2017.3 GA

Released: Rev. SDP/MultiArch/2017.3/23003 (2017/10/19).

Jobs Fixed since change 22201 up to 23003 (F=Feature, B=Bug):

- [SDP-223](#) (B): Fix EDGESERVER check in p4d\_base regression.
- [SDP-224](#) (B): Fix os\_tweaks.sh to work on RHEL/CentOS 6.9.
- [SDP-225](#) (B): Updated hms\_ts\_setup.sh to adapt to mkdirs.cfg changes.
- [SDP-226](#) (B): Fixed typo in variable name in libcore.sh.
- [SDP-227](#) (B): install\_sdp\_perl.sh: Added DVCS environment isolation safety feature.
- [SDP-228](#) (F): install\_sdp\_perl.sh: Now uses r17.1 API.
- [SDP-232](#) (F): Re-establish autologinprompt default behavior.
- [SDP-233](#) (B): Fix bug in sdp\_sync.sh related to args passed to rrun function.
- [SDP-234](#) (B): Change Unix default server.id to be unique to support remote depots
- [SDP-236](#) (B): Avoid issues interacting with incompatible local Perl.
- [SDP-237](#) (B): Scripts using libcore.sh display a harmless but scary error after all processing completes.
- [SDP-239](#) (F): Renamed crontab templates files to be template.job.p4s rather than \*.template.
- [SDP-240](#) (B): Fixed cosmetic logging bug affecting several scripts.
- [SDP-241](#) (B): Update systemd templates to add new wait targets.
- [SDP-242](#) (B): Corrected filetypes on some scripts to chmod +x.
- [SDP-248](#) (F): Provide an override for diff between proxy listen and target ports.
- [SDP-249](#) (F): Extended P4IGNORE for more Mac files.
- [SDP-250](#) (F): Add value for db.monitor.shared configurable.
- [SDP-251](#) (F): Tweaked versions for which net.tcpsize=0 is set.
- [SDP-252](#) (B): SetWsOptionsAndView.py trigger should exit 0 when p4 client used w/ -t <template>.
- [SDP-253](#) (F): Various Windows SDP enhancements.
- [SDP-254](#) (F): Added SDP Overview slide preso to SDP.

## 6.79. SDP 2017.2 Patch 1

Released: Rev. SDP/MultiArch/2017.2/22201 (2017/05/18).

Jobs Fixed since change 22177 up to 22201 (F=Feature, B=Bug):

- [SDP-222](#) (B): Fixed issue with testing mkdirs.sh on Mac.

## 6.80. SDP 2017.2 GA

Released: Rev. SDP/MultiArch/2017.2/22177 (2017/05/17).

Jobs Fixed since change 21808 up to 22177 (F=Feature, B=Bug):

- [SDP-153](#) (B): Maintenance script `unload_clients_with_delete.py` needs to ignore swarm workspaces to avoid losing data.
- [SDP-195](#) (F): Added new configurable setting: `'filesys.bufsize=1M'`.
- [SDP-196](#) (B): Fixed bug in `unload_labels.py`, weeks passed in as days.
- [SDP-197](#) (B): Fixed bug in Windows PowerShell `p4verify.ps1` script.
- [SDP-200](#) (B): Fixed issue with `/tmp` getting polluted with temp files.
- [SDP-201](#) (F): Various scripts favor more scalable `run()/rrun()` over
- [SDP-202](#) (F): HMS scripts normalize to `/bin/bash`, check `BASH_VERSION`
- [SDP-203](#) (F): Added new `JobIncrement` trigger to simplify custom job name usage.
- [SDP-210](#) (F): Enhanced `P4DTG` init script reliability.
- [SDP-215](#) (F): Added new configurable setting: `'dm.user.loginattempts=7'`.
- [SDP-216](#) (F): Refactored `mkdirs.sh` extracting user-config into `mkdirs.cfg`.
- [SDP-219](#) (B): Corrected logic on skipping the swarm user in `remove_empty_pending_changes.py`
- [SDP-220](#) (F): Added triggers using alternative file transfer for `submit/pull`.
- [SDP-221](#) (F): Enhanced to rotate `p4verify.log` like other logs.

## 6.81. SDP 2017.1 Patch 1

Released: Rev. SDP/MultiArch/2017.1/21808 (2017/03/08).

Jobs Fixed since change 21720 up to 21808 (F=Feature, B=Bug):

- [SDP-191](#) (B): Fixed default thresholds values in proxy cache cleaner.
- [SDP-192](#) (B): User deletion maint script handles usernames with backslash.
- [SDP-193](#) (F): Enhance proxy init script to incorporate monitoring, adding default value in `p4_vars`.

## 6.82. SDP 2017.1 GA

Released: Rev. SDP/MultiArch/2017.1/21720 (2017/02/17).

Jobs Fixed since change 21528 up to 21720 (F=Feature, B=Bug):

- [SDP-179](#) (F): Enhanced `install_sdp_perl.sh` to build with `P4Perl` from The Workshop
- [SDP-181](#) (B): Fixed issue keeping `recreate_db_sync_replica.sh` from fixing a replica out-of-sync issue.

- [SDP-182](#) (F): Enhanced and updated `install_sdp_perl.sh`
- [SDP-183](#) (B): In `recreate_db_sync_replica.sh`, ensure `P4ROOT` and `OFFLINE_DB` are cleaned.
- [SDP-184](#) (B): Fixed bug resulting in error sending email on Ubuntu.
- [SDP-185](#) (F): Added PowerShell script `p4verify.ps1` to verify on Windows.
- [SDP-186](#) (F): Simplified Windows setup with batch wrappers to PowerShell scripts.
- [SDP-187](#) (F): General Unix doc enhancements.
- [SDP-188](#) (F): Enhanced Perl library modules. [SDP0190](#) (B): Fixed hms failover bug targeting wrong host with multiple possible targets.

## 6.83. SDP 2016.2 Patch 17

Released: Rev. SDP/MultiArch/2016.2/21528 (2017/01/14).

Jobs Fixed since change 21489 up to 21528 (F=Feature, B=Bug):

- [SDP-160](#) (F): Enhanced `P4Triggers.py` to print exceptions encountered.
- [SDP-175](#) (F): Added more exclusions to `/p4/.p4ignore`.
- [SDP-176](#) (B): Fixed issues with `hms_ts_setup.sh`.
- [SDP-177](#) (B): Backed out clever `tempdir` feature that negatively impacted portability.

## 6.84. SDP 2016.2 Patch 16

Released: Rev. SDP/MultiArch/2016.2/21489 (2017/01/11).

Jobs Fixed since change 21480 up to 21489 (F=Feature, B=Bug):

- [SDP-174](#) (B): Added Suffix field to spec depot in new servers.

## 6.85. SDP 2016.2 Patch 15

Released: Rev. SDP/MultiArch/2016.2/21480 (2017/01/11).

Jobs Fixed since change 21379 up to 21480 (F=Feature, B=Bug):

- [SDP-167](#) (F): Added `server.start.unlicensed` configurable.
- [SDP-168](#) (F): Work around RHEL/CentOS 7 command completion issue.
- [SDP-169](#) (B): Fixed `install_sdp_python.sh` issue with building P4Python for SSL-enabled server.
- [SDP-170](#) (F): Added script to lowercase a directory tree.
- [SDP-171](#) (F): Added SSL support in `hms_ts_setup.sh`.
- [SDP-172](#) (B): Fixed bug in `upgrade.sh` introduced when truncate journal was changed to use p4 admin journal.
- [SDP-173](#) (F): Enhanced SSL support in `install_sdp_python.sh` to account for varied OpenSSL

installations.

## 6.86. SDP 2016.2 Patch 14

Released: Rev. SDP/MultiArch/2016.2/21379 (2016/12/20).

Jobs Fixed since change 21328 up to 21379 (F=Feature, B=Bug):

- [SDP-165](#) (F): Simplified SSL autogen cert generation.
- [SDP-166](#) (B): Re-login after setting auth.id, restart at end of script.

## 6.87. SDP 2016.2 Patch 13

Released: Rev. SDP/MultiArch/2016.2/21328 (2016/12/16).

Jobs Fixed since change 21239 up to 21328 (F=Feature, B=Bug):

- [SDP-157](#) (F): Added sample /Users/perforce/.mailrc.
- [SDP-158](#) (F): SDP-ified log, moving p4triggers.log to \${LOGS}.
- [SDP-159](#) (F): Updated to hms tight ship setup script, still WIP.
- [SDP-161](#) (F): Added script to lowercase a dir tree.
- [SDP-162](#) (F): Added initial HMS tight ship script.
- [SDP-163](#) (F): Standardized doc format to docx.
- [SDP-164](#) (F): Enhanced to support enterprise environments with two metadata volumes.

## 6.88. SDP 2016.2 Patch 12

Released: Rev. SDP/MultiArch/2016.2/21239 (2016/12/06).

Jobs Fixed since change 21193 up to 21239 (F=Feature, B=Bug):

- [SDP-154](#) (F): Enable auth.id for P4D 2016.1+ servers.
- [SDP-155](#) (F): Suppress known-harmless errors in p4verify.sh.
- [SDP-156](#) (F): Enhance install\_sdp\_p\* scripts to remove hard-coded dependency on an instance 1.

## 6.89. SDP 2016.2 Patch 11

Released: Rev. SDP/MultiArch/2016.2/21193 (2016/12/2).

- [SDP-138](#) (F): Take advantage of new 2016.2 configurables.
- [SDP-147](#) (F): Add CentOS 7 support to os\_tweaks.sh
- [SDP-148](#) (F): Update SDP Python/Perl install to use 'http:' rather than 'ftp:' in URLs.
- [SDP-150](#) (B): Correct cp path for ssl dir.

- [SDP-151](#) (F): Enhance Windows SDP install to server.depot.root.
- [SDP-152](#) (F): Enhance to support 2 volumes for root/offline\_db.

## 6.90. SDP 2016.2 Patch 10

Released: Rev. SDP/MultiArch/2016.2/21123 (2016/11/22).

Jobs Fixed since change 21103 up to 21123 (F=Feature, B=Bug):

- [SDP-149](#) (B): Fix shebang line for case check trigger.
- [SDP-150](#) (B): Correct cp path for ssl dir.

## 6.91. SDP 2016.2 Patch 9

Released: Rev. SDP/MultiArch/2016.2/21103 (2016/11/21).

Jobs Fixed since change 21101 up to 21103 (F=Feature, B=Bug):

- [SDP-146](#) (F): Added doc-only hms setup scripts.

## 6.92. SDP 2016.2 Patch 8

Released: Rev. SDP/MultiArch/2016.2/21101 (2016/11/21).

Jobs Fixed since change 21033 up to 21101 (F=Feature, B=Bug):

- [SDP-144](#) (F): Add CheckCaseTrigger.p to the SDP.
- [SDP-145](#) (F): Various doc update for hms and failover.

## 6.93. SDP 2016.2 Patch 7

Released: Rev. SDP/MultiArch/2016.2/21033 (2016/11/10).

Jobs Fixed since change 20995 up to 21033 (F=Feature, B=Bug):

- [SDP-139](#) (B): mkrep.sh: Add missing journalcopy to standby replicas.
- [SDP-140](#) (B): hms: Fixed issues with script hang on local failover.
- [SDP-141](#) (F): hms: Replaced hard-coded master ServerID value with configured value.
- [SDP-142](#) (B): Fix p4verify.sh bug when -recent flag is used.

## 6.94. SDP 2016.2 Patch 6

Released: Rev. SDP/MultiArch/2016.2/20995 (2016/11/07).

Jobs Fixed since change 20972 up to 20995 (F=Feature, B=Bug):

- [SDP-134](#) (B): p4verify.sh is currently broken - use of an unbounded variable (\$d); use of the -recent option fails as for verify -S you cannot specify a range (only @= is supported) ; stripping out archive,unload+remote depots also not working. get\_verify\_rev\_range used depot name incorrectly in changes
- [SDP-136](#) (B): Tweaked maint scripts to handle oddly named groups.
- [SDP-137](#) (F): Added new CN setting for /p4/common to test folder paths.

## 6.95. SDP 2016.2 Patch 5

Released: Rev. SDP/MultiArch/2016.2/20972 (2016/11/01).

Jobs Fixed since change 20856 up to 20970 (F=Feature, B=Bug):

- [SDP-120](#) (F): Add -recent flag to p4verify.sh to verify recent changes.
- [SDP-126](#) (B): p4login.\*.log files are not being cleaned up by the standard clean-up mechanism (remove\_old\_logs in backup\_function.sh).
- [SDP-127](#) (F): Allow for multiple depot volumes.
- [SDP-128](#) (B): Fixed missing LOGFILE variable issue in p4verify.sh.
- [SDP-129](#) (B): Fix formatting of logs to use simple HTML line breaks for Windows SDP.
- [SDP-130](#) (B): Various test suite improvements.
- [SDP-131](#) (B): fixed issue with broken def'n of P4PORT with multiple SSL prefixes.
- [SDP-132](#) (F): Enhanced two-factor auth mechanism.
- [SDP-133](#) (F): Tweak to slightly reduce mkdirs.sh configuration.

## 6.96. SDP 2016.2 Patch 4

Released: Rev. SDP/MultiArch/2016.2/20856 (2016/10/04).

Jobs Fixed since change 20805 up to 20856 (F=Feature, B=Bug):

- [SDP-121](#) (F): Enhanced logic to favor init scripts in /p4/N/bin over /etc/init.d.
- [SDP-122](#) (B): Fixed quoting bug in p4login.
- [SDP-123](#) (F): hms checks for cfg files in /p4/common/config.
- [SDP-124](#) (B): Fixed hms bug re: wrong master host discovered in failback testing

## 6.97. SDP 2016.2 Patch 3

Released: Rev. SDP/MultiArch/2016.2/20805 (2016/10/02).

Jobs Fixed since change 20790 up to 20805 (F=Feature, B=Bug):

- [SDP-116](#) (B): Fixed ssh hang issues with hms scripts.
- [SDP-117](#) (F): Implemented global/central start stop.

- [SDP-118](#) (F): mkrep.sh: Added more replica types and journalcopy support.
- [SDP-119](#) (F): Implement checkauth feature in HMS broker\_wrapper.

## 6.98. SDP 2016.2 Patch 2

Released: Rev. SDP/MultiArch/2016.2/20790 (2016/09/30).

Jobs Fixed since change 20755 up to 20790 (F=Feature, B=Bug):

- [SDP-112](#) (B): Minor p4 login fix to show P4TICKETS output reliably.
- [SDP-113](#) (B): Fix mkrep.sh to use \$P4BIN instead of p4.
- [SDP-114](#) (F): Added basic p4login-super.sh script.
- [SDP-115](#) (B): Added hms dir to makedirs.sh.

## 6.99. SDP 2016.2 Patch 1

Released: Rev. SDP/MultiArch/2016.2/20755 (2016/09/29).

Jobs Fixed since change 20559 up to 20755 (F=Feature, B=Bug):

- [SDP-64](#) (F): Add option to install\_sdp\_python.sh to build P4Python with SSL.
- [SDP-103](#) (B): Fix attempted login count in p4login.
- [SDP-104](#) (B): Fixed order-of-operations issue that caused some log files to be lost on rotation.
- [SDP-105](#) (B): Cosmetic fix to broker init script with 'status all' run w/no config files.
- [SDP-106](#) (F): Add Helix Management System (HMS) files to SDP.
- [SDP-107](#) (F): Enhance p4login to avoid hang issue with auth.id set.
- [SDP-108](#) (F): Further test suite docker environment updates.
- [SDP-109](#) (F): Add Two Factor Authentication sample auth script.
- [SDP-110](#) (B): Correct crontab to run sync\_replica.sh every day.
- [SDP-111](#) (B): Fix bugs in convert\_label\_to\_autoreload.py.

Jobs Fixed since change 20491 up to 20559 (F=Feature, B=Bug):

- [SDP-100](#) (B): Fix recent regression with 'restart' option in init scripts.

## 6.100. SDP 2016.2 GA

Released: Rev. SDP/MultiArch/2016.1/20491 (2016/09/09).

Jobs Fixed since change 20460 up to 20491 (F=Feature, B=Bug):

- [SDP-99](#) (B): Fix special case env insulation bug running init scripts as root.

## 6.101. SDP 2016.1 Patch 13

Released: Rev. SDP/MultiArch/2016.1/20460 (2016/09/08).

Jobs Fixed since change 20395 up to 20460 (F=Feature, B=Bug):

- [SDP-94](#) (B): Fixed a typo inserted in mkdirs.sh.
- [SDP-98](#) (B): chmod +x fix on some scripts.

## 6.102. SDP 2016.1 Patch 12

Released: Rev. SDP/MultiArch/2016.1/20395 (2016/09/04).

Jobs Fixed between changelists 20387 and 20395 (F=Feature, B=Bug):

- [SDP-94](#) (B): Fixed a typo inserted in mkdirs.sh.

## 6.103. SDP 2016.1 Patch 11

Released: Rev. SDP/MultiArch/2016.1/20387 (2016/09/04).

Jobs Fixed between changelists 20348 and 20387 (F=Feature, B=Bug):

- [SDP-89](#) (B): Fixed several issues in email.sh maint script.
- [SDP-92](#) (B): Fixed using with runRemoteCmd getting error if USER not defined in non-core SDP script.
- [SDP-93](#) (B): Removed references to legacy names for checkpoint scripts (non-functional change).

## 6.104. SDP 2016.1 Patch 10

Released: Rev. SDP/MultiArch/2016.1/20348 (2016/09/02).

Jobs Fixed between changelists 20028 and 20348 (F=Feature, B=Bug):

- [SDP-64](#) (F): Add option to install\_sdp\_python.sh to build P4Python with SSL.
- [SDP-74](#) (F): Add p4sanity\_check.sh script from Battle School.
- [SDP-75](#) (B): Fix missing echo of command into log file in p4verify.sh.
- [SDP-77](#) (F): Change adminspass to use hidden, and now instance-specific, password files
- [SDP-78](#) (F): Add mkrep script to simplify replica creation.
- [SDP-79](#) (F): Update p4verify.sh to verify shelves on master/replicas.
- [SDP-80](#) (F): Add script to convert labels to autoreload.
- [SDP-81](#) (F): Add Evil Twin Detector maintenance script.
- [SDP-85](#) (F): Add script to simplify adoption of OS-level best practices recommended by Support.
- [SDP-97](#) (B): Eliminate syntax error if user forgets start/stop/status arg; just display status.

- [SDP-88](#) (F): Use pid to shutdown p4d rather than 'p4 admin stop' to enhance reliability.

## 6.105. SDP 2016.1 Patch 9

Released: Rev. SDP/MultiArch/2016.1/20028 (2016/08/03).

Jobs Fixed between changelists 19888 and 20028 (F=Feature, B=Bug):

- [SDP-67](#) (F): Defend against environment hijacking of P4ENVIRO.
- [SDP-72](#) (F): Revive external auth LDAP group mirror scripts.
- [SDP-69](#) (B): sdp\_sync.sh v2.1.7: Fixed environment bug (missing defs), HMS support.
- [SDP-70](#) (F): Simplify login ticket handling for sophisticated topologies.
- [SDP-71](#) (F): Prevent cross-instance contamination if p4\_vars is loaded multiple times.

## 6.106. SDP 2016.1 Patch 8

Released: Rev. SDP/MultiArch/2016.1/19888 (2016/07/07).

Jobs Fixed between changelists 19838 and 19888 (F=Feature, B=Bug):

- [SDP-6](#) (B): SDP trigger breaks with Streams workspaces in P4V.
- [SDP-66](#) (B): Daily/weekly\_backup can fail leaving lock file present requiring manual intervention
- [SDP-67](#) (F): Defend against environment hijacking of P4ENVIRO.

## 6.107. SDP 2016.1 Patch 7

Released: Rev. SDP/MultiArch/2016.1/19838 (2016/06/26).

Jobs Fixed between changelists 19768 and 19838 (F=Feature, B=Bug):

- [SDP-6](#) (B): SDP triggers break with Streams workspaces in P4V.
- [SDP-65](#) (F): Add defense against known-misbehaving client versions.

## 6.108. SDP 2016.1 Patch 6

Released: Rev. SDP/MultiArch/2016.1/19768 (2016/06/24).

Jobs Fixed between changelists 19661 and 19768 (F=Feature, B=Bug):

- [SDP-62](#) (F): Change to best-practice configurables; auth.autologinprompt=0.
- [SDP-63](#) (B): p4master\_run operates incorrectly as root.

## 6.109. SDP 2016.1 Patch 5

Released: Rev. SDP/MultiArch/2016.1/19661 (2016/06/08).

Jobs Fixed between changelists 19410 and 19661 (F=Feature, B=Bug):

- [SDP-59](#) (F): Add KEEPJNLS to allow keeping more jnls than ckps.
- [SDP-60](#) (F): Rename replica scripts to be consistent with earlier rename of checkpoint scripts.
- [SDP-61](#) (F): Enhance error checking and logging replica handling scripts.
- [SDP-62](#) (F): Change to best-practice configurables; auth.autologinprompt=0.

## 6.110. SDP 2016.1 Patch 4

Released: SDP/MultiArch/2016.1/19410 (2016/05/17).

Jobs Fixed between changelists 18958 and 19410:

- [SDP-50](#): Work with license check in P4D 2016.1.
- [SDP-51](#): Change p4verify.sh to use -S to verify shelves on a replica instead
- [SDP-52](#): Removed the HOST\_IP settings from mkdirs and instance\_vars since it
- [SDP-53](#): Dockerify SDP test suite.
- [SDP-54](#): Add replica cleanup script on Windows.
- [SDP-55](#): Get p4verify.sh to check SHARED DATA on replicas.
- [SDP-56](#): Avoid chmod on a replica if it shares data with the master.
- [SDP-57](#): Use 'p4 admin journal' on master to rotate journal.

## 6.111. SDP 2016.1 Patch 3

Released: SDP/MultiArch/2016.1/18958 (2016/04/08).

Jobs Fixed between changelists 18619 and 18958:

- [SDP-39](#): Proxy status init script can show proxy is up when it is not.
- [SDP-41](#): Moved ckp\_running.txt to LOGS dir.
- [SDP-42](#): Fix missing LOGFILE= in replica\_cleanup.sh.
- [SDP-43](#): De-emphasized changeType=restricted.
- [SDP-44](#): Update Perl/P4Perl Python/P4Python
- [SDP-45](#): Support multiple broker configs.
- [SDP-46](#): Enhanced p4\_vars.template to support non-p4d hosts.
- [SDP-47](#): SDP-ify P4DTG init script.
- [SDP-48](#): Enhanced p4deleteuser.py to check for shelves, double-deletes.

## 6.112. SDP 2016.1 Patch 2

Released: SDP/MultiArch/2016.1/18619 (2016/03/10).

Jobs Fixed between changelists 17297 and 18619:

- [SDP-30](#) on 2015/12/15 by ttyler **closed** 'Enhanced offline\_db 'stale data'

## 6.113. SDP 2016.1 Patch 1

Released: SDP/MultiArch/2016.1/17297 (2016/02/03).

Jobs Fixed between changelists 16784 and 17297:

- [SDP-32](#): Support \$MAILTO values with '#' char in gen\_default\_broker\_cfg.sh.
- [SDP-34](#): sdp\_sync.sh: Fix 'null crontab' bug.
- [SDP-35](#): p4d\_base: When stopping p4d, send stderr to /dev/null.
- [SDP-36](#): global\_replica\_status.sh: Support instance-specific host config.
- [SDP-37](#): Support email addresses starting with '#'.

## 6.114. SDP 2016.1 GA

Released: SDP/MultiArch/2016.1/16784 (2016/01/12).

Jobs Fixed recently:

- [SDP-31](#): Add documentation for sdp\_sync.sh to SDP Guide.
- [SDP-32](#): Support \$MAILTO values with '#' char in gen\_default\_broker\_cfg.sh.