

Quest® SharePlex® Upgrade Planning Service

Quest®



Businesses are under increasing pressure to get more value from their data while driving down cost. In addition, database professionals are trying to ensure database operations run smoothly while ensuring data resiliency through high availability (HA) and disaster recovery (DR). That's why it makes sense to protect your investment in Quest® SharePlex® by adopting an upgrade strategy.

As a SharePlex user, you're replicating Oracle data at a fraction of the price of Oracle native tools and freeing up your resources for other investments that drive your business forward. The SharePlex team takes your return on investment (ROI) seriously and strongly encourages adopting a proactive plan for staying

current on releases to ensure the stability, functionality and uptime of your mission critical SharePlex environment.

Staying current on SharePlex allows you to continue your Oracle database replication with the best performance, features and utilities along with current operating system and Oracle version support. However, Oracle database upgrades can be complicated, and mistakes can occur. When upgrade issues occur and wipe out your production environment, every second counts. If you do not have a rollback plan to recover, an upgrade disaster can stop your business in its tracks.



UPGRADE PLANNING SERVICE

Quest offers an Upgrade Planning Service specifically for SharePlex. If your IT team does not have the time, staff or expertise to plan and execute a SharePlex upgrade, our professional services experts can assist you. The Upgrade Planning Service consists of these three components:

1. Readiness Assessment and Planning

The Readiness Assessment and Planning phase is designed to help you better understand your SharePlex environment's readiness for SharePlex upgrade and craft the upgrade plan. We share expert knowledge with your IT staff to make sure everyone is aware of what is involved with upgrading your SharePlex environment. The following steps are taken to ensure your environment and staff are ready for the upgrade:

- Check interoperability
- Validate OS compatibility
- Validate database version compatibility
- Verify inclusion of one-off builds and bug fixes
- Check for deprecated parameters
- Check for new parameters
- Recommend upgrade in the existing product directory or upgrade to a new product directory
- Document necessary steps to upgrade SharePlex

The outcome of the Readiness Assessment is identification of areas of concern so the organization is better positioned for a successful production SharePlex upgrade. This phase concludes with Quest providing an upgrade plan.

Benefits

- Verify the health and stability of the SharePlex environment
- Determine upgrade readiness
- Document upgrade plan
- Identify and recommend mitigation for potential upgrade issues
- Help identify considerations for future upgrades

2. Health Check

The SharePlex Health Check is designed to help better understand your SharePlex environment and ensure it is operating as expected. During the health check, our engineers provide a technical assessment of your SharePlex deployment to identify and prioritize system improvements. The goal is to ensure that your deployment is working as efficiently as possible. During the health check, our team will:

- Facilitate a workshop to discuss and review SharePlex replication environment health
- Review/validate existing SharePlex replication and configuration files
- Review/validate schemas and objects in replication
- Identify variances in the current environment based on SharePlex implementation best practices
- Validate the configuration for use case scenarios
- Provide recommendations on necessary changes to be done in the existing SharePlex environment
- Discuss/validate SharePlex software-related prerequisites
- Develop SharePlex replication environment draft documentation

3. Performance Tuning

Performance tuning can be an incredibly difficult task, particularly when working with large amounts of data, where even a minor change can have a dramatic impact on performance. The first step in performance tuning is to identify bottlenecks. The Quest team will review current post replication volumes and assess the post queue configuration using an expected production workload. With the SharePlex Post Queue Tuning Service, our technical experts provide basic tuning of the post process and make recommendations to improve operations. Following these steps, you'll see optimal performance, be able to better manage your application data and address real-time production issues:

- Review detailed post queue configuration and performance requirements
- Assess post replication volumes, assess current post queue configuration, and evaluate tuning readiness
- Configure post queues in SharePlex in test environment
- Configure post queues in SharePlex in production environment

OUTCOMES

At the conclusion of the engagement, you'll receive the following so you can upgrade SharePlex with confidence that every aspect has been considered:

- Readiness Assessment and Planning: determine SharePlex environment readiness and create a plan to upgrade SharePlex safely,
- Health Check: validate and document the SharePlex environment; identify potential improvements

- Performance Tuning: provide recommendations and make configuration changes to optimize performance of the current SharePlex deployment

ABOUT QUEST PROFESSIONAL SERVICES

- Trusted advisors – Our consultants take the time to understand your business and provide industry standards and technology guidance to deliver solutions that achieve your desired outcomes. We provide a framework and methodology to make the unpredictable predictable.
- Stress-free engagements – We take the guesswork out of deploying technology. Because IT project planning, facilitation and implementation can be complex, our world-class services help you complete projects on time and on budget without disrupting your business operations or user productivity.
- Accelerated return on investment – Our expert planning and implementation helps you rapidly adopt new technology, set your organization up for success and accelerate your return on investment. We'll help you quickly drive new systems into production while ensuring your IT team is ready to utilize all the new features and benefits.

Contact your sales representative or visit <https://support.quest.com/consulting-services/database-management>

ABOUT QUEST

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Quest Software. Where next meets now.

The information contained in this document is a general description of software consulting services that Quest may provide during the services engagement. The actual services to be provided will be as stated in the order for such services.

Addendum: SharePlex Upgrade Checklist

The SharePlex team strongly encourages customers to adopt a proactive strategy for staying current on SharePlex releases. Staying current allows you to continue your mission critical Oracle database replication with the best performance, features and utilities along with current OS and Oracle version support.

Below are some actions you can expect to take while upgrading SharePlex.

SHAREPLEX UPGRADE CHECKLIST

Best Practices

- Verify there is a good current back up of SharePlex
- Review hardware and software needs before upgrading
- Identify a lower environment that resembles the production environment and perform the upgrade in the lower environment before upgrading the production environment
- Upgrade target systems first to avoid compatibility concerns

Verify SharePlex Health

- Perform a SharePlex Health Check to ensure the environment is stable

Have a Plan

- Review the SharePlex Upgrade Guide
- Create an Implementation Plan
- Create a Communication Plan
- Create a Test Plan
- Create a Rollback Plan
- Reach out to your Quest Account Manager for their awareness
- Create a proactive Service Request with Quest SharePlex Support team prior to the production upgrade

Readiness Checklist

- Gather installation details:
 - Location of the SharePlex product directory
 - Location of the SharePlex variable-data directory (or directories) in this instance of SharePlex.
 - Average and peak volume of data change per hour and day
 - Name of the SharePlex administrator group (that contains the SharePlex administrator user).
 - The ORACLE_SID and ORACLE_HOME (Oracle) or the database name (Open Target) associated with the installation you are upgrading. To determine this, look in the defaults.yaml file in the data sub-directory of the product directory.

- Review the Release Notes of the new release for any interoperability restrictions between the old and new releases
- Validate OS compatibility
- Validate database version compatibility
- If you are not certain if you have one-offs or bug fixes, contact Support BEFORE proceeding
- One-off builds are those Bug fixes / Debug one-off / Customized one-off / Test one-off provided to a customer outside of a standard offering in the product. They may be created to address a bug, do some testing of a concept, and debug an issue, among others.
- Check for depreciated parameters in the Reference Guide and the Release Notes
Determine if any of the parameters that you are using were depreciated in new release. SharePlex retains backward compatibility of your current parameter settings, including those that are newly depreciated, so that you do not need to stop processes to reconfigure settings. However, you should familiarize yourself with the new parameter or default functionality that replaces a depreciated parameter to determine whether any configuration changes are appropriate.
- Check for new parameters
Review the new features in this release and enhancements for any new parameters that affect your current configuration. If any upgrade steps are required, they will be noted.
- Decide whether to upgrade SharePlex in the existing product directory (in-place) or upgrade SharePlex to a new product directory (out-of-place). For their database software, Oracle recommends out-of-place upgrades. If Services are engaged, follow the recommendation of your Services Architect.
- Create a runbook as part of the implementation plan so you have a repeatable and documented process as you upgrade the production environment. Production upgrades should be copy/paste from the runbooks.

Upgrading

- Refer to the SharePlex Upgrade guide for full details <https://support.quest.com/shareplex>
- Download the SharePlex Installer <http://support.quest.com/>
- Review OS environment details
- Review current install and determine upgrade method
 - Upgrade on Linux/Unix for Oracle Database
 - Upgrade SharePlex in the current product directory
 - Upgrade SharePlex to a new product directory

- o Upgrade on Linux/Unix for Open Target Databases
- o Upgrade on Windows
- Verify partition schemes
- Additional upgrade for SAP ASE target
- Update SharePlex utilities
 - o Database setup for HANA
 - Run database setup for HANA
 - Grant privileges to SharePlex
 - o Database setup for MySQL
 - Run database setup for MySQL
 - o Database setup for Oracle
 - Run ora setup using existing SharePlex Oracle account to upgrade database objects
 - Privileges granted to SharePlex
 - Run database setup for Oracle
 - o Database setup for PostgreSQL
 - Run database setup for PostgreSQL
 - o Database setup for SQL Server
 - Run database setup for SQL Server
 - o Database setup for Teradata
 - Run database setup for Teradata
 - Grant additional database privileges

Testing

- Start SharePlex and Oracle Services, like PLA (Product Lifecycle Analytics)
- Verify post queue is cleared and there are no out of sync issues
- Test critical SharePlex features and throughput times
 - o Verify replication startup
 - Verify that active configuration is running on source
 - o Verify SharePlex capture recovery
 - Verify that capture and read are reading current logs
 - o Verify replication of large data volumes
 - Verify that export is connecting to import
 - o Verify queuing and continuity of replication
 - Verify that post is actively sending to target database

Rollback Decision

- Execute rollback plan if warranted

Post upgrade Tasks

- Perform a health check to ensure the SharePlex environment is stable after upgrade
- Consider a performance tuning exercise based on finding from the health check
- Document gotchas and any other important information in the implementation plan for the next upgrade

Post Upgrade Addendum – SharePlex Manager

- If SharePlex Manager is used in the SharePlex environment, it may be appropriate to upgrade the SharePlex Manager as well after a successful SharePlex upgrade. Review <https://support.quest.com/shareplex-manager> for the latest SharePlex Manager information. Note: you may need to discover SharePlex ports again if they are not visible in SharePlex Manager after the upgrade.

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Quest Software Inc.

Attn: LEGAL Dept
4 Polaris Way
Aliso Viejo, CA 92656

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