



# Space Manager with LiveReorg<sup>®</sup> 9.2

## Release Notes

Tuesday, December 3, 2024

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# About Space Manager with LiveReorg

Space Manager with LiveReorg® is Quest Software's solution for optimizing space use and performance in Oracle® databases. It provides DBAs with a comprehensive set of tools for making the most of storage resources. These tools allow you to collect statistics, visualize space use, detect space-use problems, reorganize and resize objects to reclaim wasted space, create tablespaces, partition objects, and resize datafiles. Space Manager's powerful reorganization functionality makes it possible to reorganize and restructure large, volatile databases while tables are online.

As you manage capacity with Space Manager, you can monitor it with Capacity Manager for Oracle. Capacity Manager is Quest Software's solution for tracking and planning capacity across multiple Oracle databases. Designed to report on collective space use in databases, Capacity Manager lets you evaluate current allocation, forecast future growth, and identify emerging issues. To resolve these issues, you can run Space Manager from Capacity Manager. Launch points are provided throughout the Capacity Manager interface.

Together, Space Manager and Capacity Manager provide the information and control you need to efficiently maintain and plan your database resources. Capacity Manager uses the Space Manager license and can be installed when you install Space Manager.

**Note:** Capacity Manager is not available in a 64-bit version at this time and is not included in the 64-bit installer.

## Revision History

Document Version	Date	Change History
2	2 <sup>nd</sup> December 2024	<ul style="list-style-type: none"><li>Removed the support information of Oracle Net version 11g from Oracle client requirement for the client computer.</li><li>Removed the support information of IBM AIX 7.1 for the Database Server Operating Systems.</li></ul>

# New Features and Enhancements

## Space Manager 9.2

Space Manager 9.2 includes the following new operating systems and enhancements:

**Operating systems support:**

- Windows 11
- Windows Server 2022

**Enhancements:**

- Space Manager now supports the **Identity Column** feature on **Oracle 19c** for Live Reorganizations.
- Space Manager now displays sub-partition templates in the `DBA_SUBPARTITION_TEMPLATES` view, even after performing Live Reorganizations.
- Space Manager now supports the **Index with Compress Advanced High** option.
- Space Manager now supports the **READ\_ONLY** property option for partitioned tables.
- Space Manager now supports the **sub-partition count** columns.

## Space Manager 9.1

Space Manager 9.1 includes the following new features and enhancements. This release of Space Manager is upgraded to install server agent on Windows 64 bit platform.

Supported Platform versions as below:

<b>Database Server Operating System</b>	Windows Red Hat® Enterprise Linux 8.4 and 8.6 (64 bit) IBM® AIX 7.1 ,7.2 and 7.3
<b>Oracle Database</b>	12c R2 and 19c
<b>Operating System</b>	Windows Server 2016 Datacenter

## Space Manager 9.0

Space Manager 9.0 includes the following new features and enhancements.

This release of Space Manager is upgraded to support Oracle Database 19c.

Supported Platform versions as below:

<b>Database Server Operating System</b>	Oracle Solaris 11 and 11.1 IBM® AIX 7.1 and 7.2 Red Hat® Linux Advanced Server 7.4
<b>Oracle Database</b>	12c R2 19c
<b>Operating System</b>	Windows 10

**Note:** License validation will happen in Space Manager, QSA independently will not authorize the license key.

# Deprecated Platforms

The following platform is deprecated in the current version.

IBM AIX 7.1

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## Resolved Issues

The following is a list of issues addressed and enhancements implemented in this release of Space Manager.

### Space Manager 9.2

Feature	Enhancement / Resolved Issue	Defect ID
Check constraints	After performing a reorg, if a table has any check constraints, the <b>Check Constraint</b> option is automatically disabled.	SPC-1084

### Space Manager 9.1

Feature	Enhancement / Resolved Issue	Defect ID
Double Database Instance Issue	An issue with double database entry appearing at the left side of the Windows Explorer has been resolved.	SPC-1022

### Space Manager 9.0

Feature	Enhancement / Resolved Issue	Defect ID
Renci Upgrade	The Renci SSH.NET library is upgraded from version 2012.3.9 to 2020.0.1 in Space Manager to help resolve connectivity issues with the oracle servers running on the latest AIX operating systems.	SPC-906
Partitioning Wizard	An issue with the "Move to Tablespace" functionality in Space Manager is resolved.	SPC-908

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# Known Issues

The following is a list of issues known to exist at the time of this release.

Feature	Known Issue and Workaround (if applicable)	Defect ID
General	When running the Space Manager client (64-bit) in a 64-bit environment, some users might encounter the following error when attempting to submit a standard or live reorg script: "Error creating script group: Could not load file or assembly ManagedQP5.dll or one of its dependencies. is not a valid Win32 application."	SPC-409
Domain Indexes	<b>Reorganizing tables with Domain indexes.</b> Space Manager provides limited support for Domain indexes when performing reorganizations and warns that you might encounter a problem because of the Domain index. Space Manager scripts the reorganization of the domain index correctly. However, the underlying implementation of the index type may be very complex, and some unforeseen dependencies may cause runtime errors. <b>Important:</b> It is recommended that you test the reorganization of a table with a Domain index on a non-production version of the table to make sure Space Manager reorganizes both the table and index correctly before you reorganize your production table.	N/A
Installation	Error when installing QSA on Windows for Oracle Database 12cR2. Some users might encounter an "Error running setup" error after attempting to install the QSA Server Agent on Windows for Oracle Database 12c R2. <b>Workaround:</b> If you encounter this issue, contact Quest Support for assistance.	SPC-491
Live Reorg	Error when running Live Reorg on Oracle Database 12cR2 in Windows. Some users might encounter the following error when attempting to run a Live Reorg script on Oracle 12c R2 in a Windows environment: "350: Aborted QSA - 20391 ORA - 01403 during internal SQL." <b>Workaround:</b> If you encounter this issue, contact Quest Support for assistance.	SPC-493
Object Properties	Attempting to open the Object Properties dialog for a recently-created partitioned table using a Direct connection type resulted in an error.	SPC-482
Partitioning Wizard	After creating a table partitioned by range with a global index, using the Partitioning Wizard to change the partitioning method from range to hash unexpectedly changed to the index's locality to local.	SPC-483

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# System Requirements

Before installing Space Manager and Capacity Manager, ensure that your system meets the following minimum hardware and software requirements.

## Requirements for the Client Computer

The Space Manager client must be installed on the same computer, and their requirements are the same unless otherwise specified. The computer must meet the following requirements:

Item	Requirement
Oracle® Client	Oracle Net version 12c and 19c <b>Note:</b> The bitness (architecture) of the Oracle client must match the bitness of the Space Manager application.
Operating System	<ul style="list-style-type: none"><li>• Windows 10</li><li>• Windows 11</li><li>• Windows Server 2016</li><li>• Windows Server 2022</li></ul> <b>Note:</b> The Space Manager client is tested on Windows Server 2022 with the QSA Agent and Oracle 19c hosted on AIX 7.2, and AIX 7.3.
Processor	1 GHz Processor (recommended minimum)
Memory	2 GB of RAM
Display Settings	A resolution of 1024 x 768; true color or high color; small fonts
Disk Space	Space Manager: Approximately 800 MB
.NET Framework	Microsoft® .NET Framework 4 (including update 4.0.3) <b>Note:</b> The .NET Framework 4 Full Profile is required. The Client Profile is not sufficient.

# Requirements for Databases

Each database being managed with Space Manager must meet the following requirements:

Item	Requirement
Oracle Database	<ul style="list-style-type: none"> <li>Oracle 12c Release 2</li> </ul> <p><b>Additional Requirements for Oracle 12c Release 2:</b> To be supported by Space Manager, an Oracle 12c Release 2 database is required to have the following sqlnet.ora profile parameter values specified:</p> <p>SQLNET.ALLOWED_LOGON_VERSION_CLIENT = 8 SQLNET.ALLOWED_LOGON_VERSION_SERVER = 8</p> <p>See "Additional Requirements for Oracle 12c Release 2" below for more information.</p> <ul style="list-style-type: none"> <li>Oracle 19c</li> </ul> <p><b>Notes:</b></p> <ul style="list-style-type: none"> <li>Space Manager supports Oracle Enterprise Edition and Standard Edition databases.</li> <li>Space Manager does not support Oracle databases which use Oracle Database Vault.</li> </ul>
Database Server Operating System	<p>Space Manager supports the following operating systems:</p> <ul style="list-style-type: none"> <li>Oracle Solaris 11 and 11.1</li> <li>IBM® AIX 7.2 and 7.3</li> <li>Red Hat® Linux Advanced Server 7.4 (64 bit)</li> <li>Red Hat® Enterprise Linux 8.4 and 8.6 (64 bit)</li> <li>Windows 11</li> <li>Windows Server 2016 Datacenter (64 bit)</li> <li>Windows Server 2022 (64 bit)</li> </ul>
Disk Space	<p>Disk-space requirements are:</p> <ul style="list-style-type: none"> <li>80 MB for statistics tables</li> <li>20 MB for scripts tables</li> <li>20 MB contiguous free space for LiveReorg objects in the LiveReorg tablespace (set with QSA's LW_TABLESPACE parameter)</li> <li>40 MB in the filesystem for QSA executables and logs</li> </ul>
Oracle Packages	<p><b>Space Manager:</b> DBMS_SQL, DBMS_PIPE, DBMS_LOCK, DBMS_SPACE_ADMIN  <b>QSA:</b> DBMS_SQL, DBMS_PIPE, DBMS_OUTPUT, DBMS_APPLICATION_INFO  <b>Find Long LONGs feature:</b> UTL_RAW  <b>Email notifications:</b> UTL_SMTP</p>
Oracle's Partitioning Option	<p>Required for the Online Switch (a feature available for live reorganizations) and the Partitioning Wizard; Partitioning Option must be installed and licensed.</p>
XDB Schema	<p>Required for XMLType datatypes.</p>



## Additional Requirements for Oracle 12c Release 2 and Oracle 19c

Before installing the server components (and QSA), specify a password version for the database by performing the following procedure.

1. First, to verify that this procedure is necessary for the target database, run the following query:

```
select username, password_versions
from dba_users
where username = 'SPACER'
```

**Note:** Username is the installation DBA.

2. If results returned include "10G, 11G, 12c" in the PASSWORD VERSIONS column, then this procedure is not necessary for this database.
3. If results do not include 10G, you must perform this procedure for the target database.
4. Open the SQLNET.ORA file for the target database.
5. Enter the following:

```
SQLNET.ALLOWED_LOGON_VERSION_SERVER=8
SQLNET.ALLOWED_LOGON_VERSION_CLIENT=8
BEQUEATH_DETACH=YES
```

6. Save the SQLNET.ORA file.
7. Add the below command in the listener.ora file.
8. Stop and restart the listener. Use the following commands:

```
lsnrctl stop
lsnrctl start
```

The listener may take a few minutes to fully restart.

9. Alter the password for the installation DBA to a temporary password and then back again to reset it, for example:

```
alter user spacer identified by X;
alter user spacer identified by spacer;
```

10. Reset the sys password using alter, for example:

```
alter user sys identified by syspassword;
```

11. Now run the query again to verify the change.

```
select username, password_versions
from dba_users
where username = 'SPACER'
```

**Note:** Username is the installation DBA.

12. You can also verify the change for the sys user.

```
select username, password_versions
from dba_users
where username = 'SYS'
```

13. If results returned from the queries include "10G, 11G, 12c" in the PASSWORD VERSIONS column, the password version was successfully set.

For additional information, see the Oracle documentation:

<https://docs.oracle.com/database/121/NETRF/sqlnet.htm#NETRF2010>.

# Requirements for the Capacity Manager Repository

**Note:** Capacity Manager is not available in a 64-bit version at this time and is not included in the 64-bit installer.

The database used for the Capacity Manager repository must meet the following requirements:

Item	Requirement
Oracle Database	Supported for the repository: Oracle 12c
Disk Space	8 MB recommended per monitored database assigned to a repository (accommodates one year of growth in repository objects)
Job Scheduler	One of the following schedules is needed for snapshot jobs, report scheduling, and Windows scheduling: <ul style="list-style-type: none"><li>• Oracle DBMS_SCHEDULER is used for scheduling snapshot jobs.</li><li>• A third-party job scheduler can be used instead of an Oracle DBMS package.</li></ul>
Oracle Initialization Parameters	Oracle initialization parameters should be set as follows: <ul style="list-style-type: none"><li>• OPEN_LINKS—The value for OPEN_LINKS initialization parameter should be equal to or greater than the number of monitored databases assigned to a repository. The default value for this parameter is 4; the maximum is 255.</li><li>• JOB_QUEUE_PROCESSES—For optimal performance of snapshot jobs, the value for the JOB_QUEUE_PROCESSES initialization parameter should be equal to or greater than the number of monitored databases assigned to a repository. The maximum is 1,000.</li></ul>
Character Set	Must be a superset of the character sets for all monitored databases. A UTF8 character set is recommended.
Activity Level	Light activity level.

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# Product Licensing

## **To activate a trial license**

1. In the License Key dialog, enter your Authorization Key.
2. Enter the Site Message included with your Authorization Key.

## **To activate a purchased commercial license**

1. In the License Key dialog, enter your Authorization Key.
2. Enter the Site Message included with your Authorization Key.

**Note:** License validation will happen in Space Manager, QSA independently will not authorize the license key.

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# Getting Started

## Contents of the Release Package

Space Manager with LiveReorg 9.2 and Capacity Manager for Oracle 1.4 include the following documentation:

- Space Manager online help and user guide
- Capacity Manager online help

**Note:** The *Installation Guide* and Release Notes are not included in the setup executable and need to be downloaded separately. These documents are also available from the Quest Software Support Portal.

## Installation Instructions

The clients for Space Manager with LiveReorg 9.2 and Capacity Manager for Oracle 1.4 can be installed together using the Installer.

**Note:** Capacity Manager is not available in a 64-bit version at this time and is not included in the 64-bit installer.

The installer is identified as the Space Manager with LiveReorg 9.2 Installer. The executable for the installer is available at our Support Portal at <https://support.quest.com/> and on the installation CD for Space Manager with LiveReorg.

After installing the Space Manager client, you install server components and the QSA Server Agent. Each database you plan to manage with Space Manager must have server components and an agent. Job scheduling and LiveReorg require an agent. After installing the Capacity Manager client, you install the repository and assign monitored databases to the repository. Each database you plan to manage with Capacity Manager must be assigned to the repository.

QSA Server Agent version 8.5 is included in this release of Space Manager with LiveReorg 9.2.

Refer to the *Space Manager with LiveReorg Installation Guide* for more information about installing Space Manager.

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# Upgrade and Compatibility

After you upgrade the Space Manager client, when you connect to a database with Space Manager server objects already installed, you are prompted to upgrade server components and the QSA Server Agent.

## Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release supports any single-byte or multi-byte character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan.

# About Us

## We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation.

## Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece—you—to the community, to the new Quest.

## Contact Quest

For sales or other inquiries, visit [www.quest.com/contact](http://www.quest.com/contact).

## Technical Support Resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product

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