Oracle® Database

Machine Learning System Requirements

Latest

F79038-03

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Database Editions and System Requirements

Oracle Database editions and OML availability with those editions along with supported operating systems are listed. Each edition is suitable for different development and deployment scenarios. Oracle Machine Learning components associated with Oracle Database are included with the database license.

Topics:

- Oracle Machine Learning Family of Components
- Database and System Requirements for OML4SQL
- Database and System Requirements for OML4Py in Oracle Autonomous Database Serverless
- Database and System Requirements for OML4Py in Oracle Database On Premises
- Database and System Requirements for OML4R in Oracle Autonomous Database Serverless
- Database and System Requirements for OML4R in Oracle Database On Premises

Oracle Machine Learning Family of Components

The following table describes the availability of OML components on different platforms.

OML Component	Autonomous Database Serverless Dedicated Region	Autonomous Database on Dedicated Exadata Infrastructure Cloud @ Customer	Oracle Database On premises, Base Database Service, Cloud Service, Cloud Infrastructure, Cloud@Customer
OML4SQL API	✓	✓	✓
Build machine learning models and score data with no data movement using SQL and PL/SQL			



OML Component	Autonomous Database Serverless Dedicated Region	Autonomous Database on Dedicated Exadata Infrastructure Cloud @ Customer	Oracle Database On premises, Base Database Service, Cloud Service, Cloud Infrastructure, Cloud@Customer
OML4Py API	✓		✓
Leverage the database as a high performance compute engine from Python with in- database machine learning			
OML4R API	✓		✓
Leverage the database as a high performance compute engine from R with in- database machine learning			
OML Notebooks	✓		
SQL, PL/SQL, Python, R, Conda, and markdown interpreters			
OML AutoML UI	✓		
No code automated modelling interface			
OML Monitoring	✓		
No-code user interface for monitoring changes in data and in-database machine learning model quality			
OML Services	✓		
RESTful model management, deployment, monitoring			
Oracle Data Miner	✓	✓	✓
SQL Developer extension with a drag-n-drop interface for creating machine learning methodologies			

Oracle Database offers a range of editions, including XE, SE2, EE, EE-CS, BaseDB-SE, BaseDB-EE, BaseDB EE-HP, BaseDB EE-EP, ExaCS or CE, and Oracle Autonomous Database - Shared or Serverless. OML4SQL is supported on all these offerings. See Supported Oracle Database Editions to understand about database offerings.

The following tables present information on supported database and system requirements for various Oracle Machine Learning APIs.



Database and System Requirements for OML4SQL

System\Database Version	23ai	21c	19 <i>c</i>
Windows x64	✓	✓	✓
Linux x64	(OL 9, OL8)	√ (OL8, OL7)	√ (OL9, OL8, OL7)
Oracle Enterprise Linux	√ (EL 9, EL8)		
Red Hat Enterprise Linux	(RHEL 9 and RHEL 8)	(RHEL 8)	√ (RHEL 9, RHEL 8, RHEL 7)
Linux ARM (aarch64)	√ (OL 8)		✓
HP-UX ia64		✓	✓
Linux on System z (64 bit)			✓
Oracle Solaris (x86 systems, 64 bit)			✓
Oracle Solaris (SPARC systems, 64- bit)			✓
IBM AIX (64 bit)			✓
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Database and System Requirements for OML4Py in Oracle Autonomous Database Serverless

The following table presents the current database, Python, and OML4Py versions available in Oracle Autonomous Database Serverless.



OML4Py Version	Python Version	Database Version	Operating System Version
2.0	3.12.0	23ai	Linux x64 Container (OL7)
	3.12.0	21c	Linux x64 Container (OL7)
		19c	
1.0	NA		

Database and System Requirements for OML4Py in Oracle Database On Premises

The following table presents Oracle Database on premises requirements for OML4Py

OML4Py Version	Python Version	Database Version	Operating System Version
2.0	3.12.0	23ai	Linux x64 (OL8)
	3.12.0	21c	Linux x64 (OL7 and OL8)
		19c	
1.0	3.9.5	21c	Linux x64 (OL7 andOL8)
		19c	

Database and System Requirements for OML4R in Oracle Autonomous Database Serverless

The following table presents the current database, R, and OML4R versions available in Oracle Autonomous Database Serverless.

OML4R Version	Oracle R Distribution	Database Version	Operating System Version
2.0	4.0.5	19c, 21c, 23ai	Linux x64 (OL7)

Database and System Requirements for OML4R in Oracle Database On Premises

The following table presents Oracle Database on premise requirements for OML4R.

OML4R Version	Oracle R Distribution	Supported in Oracle Database Releases	Oracle Database Operating System Version
2.0	4.0.5	19c, 21c, 23ai	Linux x64 (OL7 and OL8)



OML4R Version	Oracle R Distribution	Supported in Oracle Database Releases	Oracle Database Operating System Version
1.5.1	3.6.1	18c, 19c, 21c	Linux x64 (OL6, OL7, OL8)
			IBM AIX 5.3, 6, and 7, 64-bit
			Solaris SPARC 64-bit
			Microsoft Windows x64, 64-bit
1.5.1	3.3.0	11.2.0.4, 12.1.0.1, 12.1.0.2, 12.2.0.1	Linux x64 (OL6, OL7, OL8)
			Microsoft Windows x64, 64-bit
			IBM AIX 5.3, 6, and 7, 64-bit
			Solaris x86, 64-bit Solaris SPARC, 64-bit
1.4.1	3.0.1, 3.1.1	11.2.0.3, 11.2.0.4, 12.1.0.1, 12.1.0.2	Linux x64 (OL5 and OL6)
			Solaris x86, 64-bit Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit
1.4	3.0.1, 3.1.1	11.2.0.3, 11.2.0.4, 12.1.0.1	Linux x64 (OL5 and OL6)
			Solaris x86, 64-bit Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit
1.3.1	2.15.1, 2.15.2, 2.15.3	11.2.0.3, 11.2.0.4, 12.1.0.1	Linux x64 (OL5 and OL6)
			Solaris x86, 64-bit Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit
1.3	2.15.1	11.2.0.3, 11.2.0.4, 12.1.0.1	Linux x64 (OL5 and OL6)



OML4R Version	Oracle R Distribution	Supported in Oracle Database Releases	Oracle Database Operating System Version
			Solaris x86, 64-bit
			Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit
1.2	2.15.1	11.2.0.3, 11.2.0.4, 12.1.0.1	Linux x64 (OL5 and OL6)
			Solaris x86, 64-bit
			Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit
1.1	2.13.2	11.2.0.3, 11.2.0.4, 12.1.0.1	Linux x64 (OL5 and OL6)
			Solaris x86, 64-bit Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit
1.0	2.13.2	11.2.0.3, 11.2.0.4, 12.1.0.1	Linux x64 (OL5 and OL6)
			Solaris x86, 64-bit
			Solaris SPARC, 64-bit
			IBM AIX 5.3 and 6, 64-bit
			Microsoft Windows x64, 64-bit

Note:

Oracle Database offers a range of editions, including XE, SE2, EE, EE-CS, DBCS-SE, DBCS-EE, DBCS EE-HP, DBCS EE-EP, ExaCS or CE, and Oracle Autonomous Database - Shared or Serverless.

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