New Oracle Database Release Model

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New Release Model Highlights

New Release Model: Goals

Agility

Quality

New Release Model: Highlights

New Releases

Yearly

Release Updates

Quarterly

Release Update Revisions

Agile Delivery

New Release Model Details

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New Releases

Yearly

Features

Performance Improvements

Bug Fixes

Min Downtime Upgrade

Fix Support up to 8 years

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Release Updates

Quarterly

Critical Fixes

Security Fixes

Zero Downtime Install

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Release Update Revisions

Agile Delivery

Associated with an RU for up to 6 mths

Security Fixes

Regression Fixes

Zero Downtime Install

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Release Update and Release Update Revision Contents

	Release Update	Release Update Revision
Replaces	BPs	SPUs with one-off regression fixes
Benefit over predecessor	Combines the various BPs (DB, Exadata, E-business, Fusion Apps, SAP)	Extend RU lifetime. Stay current on security and regression content
Cadence	Quarterly	Minimum quarterly or as needed
Switch between RU and RUR	✔	✔
Proactive functional fixes	✔	✘
Security fixes	✔	✔
Regression fixes	✔	✔
Optimizer plan changes (off by default)	✔	✘
Functional enhancements (minor)	✔	✘
Emergency one-offs	✔	✘

Other

- Release Update (RU) Incremental Drops
  - Oracle will release monthly incremental drops for an RU to accelerate stabilization
- Emergency Off Cycle Patches (one-off patches)
  - Still available with new release model
- Windows patching mode does not change
- 12.2.0.1 switched to RUs and RURs instead of PSUs and BPs starting July 2017.
  - The following are the full names for the 12.2.0.1 RU / RURs
    - Database Release Update 12.2.0.1<build-date>
    - Database *July 2017* Release Update Revision 12.2.0.1.<build-date>
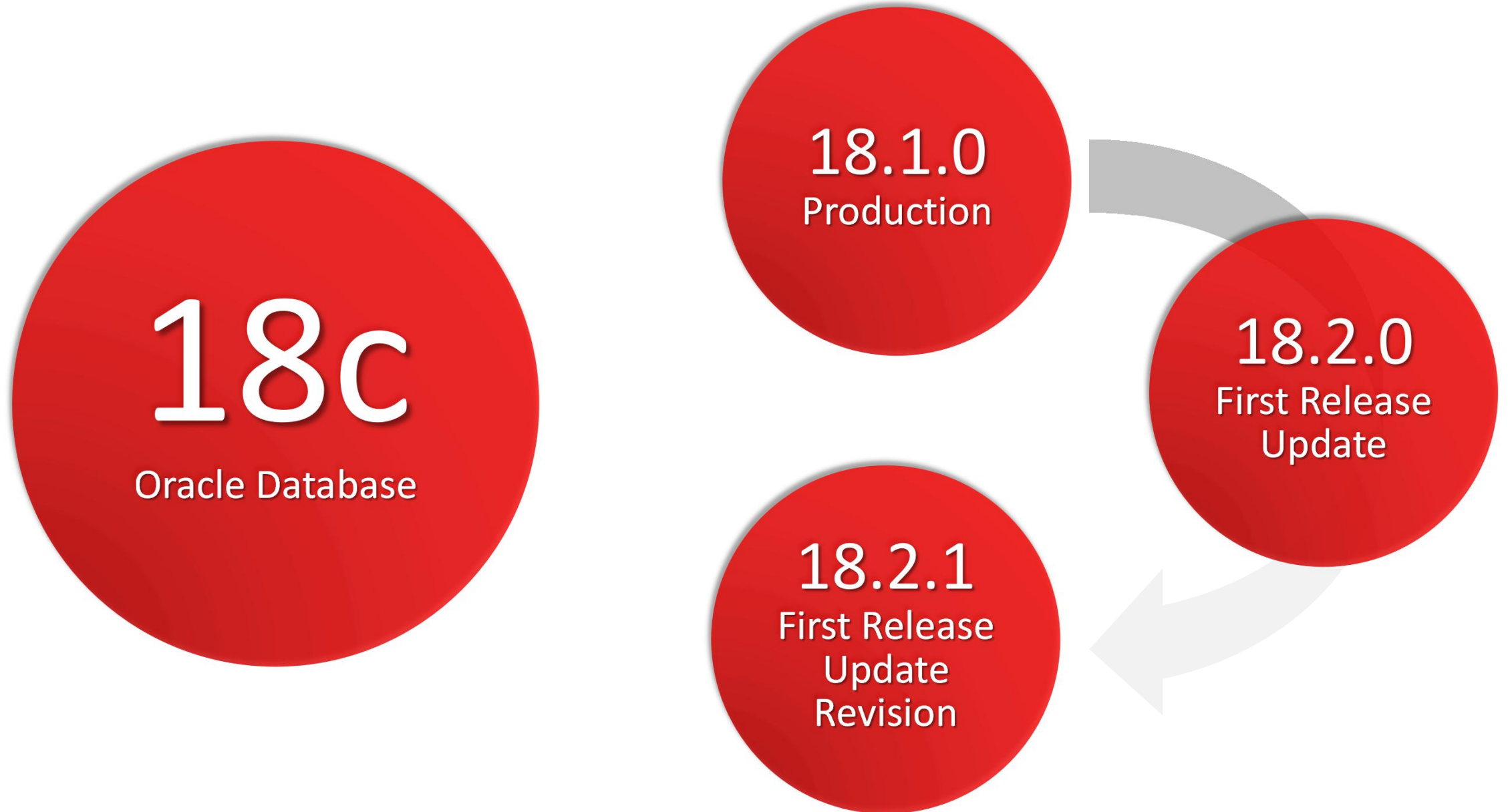
New Release Version Numbering

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New Release Model: Version Format

3 Digit Format

Year.Update.Revision

- **Year** is last 2 digits of year a release is delivered
  - E.g. **"18"** will be used for the release that ships in late 2017 or early 2018

- **Update** tracks Release Update (RU) or Beta releases

- **Revision** tracks the associated RU Revision level (0, 1, 2)

- Easily determine what you have installed
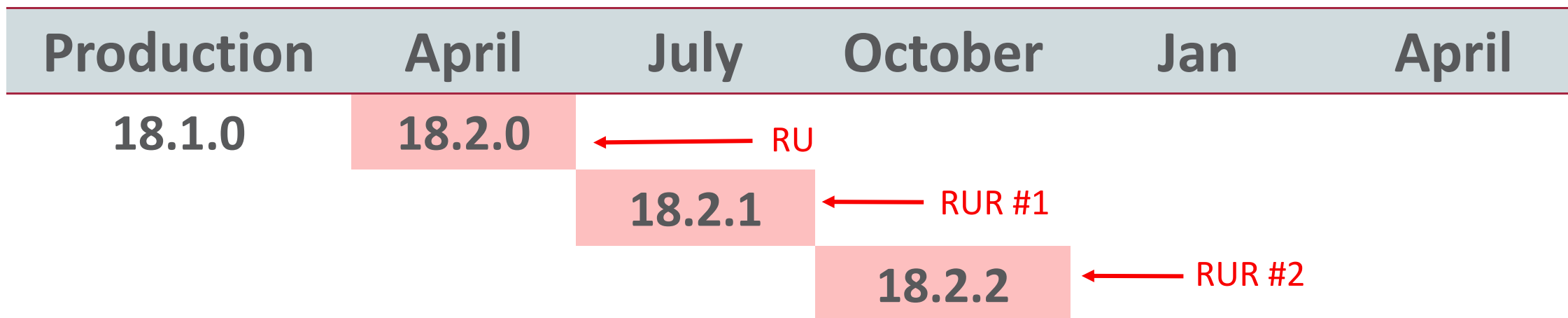
New Release Model: Rollout

18c
Oracle Database

18.1.0
Production

18.2.0
First Release
Update

18.2.1
First Release
Update
Revision

Versioning Number Examples for Release 18c

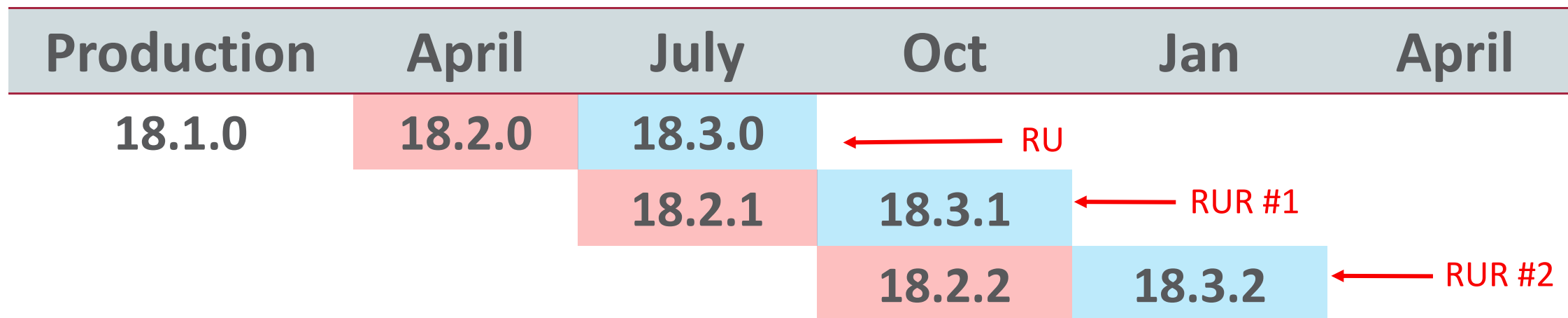| Version #	Major Version	Release Update (RU)	RU Revision (RUR)	
18.1.0	18	**1**	0	**Production**
18.2.0	18	**2**	0	**First Release Update (RU)**
18.2.1	18	2	**1**	**First Revision to RU (RUR)**

Example Version Banner

*Oracle Database 18c Enterprise Edition Release 18.0.0.0.0 - Production
Version 18.1.0.0.0*

Sample Version Number Timeline for 18c RUs and RURs

Production	April	July	October	Jan	April
18.1.0	18.2.0				
		18.2.1			
			18.2.2		

18.2.0 ← RU

18.2.1 ← RUR #1

18.2.2 ← RUR #2

Note: No RURs planned for initial production release

Sample Version Number Timeline for 18c RUs and RURs

Production	April	July	Oct	Jan	April
18.1.0	18.2.0	18.3.0	← RU		
		18.2.1	18.3.1	← RUR #1	
			18.2.2	18.3.2	← RUR #2

Note: No RURs planned for initial production release

Sample Version Number Timeline for 18c RUs and RURs

Production	April	July	October	January	April
18.1.0	18.2.0	18.3.0	18.4.0		
		18.2.1	18.3.1	18.4.1	
			18.2.2	18.3.2	18.4.2

Note: No RURs planned for initial production release

When to Uptake RUs and RURs for Test/Dev Environments

- Test/Dev environments should always uptake the latest RU
  - Quickly find and report any customer or workload-specific regressions in RU before production systems uptake RU

Production	April	July	October	January	April
18.1.0	**18.2.0**	**18.3.0**	**18.4.0**	**18.5.0**	**18.6.0**
		18.2.1	18.3.1	18.4.1	18.5.1
			18.2.2	18.3.2	18.4.2

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When to Uptake RUs and RURs for Production Environments

- Production Databases start by using latest RU for fastest stabilization
  - RUs consolidate fixes for common issues encountered by customers and are highly tested as a bundle by Oracle before shipping

- When production DB stability is achieved, switch over to RURs seamlessly
  - RURs primarily contain RU content with sufficient time allowed for the content to be proven in field by thousands of customer deployments and any regressions resolved

Production	April	July	October	January	April
18.1.0	18.2.0	18.3.0	18.4.0	18.5.0	18.6.0
		18.2.1	18.3.1	18.4.1	18.5.1
			18.2.2	18.3.2	18.4.2

Oracle Database Development

Internal Transformations

Improving quality and increasing agility

- Huge investment in automation of stress testing

- Intelligent test selection based on content changes

- Project development on branches

- Date based releases: features meeting release quality criteria are in, those who aren't are out.

- Always have RU / RUR version ready for release: continuous integration of bug fixes
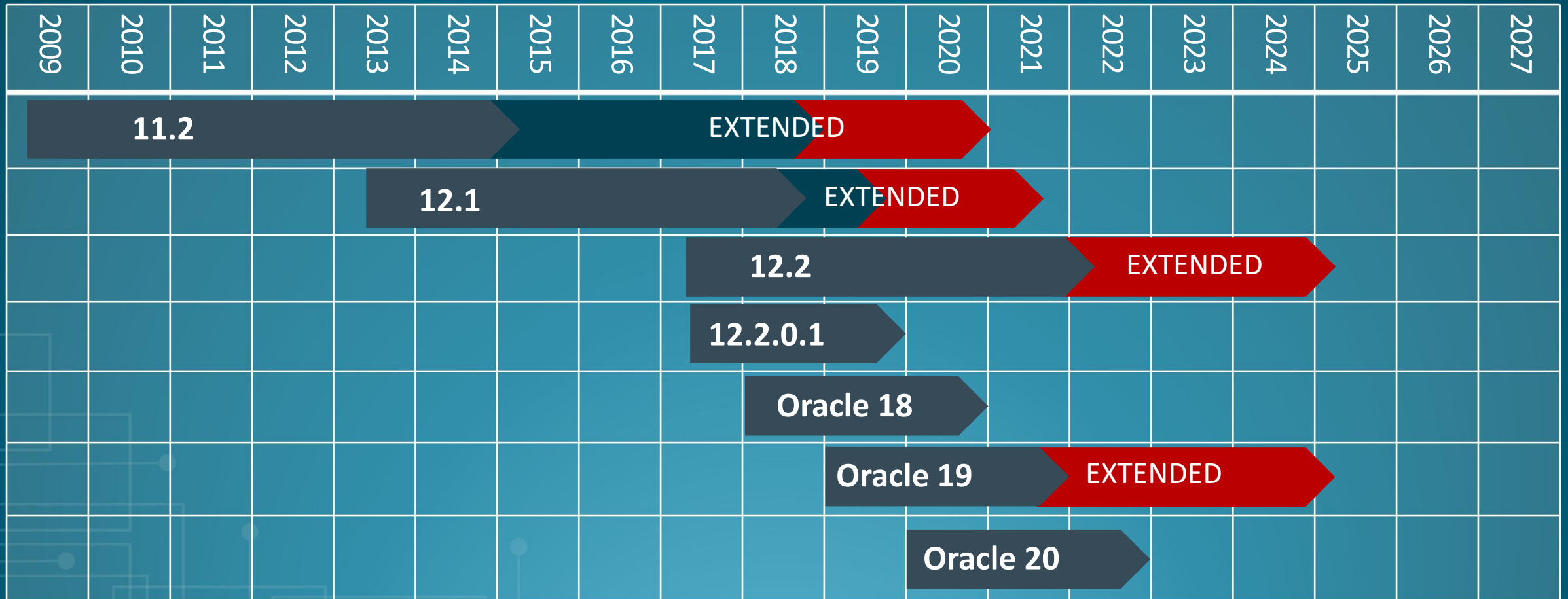
Lifetime Support

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Lifetime Support

- Yearly releases will be supported for patching for a minimum of 2 years after the next release goes out.

  - Similar to patch set error correction policy

- Approximately every 3-5 years there will be a "Long Term" release which will be supported for 5 years premier support and 3 years extended support.

- The 18c and (likely) 19c releases will fall under the umbrella of Database 12.2 Lifetime support as if they were the 12.2.0.2 and 12.2.0.3 patch sets.

- Refer to MOS KM Note 742060.1 for details on Database release schedules.

Summary

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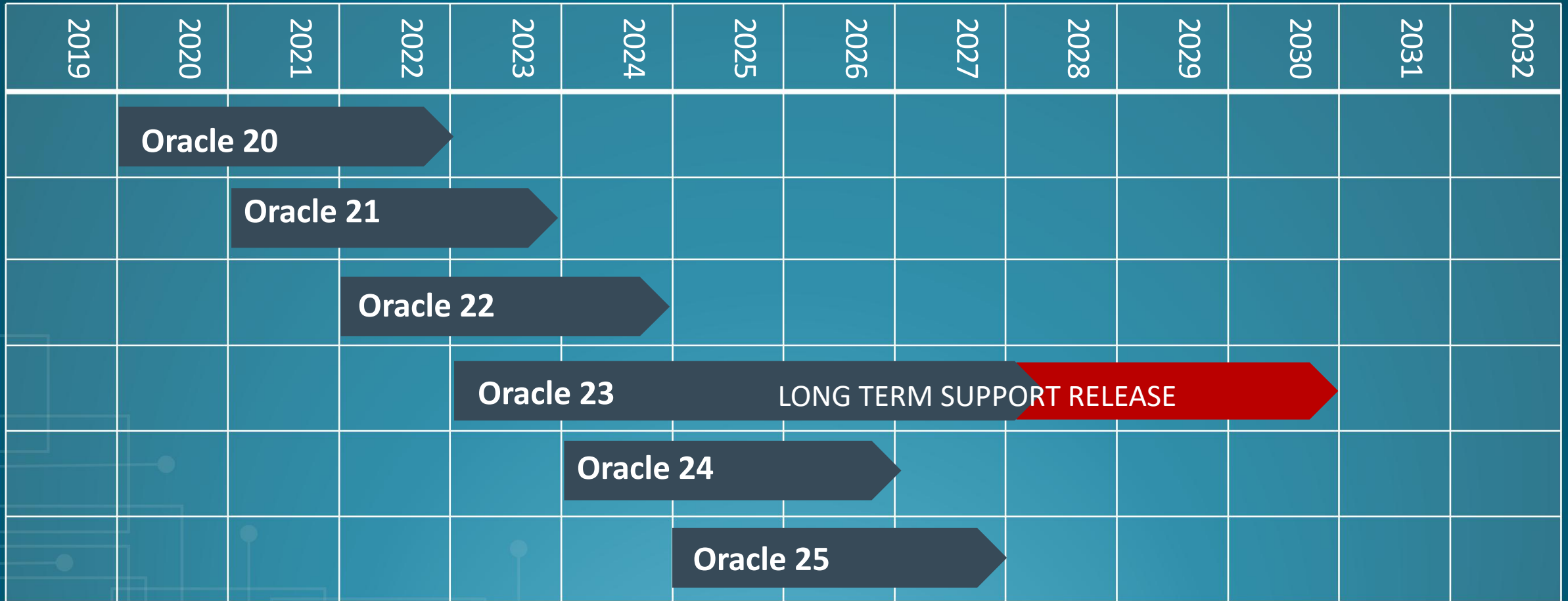# Supporting Customer Needs for Cloud and On-Premises

Agility

- Faster incremental delivery of new functionality in annual releases
- Seamlessly switch between RUs & RURs
- Zero downtime for install

Quality

- Test faster with incremental changes that are easy to stabilize and less risky
- Reduce need for interim patches

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Learn More at OpenWorld and Beyond

- **MBC: Superior Quality and Simplicity: New Database Release Mode** Mon, Oct 2 @ 2:30 PM | Tue, Oct 3 @ 2:00 PM |Moscone South Stars Bar

- **DEMO SDB-024: New Release Model for Oracle Database** Moscone South, Lower Left, Database

- **MOS document 2285040.1: Release Update and Release Update Revisions for Database Proactive Patch Program**

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