

Configuring a Customer-Managed Disaster Recovery Solution for Visual Builder

This document provides an architectural view of an Active-Passive configuration with two Visual Builder (VB) instances, or two Oracle Integration 3 instances that include Visual Builder, for a High Availability (HA) Disaster Recovery (DR) solution.

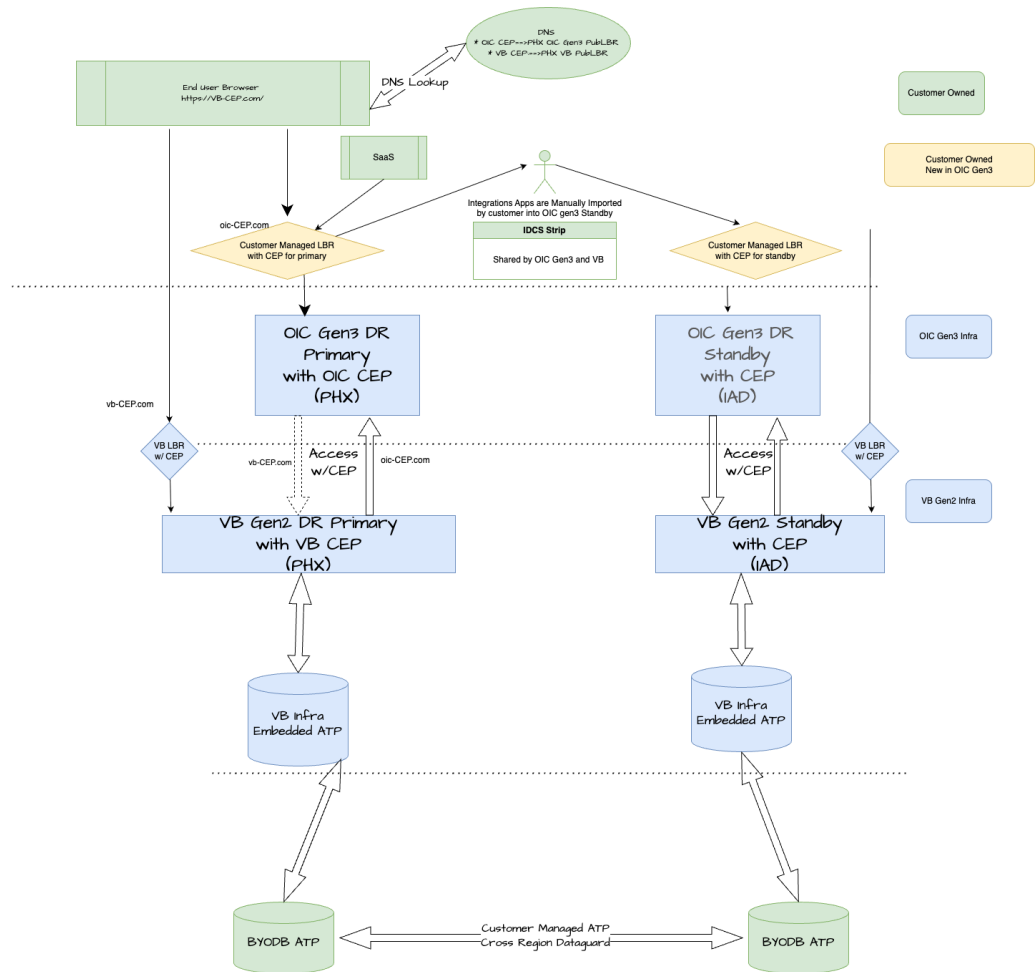
It also provides a procedure for setting up the system. In this document, the "active" instance is sometimes referred to as the "primary" instance, and the "passive" instance is usually referred to as the "standby" instance for the failover scenario.

Supported Scenario

If you have a live VB application that is deployed on an active instance, and a failover necessitates switching to the standby instance, your application will continue to execute with the understanding that both Identity Cloud Service (IDCS) and the Bring Your Own Database (BYODB) Autonomous Transaction Processing (ATP) instances are functional after the failover.

High Availability Disaster Recovery Architecture Using ATP Cross-Region Data Guard

You can configure a high-availability DR architecture solution that consists of two VB instances, active and standby, to use the BYODB configuration to the same ATP database. This diagram shows the DR architecture when you have two Oracle Integration 3 instances that include Visual Builder:



This solution utilizes Visual Builder's BYODB feature for the database configuration to simplify sharing your application data between the primary and standby instances and using a custom domain name for both the instances to support DNS switching in a failover scenario.

You need to create and manage your own ATP database instance. You're also responsible for managing any additional database-specific DR setup with the ATP database. See [Using a Standby Database with Autonomous Database](#). The primary and standby service instances both need to be updated to use the ATP database in a BYODB configuration. Once that is done, VB DevOps must make the standby instance setup point to the same schema setup in the BYODB configuration for the primary instance.

Both the primary and standby instances are configured to use the same "custom" host name for the VB service. Sharing the same host name provides a mechanism to make a DNS change to the registered CNAME for the custom endpoint in a failover scenario, routing traffic to the standby instance without you having to perform additional steps related to life cycle management of your published apps. That means there is no need for you to version, re-stage, and re-publish.

About the Solution: How It Works and Any Limitations

You can configure Visual Builder DR solutions for:

- Oracle Visual Builder instances
- Visual Builder in Oracle Integration Generation 3 instances

This section provides specific details about how the DR solution works and explains its limitations.

What Makes the Solution Work?

- In this configuration, the DNS CNAME registration for the custom endpoint is used to route requests to the VB or OIC service instance region-friendly hostname.
- Two Visual Builder host names are configured with additional listeners (and SSL certificate) for the custom endpoint.
- In this Active-Passive failover configuration, only one of the service instances processes requests.
- The VB Design Time and apps in the primary instance are accessed using the custom endpoint.
- The standby instance doesn't get traffic related to the custom endpoint.
- When a switchover operation is required, you need to update your DNS CNAME registration to point to the standby instance's region-friendly hostname.
- The data tier is set up so both instances are configured to use the BYODB feature and both point to the same schemas in the ATP database.
- The ATP database must be configured to have cross-region Data Guard DR, which is a solution that is separate from the VB DR solution. See [Using a Standby Database with Autonomous Database](#).

What Are Its Limitations?

- Cross-region standby with Data Guard is the only setup option. This setup **does not support automatic failover**. You'll need to [manually switch over](#) to the cross-region standby.
- In [identity domains with built-in cross-region DR](#) (in regions with cross-region DR enabled):
 - Identity domains replicated to other regions might not be in sync with the DR region.
 - In some cases you might not have access to the OCI Console during failover.

Set Up the Disaster Recovery Solution for Oracle Visual Builder

Follow these one-time tasks to set up the disaster recovery solution for Oracle Visual Builder:

1. Set up your service instances:
 - To set up VB instances, see *Create the OCI Resources for Visual Builder* in *Administering Oracle Visual Builder*.
 - To set up Oracle Integration 3 instances, see [Set Up the Disaster Recovery Solution for Integrations](#) in *Configuring a Customer-Managed Disaster Recovery Solution for Oracle Integration 3*.
2. Provision an ATP database with **Allow secure access from anywhere** enabled. Then complete the following:
 - a. If you plan to restrict access to your ATP DB instance, add security rules to allow access from both service instances.

Get the VCN OCIDs and NAT gateway IP addresses that are required for access (ingress) rules to your ATP database. You can find the VCN OCIDs on the Visual Builder instance details page in the OCI Console. See *Access Visual Builder from the OCI Console* in *Administering Oracle Visual Builder*.

After you have the VCN OCIDs and NAT gateway IP addresses, add the new rules to your ATP database's access control settings to allow access from VB.
 - b. Ensure that ATP database is configured for ATP disaster recovery. See [Using a Standby Database with Autonomous Database](#) and follow ATP best practices for setting up DR.
3. Configure the BYODB feature in both of your service instances to use their ATP database.

Note

If your configuration uses BYODB ATP with cross-region standby with Data Guard:

- a. Manually construct a new ATP wallet with single connection string containing both the primary and the standby database hostnames. For details, see *Use ATP Database with Cross-Region Autonomous Data Guard for Disaster Recovery* in *Administering Oracle Visual Builder*.
- b. Configure the Primary and Secondary VB instances with the new ATP wallet.
- c. Switch over the BYODB ATP to standby.
- d. Verify that both VB instances are able to connect to the ATP database.

4. Finally, file a service request (SR) and request VB DevOps to complete the remaining Oracle service-side-related HA-DR set up.

Post-Configuration Tasks

Once you and Visual Builder DevOps team have completed the HA DR configuration, you must also:

- Configure the IDCS Service Applications of both service instances to have exactly the same assigned access based on groups rather than individual users.
- Use the custom domain URL to access all Visual Builder design-time applications (creating, editing, and publishing) and for providing runtime access for your applications.

Note

For Visual Builder on OIC instances, on the **Tenant Settings** page, you'll also need to update the default values for the **Integration** and **Process** server URLs to use the custom domain host name.

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

Access to Oracle Support

Oracle customer access to and use of Oracle support services will be pursuant to the terms and conditions specified in their Oracle order for the applicable services.

Oracle Cloud Configuring a Customer-Managed Disaster Recovery Solution for Oracle Visual Builder,
G40048-01

Copyright © 2023, 2025, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software, software documentation, data (as defined in the Federal Acquisition Regulation), or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, then the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs) and Oracle computer documentation or other Oracle data delivered to or accessed by U.S. Government end users are "commercial computer software," "commercial computer software documentation," or "limited rights data" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, the use, reproduction, duplication, release, display, disclosure, modification, preparation of derivative works, and/or adaptation of i) Oracle programs (including any operating system, integrated software, any programs embedded, installed, or activated on delivered hardware, and modifications of such programs), ii) Oracle computer documentation and/or iii) other Oracle data, is subject to the rights and limitations specified in the license contained in the applicable contract.

The terms governing the U.S. Government's use of Oracle cloud services are defined by the applicable contract for such services. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle®, Java, MySQL, and NetSuite are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Inside are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Epyc, and the AMD logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information about content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services unless otherwise set forth in an applicable agreement between you and Oracle. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services, except as set forth in an applicable agreement between you and Oracle.