

Oracle® Virtual Assembly Builder

Release Notes

11g Release 1.1 (11.1.1)

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These release notes describe issues associated with Oracle Virtual Assembly Builder. They include the following topics:

- [Section 1, "Component Specific Issues"](#)
- [Section 2, "Oracle Virtual Assembly Builder Studio Operation Issues"](#)
- [Section 3, "Documentation Errata"](#)
- [Section 4, "Documentation Accessibility"](#)

1 Component Specific Issues

This section describes specific issues for components that Oracle Virtual Assembly Builder can introspect. The list of issues for each component presents the most severe or frequently encountered issues first, followed by lower priority issues.

This section describes the following topics:

- [Section 1.1, "Oracle Virtual Machine"](#)
- [Section 1.2, "Oracle WebLogic Server Issues"](#)
- [Section 1.3, "Oracle Web Cache Issues"](#)
- [Section 1.4, "Oracle Database Issues"](#)

1.1 Oracle Virtual Machine

This section describes issues for OracleVM. It includes these items:

- [Section 1.1.1, "Intermittent Errors When Using OracleVM"](#)
- [Section 1.1.2, "Limit Virtual Machine Names to 100 Characters or Less"](#)
- [Section 1.1.3, "Limit Virtual Machine Passwords to 50 Characters or Less"](#)

1.1.1 Intermittent Errors When Using OracleVM

Intermittent errors have been reported when using OracleVM. If you receive an error that includes `oracle.ovs.biz`, check the OracleVM logs to ensure you understand the root cause of the problem. In some cases, simply reaccomplishing the task will solve the problem, but consulting the logs is the best approach.

1.1.2 Limit Virtual Machine Names to 100 Characters or Less

Oracle Virtual Machine limits virtual machine names to 100 characters or less. If your names are too long, you will receive the error:

```
oracle.ovs.biz.exception.invalidNameException: OVM-4008
```

Oracle Virtual Assembly Builder Deployer determines virtual machine names based on the following format:

```
deploymentId_subassemblyName_applianceName_instanceName0
```

In order to have virtual machine name length in the defined 100 character limit, the assembly name (and all subassembly names) and appliance names combined must be short enough that, when combined, are less than 100 characters.

1.1.3 Limit Virtual Machine Passwords to 50 Characters or Less

Oracle Virtual Machine limits virtual machine passwords to 50 characters or less; your virtual machine password must be less than 50 characters long. If your password is too long, you will receive the error: `Oracle.ovs.biz.exception.OVSEException: OVM-5101 The template{0} cannot be found`

1.2 Oracle WebLogic Server Issues

This section describes issues for Oracle WebLogic Server. It includes these items:

- [Section 1.2.1, "Forward Slashes in Server Service Names Cause Oracle WebLogic Server Deployment Failures"](#)
- [Section 1.2.2, "Deployment Failure Caused by Setting plan-dir and plan-path"](#)
- [Section 1.2.3, "Application Deployment Plan Causes Deployment Failure"](#)
- [Section 1.2.4, "Deployment Failure Due to Missing .JAR in Base Image"](#)
- [Section 1.2.5, "Oracle WebLogic Server and Oracle JRockit Virtual Edition Must Be Compatible"](#)
- [Section 1.2.6, "Applications with JDBC Remap May Need to be Manually Restarted"](#)
- [Section 1.2.7, "High Availability Patch for Oracle Virtual Machine, Release 2.2"](#)
- [Section 1.2.8, "No SSL Support When Deploying to WebLogic Server on JRockit Virtual Edition"](#)
- [Section 1.2.9, "Applications Accessing Web Services Not Updated at Deployment"](#)
- [Section 1.2.10, "Limitation with Oracle WLS Domains Upgraded from 10.3.1"](#)
- [Section 1.2.11, "Templates Created on Individual Servers Cannot Be Deployed"](#)
- [Section 1.2.12, "Admin URL Required to be Specified When Managed Server is No Longer Running"](#)

1.2.1 Forward Slashes in Server Service Names Cause Oracle WebLogic Server Deployment Failures

You can create a WebLogic Server service (such as a JMS server definition or a data source definition) with a name that contains a forward slash ('/'). Services with forward slashes in their names will cause WebLogic Server deployments to fail. To work around this, ensure that your WebLogic Server services do not have the '/' character in their names.

1.2.2 Deployment Failure Caused by Setting plan-dir and plan-path

A valid configuration in `config.xml` for an application deployment plan can have both a `<plan-dir>` and a `<plan-path>` specified where the `<plan-path>` value is absolute, and the `<plan-dir>` value should be ignored.

Oracle WebLogic Server introspection fails if this is how the application deployment plan location is configured. To work around this issue, remove or comment out the `<plan-dir>` element from `config.xml`.

1.2.3 Application Deployment Plan Causes Deployment Failure

An application that has an application deployment plan configured will cause deployment of the WebLogic Server server that the application targets to fail.

To work around this issue, remove any instance of the `appdeployplan.py` file (found in the shared area of the catalog) before template creation. After deployment, the application deployment plan must be manually copied to the location configured in `config.xml`, and the application that references the plan must be started manually.

1.2.4 Deployment Failure Due to Missing .JAR in Base Image

Deployment of an Oracle WebLogic Server application fails due to a missing jar. The error occurs if the following conditions are present for the application:

- Part of the Oracle WebLogic Server domain
- Packed during introspection as part of the `domain_template.jar`
- Resides on an Oracle WebLogic Server assembly on Oracle JRockit Virtual Edition

This problem does not occur on the Oracle Enterprise Linux deployment because the needed library is captured as part of the reference system (the Oracle Middleware Home contains the library).

This failure does not cause the overall deployment to fail; only the Oracle WebLogic Server deployment of the applications requiring the missing libraries are affected.

To avoid this problem, use Oracle WebLogic Server JRockit Virtual Edition tools to copy over the needed libraries onto the Oracle JRockit Virtual Edition image:

1. Shut down the virtual machines after Oracle Virtual Assembly Builder deployment succeeds.
2. Use Oracle WebLogic Server JRockit Virtual Edition tools to copy the missing libraries onto the image.
3. Power the image back on

1.2.5 Oracle WebLogic Server and Oracle JRockit Virtual Edition Must Be Compatible

If you want to deploy Oracle WebLogic Server on Oracle JRockit Virtual Edition, ensure that the reference system you introspect is compatible with the Oracle JRockit Virtual Edition base image used during template creation. If you do not, the deployment will fail.

Check the certification matrix for specifics:

http://www.oracle.com/technology/software/products/ias/files/fusion_certification.html

1.2.6 Applications with JDBC Remap May Need to be Manually Restarted

An error has been reported in which an application using JDBC data source mapping configured at the application scope fails to start. The failure occurs only for deployments on Oracle WebLogic Server AdminServer, and only immediately after the AdminServer itself is deployed.

To correct this problem, manually start the AdminServer.

1.2.7 High Availability Patch for Oracle Virtual Machine, Release 2.2

This issue impacts only users who have High Availability enabled for their appliance virtual machines; for users who do not have High Availability-enabled appliance virtual machines, there is no issue and no action is required.

Oracle Corporation recommends that you use Oracle Virtual Assembly Builder or Oracle WebLogic Server Node Manager to stop High Availability appliances (that is, appliances within assemblies configured as High-Availability virtual machines) running on Oracle WebLogic Server on JRockit Virtual Edition. If you want to stop these appliances using other consoles or operations, then you must install a patch that fixes a problem that erroneously restarts the appliances.

The High Availability (HA) enhancement is delivered through an updated Oracle VM agent and Xen packages which can be applied to Oracle VM Server 2.2. The new packages are available for download from Oracle's ULN (Unbreakable Linux Network) at <http://linux.oracle.com> <<http://linux.oracle.com>%22>

When you navigate to that location, choose the `ovm22_i386_latest` channel. See the FAQ (https://linux.oracle.com/uln_faq.html<https://linux.oracle.com/uln_faq.html%22> for detailed instructions.

After you update your Oracle VM Server 2.2 (there is no need for update if you have a new install of Oracle VM Server 2.2.1), ensure you have the required packages or later versions:

- `ovs-agent-2.3-38`
- `xen-3.4.0-0.1.10`
- `xen-64-3.4.0-0.1.10`
- `xen-debugger-3.4.0-0.1.10`
- `xen-tools-3.4.0-0.1.10`

1.2.8 No SSL Support When Deploying to WebLogic Server on JRockit Virtual Edition

Because the base image for WebLogic Server on JRockit Virtual Edition does not include a demo trust store, Oracle Virtual Assembly Builder does not support SSL when deploying to WebLogic Server on JRockit Virtual Edition. This means that you cannot introspect and then deploy to WebLogic Server on JRockit Virtual Edition those domains that have the domain-wide admin port enabled.

There may also be issues with enabling SSL ports for WebLogic Server on JRockit Virtual Edition. You must configure SSL, post-deployment, for WebLogic Server on JRockit Virtual Edition.

1.2.9 Applications Accessing Web Services Not Updated at Deployment

An application that accesses a Web service that is also hosted on the Oracle WebLogic Server reference system will not be updated to point to the new web service location

upon deployment. You must update the application to access the web service WSDL on the new Oracle VM host, and then redeploy the application through Oracle WebLogic Server administration tools, such as Admin Console or wlst, to the Oracle VM Oracle WebLogic Server environment.

1.2.10 Limitation with Oracle WLS Domains Upgraded from 10.3.1

Oracle Virtual Assembly Builder uses a pack/unpack utility when moving Oracle WebLogic Server domains. An issue with the utility causes the unpack operation to fail when using the utility to move a domain that was originally a 10.3.1 domain, but which was upgraded to 10.3.2 during installation of 10.3.2.

1.2.11 Templates Created on Individual Servers Cannot Be Deployed

If you create a template on an individual server in Oracle WebLogic Server, the command line and graphical user interface operations will not indicate an error. However, such templates cannot be deployed because they lack certain deployment artifacts (the domain template jar in content, and data at the assembly level).

1.2.12 Admin URL Required to be Specified When Managed Server is No Longer Running

This issue applies to an uncommon scenario in which Oracle Virtual Assembly Builder has deployed and started the required instances in the assembly, including the Oracle WebLogic Server Managed Servers, and later the Managed Server (but not the Guest OS) has either crashed or been explicitly shutdown through an external tool.

If you want to perform manual starts from the context of the Guest-OS, you must manually modify the StartManagedServer.sh script to provide the correct Admin Server URL (Admin Server hostname). This is required because the default admin URL has the wrong value (the machine name of the Admin Server is not known at the time of template creation).

You can still start or stop the server through the node manager in Admin Console.

1.3 Oracle Web Cache Issues

This section describes issues for Oracle Web Cache. It includes these items:

- [Section 1.3.1, "Oracle Web Cache Administration Port Not a Privileged Port"](#)
- [Section 1.3.2, "Oracle Web Cache Scaling Issues"](#)
- [Section 1.3.3, "Update Virtual Host Map Properties When Making Port Changes"](#)

1.3.1 Oracle Web Cache Administration Port Not a Privileged Port

Oracle Virtual Assembly Builder does not support an Oracle Web Cache appliance to be deployed with its administration port being a privileged port (a port number less than 1024).

1.3.2 Oracle Web Cache Scaling Issues

Oracle Virtual Assembly Builder does not automatically update the `webcache.xml` file for each instance, after you perform scaling. Even when the scaling operation completes without errors, you must still update the `webcache.xml` file for each instance, so that the instance recognizes all the members in the cluster.

1.3.3 Update Virtual Host Map Properties When Making Port Changes

In Oracle Web Cache, there is not necessarily a correlation between the ports in the virtual host map (VHM) elements and those in the listen elements of the Oracle Web Cache configuration. Whenever you make a port change, you must update your VHM ports by manually updating the properties associated with the VHMs.

1.4 Oracle Database Issues

This section describes issues for Oracle Database. It includes these items:

- [Section 1.4.1, "Deployment Error Due to Database Vault"](#)
- [Section 1.4.2, "Use default name LISTENER on Reference Systems"](#)
- [Section 1.4.3, "Limited Database Configuration Support"](#)
- [Section 1.4.4, "Upgraded 10g Oracle Homes Cannot be Introspected"](#)

1.4.1 Deployment Error Due to Database Vault

If the database vault has been configured in your reference system's database home, you may experience failures during some Oracle Virtual Assembly Builder operations.

In order to avoid any problems, complete these steps:

1. Before introspection, execute the following command on your system to temporarily disable Database Vault in the database home:

```
$ make -f $ORACLE_HOME/rdbms/lib/ins_rdbms.mk dv_off ioracle
```

2. Re-start the database on your reference system and then shut it down.

3. After packaging, execute the following command on your reference system to re-enable Database Vault in the database home:

```
$ make -f $ORACLE_HOME/rdbms/lib/ins_rdbms.mk dv_on ioracle
```

4. Re-start the database on your reference system.

5. After deployment, execute the following command on the new virtual machine to enable Database Vault in the database home:

```
$ make -f $ORACLE_HOME/rdbms/lib/ins_rdbms.mk dv_on ioracle
```

6. Re-start the database on the new virtual machine.

1.4.2 Use default name LISTENER on Reference Systems

During Oracle Virtual Assembly Builder operations, the listener on newly-created virtual machines starts using the default name LISTENER. If you used a different name for the listener on your reference system, you will receive an error. To avoid this error, ensure that you use the default name (LISTENER).

If you must use a different listener name, start your listener manually with the correct name:

```
$ORACLE_HOME/bin/lsnrctl start <listener name>
```

Note: To view the correct listener name, see: \$ORACLE_HOME/network/admin/listener.ora.

1.4.3 Limited Database Configuration Support

The database introspector expects the listeners (the listener.ora configuration) to be configured as follows:

```
(ADDRESS = (PROTOCOL = TCP)(HOST = example.cm)(PORT = 5521))
```

Note: The protocol, host, and port are all required, and must appear in the order above.

1.4.4 Upgraded 10g Oracle Homes Cannot be Introspected

You cannot introspect a single-instance database Oracle Home if that Oracle Home has been upgraded from Release 10g.

2 Oracle Virtual Assembly Builder Studio Operation Issues

This section describes issues for operations for Oracle Virtual Assembly Builder studio, such as introspection, packaging, and deployment. It includes these items:

- [Section 2.1, "Oracle Virtual Assembly Builder Introspection Issues"](#)
- [Section 2.2, "Oracle Virtual Assembly Builder Packaging Issues"](#)
- [Section 2.3, "Oracle Virtual Assembly Builder Deployment Issues"](#)
- [Section 2.4, "Other Oracle Virtual Assembly Builder Issues"](#)

2.1 Oracle Virtual Assembly Builder Introspection Issues

This section describes issues observed during introspection. It includes these items:

- [Section 2.1.1, "Remote Introspection Must Be Run as Specific Users"](#)
- [Section 2.1.2, "Unable to Create Secure Connections for Multiple OVMs in a Single Session"](#)
- [Section 2.1.3, "Do Not Try to Import and Register a Template at the Same Time"](#)

2.1.1 Remote Introspection Must Be Run as Specific Users

The `remoteUser` specified for remote WLS introspection must be either the owner of the WLS process that is running on the reference system, or must be a user that has permission to read files that the owner of the WLS process creates.

2.1.2 Unable to Create Secure Connections for Multiple OVMs in a Single Session

You can create secure connections to multiple OVMs using Oracle Virtual Assembly Builder Studio. However, you cannot create secure connections to multiple OVMs during a single Studio session. In order to create multiple secure connections, you must create a secure connection, then exit Oracle Virtual Assembly Builder Studio. Restart Studio and create the next secure OVM connection. You must repeat this process for each desired secure OVM connection.

2.1.3 Do Not Try to Import and Register a Template at the Same Time

Do not attempt to import and register a template at the same time. Doing so will cause the registration to fail and may cause unforeseen side-effects.

2.2 Oracle Virtual Assembly Builder Packaging Issues

This section describes issues observed during packaging operations. It includes these items:

- [Section 2.2.1, "Troubleshooting Template Registration Errors"](#)
- [Section 2.2.2, "Packages and Templates Cannot be Shared on Registered Appliances"](#)
- [Section 2.2.3, "Packaging with a Different userid than userid of Individual Who Installed Oracle Virtual Assembly Builder"](#)
- [Section 2.2.4, "Template Status Not Updated"](#)

2.2.1 Troubleshooting Template Registration Errors

If you receive an error while registering a template (such as `ImportError`, or any error including `oracle.ovs.biz.exception.OVSEException`) in the Oracle Virtual Assembly Builder log file, be sure to check the Oracle VM logs for the root cause, as it may not be expressed in the Oracle Virtual Assembly Builder logs.

2.2.2 Packages and Templates Cannot be Shared on Registered Appliances

Multiple appliances can share packages and templates. Modifying a package on one appliance modifies the package on the other appliances in the relationship. However, after you register an appliance, that sharing no longer takes place. This is expected behavior, but users should be aware of it.

2.2.3 Packaging with a Different userid than userid of Individual Who Installed Oracle Virtual Assembly Builder

When packaging a local reference system that was installed using a different OS userid than the one used for the Oracle Virtual Assembly Builder installation, packaging will fail with file permission errors. There are two workarounds for this issue. Use either:

- Run Oracle Virtual Assembly Builder as root. When you do this, all generated artifacts in catalog (such as metadata, packages, and others) are owned by the root user and all subsequent operations must also be executed as root user.
- Run local packaging through remote ssh. Treat the local reference system as remote and perform remote packaging, using an ssh user that has read permission of the reference system installation.

2.2.4 Template Status Not Updated

An intermittent problem has been reported in which the status of a template is not immediately updated after the status has changed. If you encounter this issue, stop and restart Oracle Assembly Builder Studio.

2.3 Oracle Virtual Assembly Builder Deployment Issues

This section describes issues observed during deployment. It includes these items:

- [Section 2.3.1, "Scale Operations and Failed Deployments"](#)
- [Section 2.3.2, "Unresolved IP Addresses Result in Error"](#)
- [Section 2.3.3, "NFS Mounting Not Supported in Reference Systems"](#)
- [Section 2.3.4, "Firewall Implications for Template Registration"](#)

- [Section 2.3.5, "Recovering from Unexpected Errors During Deployment"](#)

2.3.1 Scale Operations and Failed Deployments

Scale operations are affected by failed deployments.

Scale down operations only remove properly (successfully) deployed instances. In the case of failed deployments, those instances are not removed during scale down. This occurs because failed instances are left for you to troubleshoot. If you want to remove instances that failed to deploy, you must undeploy them, fix the plan, and then redeploy.

In the case of Scale up operations, it is prohibited if a failed instance(s) exists in the assembly. As above, you must undeploy, fix the problem, and then redeploy.

2.3.2 Unresolved IP Addresses Result in Error

Deployment attempts will fail if IP addresses specified in the deployment plan are unresolved on the Oracle Virtual Assembly machine (the machine on which Deployer is running). To avoid this issue, ensure that IP addresses are resolvable.

2.3.3 NFS Mounting Not Supported in Reference Systems

Oracle Virtual Assembly Builder does not support NFS mounting in the reference system, since these NFS mounts will not be created by Assembly Builder in the deployment environment. In some cases, deployment will fail if the reference system has an NFS mount.

A number of third-party tools require mounting file systems as part of their configuration. This can require specific workarounds. For example, when using the Websphere MessageQueue external JMS server, you may encounter the following issues:

- The configuration for the JMS Server requires access to a class provided by Websphere. In some environments, those classes (also known as jars) are added to the `PRE_CLASSPATH` environment variable prior to starting Oracle WebLogic Server. Ensure that the configuration for your environment does not require modification for Oracle WebLogic Server to be able to see these jar files automatically on startup.
- The Oracle WebLogic Server configuration for the JMS server requires a JNDI connection URL as follows, `'file://<path to mq config>'`. This file resides on the external Websphere server, and must be mounted locally so it can be used.

2.3.4 Firewall Implications for Template Registration

To allow template registration, the Oracle VM host must be able to download the template through HTTP from the Assembly Builder host. If you are using a firewall (for example, iptables on Linux) then you must properly configure that firewall to allow the communication. By default Oracle Virtual Assembly Builder specifies its HTTP port to be "0" which causes the system to issue one (so there is no default port).

You can specify the port by setting the "ovmPort" property in `deployer.properties`.

A simpler solution is to turn off the firewall. For iptables, use the following command:
`/etc/init.d/iptables stop`

To configure your firewall, refer to the documentation for your firewall.

2.3.5 Recovering from Unexpected Errors During Deployment

Whenever an unexpected error occurs during deployment, you typically want to examine what went wrong and perform necessary cleanup before recovering from the error. For these reasons, Oracle Virtual Assembly Builder provides neither an automatic recovery mechanism, nor a tool to recover from a failure.

To perform recovery of the Deployer:

1. Examine the resource pools in the corresponding Oracle Virtual Machine managers configured in the `resource-pools.xml` file relevant to the crashed `AB_INSTANCE` and perform cleanup. This includes cleaning up (stopping and destroying) all instances initiated by Oracle Virtual Assembly Builder.
2. Delete the `.hastore` file.

This returns the Deployer to a clean state.

2.4 Other Oracle Virtual Assembly Builder Issues

This section describes other issues observed while performing operations in Oracle Virtual Assembly Builder. It includes these items:

- [Section 2.4.1, "Add DNS Button Does Not Work When Using OVAB Studio in Japanese Language"](#)
- [Section 2.4.2, "Large Delete Operations Can Make Oracle Virtual Assemble Builder Studio Appear to Lock Up"](#)
- [Section 2.4.3, "Virtual Machine Swap Space"](#)
- [Section 2.4.4, "Top-level Delete Messages in English Only"](#)

2.4.1 Add DNS Button Does Not Work When Using OVAB Studio in Japanese Language

When following the procedure to create resource pools using the graphical interface of Oracle Virtual Assembly Builder Studio set to the Japanese locale, the **Add DNS** button does not function. To work around this problem, set the locale to English:

1. Exit Oracle Virtual Assembly Builder
2. Execute the commands:

```
export LC_ALL= c
./abstudio.sh
```

3. Create resource pool connection in the English locale.

2.4.2 Large Delete Operations Can Make Oracle Virtual Assemble Builder Studio Appear to Lock Up

When large top-level items are deleted through Oracle Virtual Assembly Builder Studio, the interface may appear to have locked-up, when in fact it is running normally. This is normal behavior, allow the application to finish its task.

2.4.3 Virtual Machine Swap Space

Ensure your virtual machines have at least 500MB of available swap space (on each machine).

2.4.4 Top-level Delete Messages in English Only

Messages displayed during top-level delete of items are displayed in English only.

3 Documentation Errata

This section includes corrections to published documentation.

3.1 Accessing Oracle Virtual Assembly Builder Studio

The text in Section 2.1.1 of *Oracle Virtual Assembly Builder User's Guide* lists an incorrect command for launching Oracle Virtual Assembly Builder Studio. This is the correct command:

```
$AB_INSTANCE/bin/abstudio.sh
```

3.2 Custom Scripts Directory

The text in the third paragraph of Section 2.3.1.2.1 of *Oracle Virtual Assembly Builder User's Guide* should read:

The "config" action is executed only once at initial deployment after the VM has fully started. The "start" action is executed after a "config" action, *and at any other time when the deployed VM is started* (initiated either from Oracle Virtual Assembly Builder or from outside). The "stop" action is executed when the deployed VM is stopped (initiated either from Oracle Virtual Assembly Builder or from outside).

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